## 2018

# Adaptation and mitigation funding in Cambodia

Case study on synergies and complementarities between climate finance mechanisms



Dr. Christine Wörlen Jens Altevogt Lisa Keppler Arepo Consult 30.10.2018



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Annex I. Overview on climate initiatives included in this case study



#### List of acronyms

ACP	Asia Climate Partners
ADB	Asian Development Bank
AF	Adaptation Fund
AFCPA	Enhancing Climate Resilience of Rural Communities Living in Protected Areas of Cambodia
AFD	Agence Française de Développement
AfDB	African Development Bank
AusAID	Australian Agency for International Development
CAMPAS	Strengthening National Biodiversity and Forest Carbon Stock Conservation through Landscape-based Collaborative Management of Cambodia's Protected Area System as Demonstrated in the Eastern Plains Landscape
CARP	Coastal Adaptation and Resilience Planning
СВО	Community-Based Organizations
СС	Climate Change
CCA	Climate Change Adaptation
ССВАР	Cambodia Community Based Adaptation Programme
CCCA	Cambodia Climate Change Alliance
CIF	Climate Investment Fund
CNP	Cambodia UN-REDD National Programme
CoWES	Collaborative Management for Watershed and Ecosystem Service Protection and Rehabilitation in the Cardamom Mountains, Upper Prek Thnot River Basin
СРА	Community Protected Area
CRRC SDP	Climate Resilient Rice Commercialization Sector Development Program
CSO	Civil society organization
CTF	Clean Technology Fund
Danida	Danish International Development Agency
DPSP	Dedicated Private Sector Program
DSF	Debt Sustainability Framework
EbA	Ecosystem-based Adaptation
FAO	Food and Agriculture Organization
FTB	Foreign Trade Bank



FU	Follow-up
GCF	Green Climate Fund
GDP	Gross domestic product
GEF	Global Environment Facility
GEF TF	GEF Trust Fund
GERES	Group for the Environment, Renewable Energy and Solidarity
GMS	Greater Mekong Subregion
GMS-BCC	Greater Mekong Subregion Biodiversity Conservation Corridors Project
GMS-FBP	Greater Mekong Subregion Forests and Biodiversity Program
GMS-FDRMMP	Greater Mekong Subregion Flood and Drought Risk Management and Mitigation Project
GNI	Gross national income
IFAD	International Fund for Agricultural Development
INDC	Intended Nationally Determined Contributions
IP	Investment Plan
JICA	Japanese International Cooperation Agency
LAOS PDR	Lao People's Democratic Republic
LDC	Least developed country
LDCF	Least Developed Countries Fund
LULUCF	Land Use, Land-Use Change and Forestry
MAFF	Cambodian Ministry of Agriculture, Forestry and Fisheries
MAP-CBA	Mekong-Asia-Pacific Community Based Adaptation
MOE	Ministry of Environment
MRC	Mekong River Commission
MTR	Mid-term review
MW	Megawatt
ΝΑΡΑ	Cambodia National Adaptation Programme of Action
NGO	Non-governmental Organization
NC	National communication
NCCC	National Climate Change Committee
NCSD	National Council for Sustainable Development



NRS	National REDD+ Strategy
O&M	Operations and Maintenance
PCR	People's Republic of China
PIF	Project Identification Form
PPCR	Pilot Program for Climate Resilience
PSU	Project Support Unit
RE	Renewable energy
REDD+	Reducing Emissions from Deforestation and Forest Degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries
RET	Renewable Energy Technologies
RGoC	Royal Government of Cambodia
RRIP	Rural Roads Improvement Project
RULIP	Rural Livelihoods Improvement Project in Kratie, Preah Vihear and Ratanakiri
SCAF	Seed Capital Assistance Facility
SCCF	Special Climate Change Fund
SCF	Strategic Climate Fund
SGP	Small Grants Programme
Sida	Swedish International Development Cooperation Agency
SPCR	Strategic Program for Climate Resilience
S-RET	Building Adaptive Capacity through the Scaling-up of Renewable Energy Technologies in Rural Cambodia
SRI	System of Rice Intensification
ТА	Technical assistance
TE	Terminal evaluation
TRAC	Targets for resource assignment from the core
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNIDO	United Nations Industrial Development Organization
UN-REDD	United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation



USAID SFB	U.S. Agency for International Development's Supporting Forests and Biodiversity
VAAP	Vulnerability Assessment and Adaptation Programme for Climate Change in the Coastal Zone of Cambodia Considering Livelihood Improvement and Ecosystems
VRA	Vulnerability reduction assessments
WCS	Wildlife Conservation Society
WWF	World Wide Fund For Nature



#### Executive summary

- 1. In the past years, several severe weather events like floods, droughts and windstorms have impacted livelihoods in Cambodia, a coastal country in the South-East Asian Mekong region. Both, drought and floods are directly affecting rain-fed agriculture on which 80 % of the population directly depends. In addition, these events are putting pressure on inland and coastal infrastructure such as communal water management systems or transport infrastructure. Considerable loss of forest cover from about 73 % in the 1960s to 47 % in 2014 is another factor as erosion increases and availability of forest resources decreases.
- 2. Climate funding in Cambodia from the Least Developed Countries Fund (LDCF) supported for example the "Programme of Action for Adaptation to Climate Change" in which the United Nations Development Programme (UNDP) supported the Government in developing Cambodia's first National Adaptation Programme of Action (NAPA). The NAPA was published in 2006. The first NAPA Follow-up Programme began in 2007. A major milestone was the development of Cambodia's Pilot Program for Climate Resilience (PPCR) from 2009 to 2011. At about the same time, other larger-scale initiatives and programmes funded by the Global Environment Facility (GEF) and the Adaptation Fund (AF) gradually launched their activities. The Asian Development Bank (ADB)/GCF "Climate-friendly Agribusiness Value Chains Sector Project" began in May 2018. In terms of funding supporting multiple conventions, UNDP/GEF-Small Grants Programme (SGP) had launched its activities already in 2004 and implemented its first project in 2005.
- 3. Most of these climate-financed projects in Cambodia are supporting implementation on the subnational level. They form topical clusters, and each of these clusters is supported through multiple climate funds. The following clusters can be identified:
  - Climate-proofing of infrastructure and agribusiness (Climate Investment Funds-CIF and GCF funding, implemented by ADB);
  - Increasing climate resilience of smallholder farming by climate-proofing of agricultural practices, water management and ecosystem services (LDCF and AF funding, implemented by UNDP, the United Nations Environment Programme-UNEP and the Food and Agriculture Organization-FAO);
  - Forestry and agroforestry through related ecosystem protection and rehabilitation (GEF-Trust Fund (TF) and AF funding, implemented by ADB, UNDP and UNEP).
- 4. The Cambodia case, thus, illustrates a number of synergy mechanisms:
  - Climate initiatives can be thematically highly complementary. If agencies and funds are coordinated, they can work side by side with different but complementary thematic foci and approaches or with a useful type of geographical complementarity.
  - National planning documents support this. The division of work between the different climate-financed initiatives can be traced back to Cambodia's NAPA of 2006. In fact, the NAPA formed the starting point for the LDCF funded projects and is a key reference for the Strategic Program for Climate Resilience (SPCR) of Cambodia's PPCR. Furthermore, by now, the climate initiatives are covering the vast majority of Cambodia's NDC priorities.



- Coordination of climate activities which was instrumental to these synergies was achieved through the National Climate Change Committee (NCCC) and since 2015 by the National Council for Sustainable Development (NCSD), the mandated government entities to coordinate all climate initiatives in the country. The first phase of the Cambodia Climate Change Alliance (CCCA) programme - funded by the European Union, UNDP (TRAC), Swedish International Development Cooperation Agency (Sida) and Danish International Development Agency (Danida) and launched in 2010 – has supported the Ministry of Environment (MOE's) Department of Climate Change to strengthen capacities to coordinate climate actions.
- Agencies can enter into partnerships with each other, leveraging complementary advantages for synergistic collaboration. On a technical level, benefits were, for instance, mutual learning, the sharing of knowledge products, or enhanced opportunities for mainstreaming of results within the responsible ministry. Operationally, there are cases where this led to higher efficiency, for instance, where the same programme support unit or using the same review, approval and disbursement mechanisms were shared between projects.
- Most programmes are co-financed by other sources. Two co-financing situations prevail: In the ADB projects (both CIF and GCF funded), climate funding complements ADB's existing loan portfolio that has not yet addressed climate change. In other cases, the climate projects brought new climate funding (e.g. GEF funds) and new co-financing from different sources. Note that are no examples of ongoing projects seeking co-financing between CIF, GCF or GEF.
- 5. While synergies could be observed, there were also challenges encountered:
  - Since climate initiatives are thematically well-coordinated, overlaps and competition are comparably small. Still, there are some topics which are addressed by different initiatives. In these cases, although there seems to be willingness to cooperate at the outset of projects, only little evidence for active cooperation could be identified.
  - Although Cambodia was generally quite successful in coordinating initiatives, especially through the NCCC and – from 2015 – the NCSD mentioned above, there are signs that international responsibilities with regards to climate change, investment plan development or the confrontation with a plethora of climate funds but also implementing agencies is a challenging task for responsible government entities.



#### **1** Overview of country and sectors

- 6. The Kingdom of Cambodia is enclosed by Thailand, Laos PDR and Viet Nam and has a 435 km coastline with the Gulf of Thailand. 76% of its population of 16 million live in rural areas. Most people live in the southeast around Phnom Penh or close to the Tonle Sap (Southeast Asia's largest freshwater lake) and the Mekong River.<sup>1</sup> The unemployment rate decreased since 2013 from 30 to 22 %, which is still a high rate taking also into consideration that more than 50 % of the population is under 25 years old.<sup>2</sup> The demographic imbalance was caused by the Khmer Rouge regime during 1975-1979 when an estimated 1.7 million Cambodians lost their lives.<sup>3</sup>
- 7. Over the last decades, Cambodia has achieved strong economic growth and is the sixth fastest growing economy in the world. According to the World Bank, its gross national income (GNI) per capita of US\$1,230 in 2017 makes it a Middle-Income Country.<sup>4</sup> Still, as per UN classification, Cambodia is a Least Developed Country (LDC).<sup>5</sup> Of its GDP of US\$ 22 billion, 25 % were generated in the agricultural sector (incl. forestry and fishery), 33% in industry and 42 % in the service sector. The tourism, garment, construction and real estate as well as the agricultural sectors are mainly responsible for the high growth rates. The most important agricultural products are rice, rubber, corn, vegetables, cashews, cassava and silk.<sup>6</sup>
- 8. 16.5 % of Cambodians are living under the poverty line of US\$ 1.90 per day. Another 30% of the population live at only slightly higher levels, leaving them highly vulnerable to fall back into poverty when exposed to threats like climate change induced floods and droughts or economic shocks. The vulnerability is aggravated by the fact that most of the poor are living in rural areas with weak adaptive capacity and poor infrastructure but high dependency on agriculture. 14 % of the population are facing food insecurity.<sup>7</sup>
- 9. According to the 2<sup>nd</sup> national communication (NC) report to the UNFCCC in 2015, the major sources of emissions are land-use change and forestry (49%) as well as agriculture (44%). Therefore, an effective climate change mitigation policy needs to be linked to these sectors. Due to their increasing share in the economy, the importance of including the energy and transport sector into the mitigation policy will raise.<sup>8</sup>

#### 1.1 Agriculture

10. About 60 % of the workforce work in agriculture, and the livelihoods of nearly 80% of Cambodia's population depend directly on this sector. Thus, the major part of the population is highly

<sup>&</sup>lt;sup>1</sup> CIA Factbook <u>https://www.cia.gov/library/publications/the-world-factbook/geos/cb.html</u>

<sup>&</sup>lt;sup>2</sup> CIA Factbook.

<sup>&</sup>lt;sup>3</sup> PPCR IP (2011), p.4.

<sup>&</sup>lt;sup>4</sup> World bank <u>http://www.worldbank.org/en/country/cambodia/overview</u>

<sup>&</sup>lt;sup>5</sup> The graduation thresholds for the Human Assets and the Economic Vulnerability Index have been exceeded by Cambodia. But the country just misses the Gross National Income threshold of US \$ 1,230 per capita by US \$ 155. <u>https://www.un.org/development/desa/dpad/least-developed-country-category-cambodia.html</u>

<sup>&</sup>lt;sup>6</sup> CIA Factbook <u>https://www.cia.gov/library/publications/the-world-factbook/geos/cb.html</u>

<sup>&</sup>lt;sup>7</sup> FAO Stat <u>http://www.fao.org/faostat/en/#country/115</u>

<sup>&</sup>lt;sup>8</sup> ADB (n.a.), p.1



vulnerable to changes of the periodical flooding and recession of its water resources.<sup>9</sup> Unlike Thailand and Viet Nam, Cambodia relies on rain-fed instead of irrigated agriculture.<sup>10</sup> The climate is dominated by the southwest monsoon - the rainy season from May-November alternates with the dry season from November-May.

- 11. In the last years, the frequency and intensity of floods, droughts and storms increased in Cambodia: according to ADB, eight large flooding events and three droughts affected about 20 million people between 1990 and 2010.<sup>11</sup> These events affected community infrastructure such as water management systems, schools and healthcare centers and transport infrastructure as most roads are unpaved. Researchers expect more intense rain as well as hard-to-predict dry periods during the wet season. Delayed onset of the rainy season is also an expected consequence of climate change, prolonging the dry seasons and delaying food production.<sup>12</sup>
- 12. The vulnerability of the Cambodian population to climate change specifically in the agriculture and the related infrastructure sector have led to various financial interventions by multilateral climate finance stakeholders, like the Asian Development Bank (ADB), the Global Environment Facility (GEF) or the Climate Investment Funds (CIFs). Support to the agricultural sector has also been a core topic of official development assistance since the Paris Peace Accords in 1991. In 2015, 15 % of development aid were spent in support of agriculture. Main sub-sectors were agriculture water and irrigation, extension services and food security/nutrition. Overall, ODA correlated to 28 % of government expenditure in 2016, coming from 61 % in 2010.<sup>13,14</sup>

#### **1.2 Forests**

- 13. About four million Cambodians live closer than five kilometers to forests, their resources contribute between 10 and 20 % on average to household consumption. Most rural households are relying on fuel wood and charcoal and food coming from the forests. Cambodian forests are also critical for fisheries standing for 80 % of Cambodia's protein supply as upland forests control erosion and flooded forests and mangroves are important for fish breeding.<sup>15</sup>
- 14. Cambodia's forest cover has decreased from 73 % in 1965 to 60 % in 2005/2006 and 47 % in 2014. Several factors drive deforestation: Expansion of agriculture into forests (through both agro-industrial and social concessions), land speculation, migration into forests, unauthorized logging, poverty and fuel wood demand.<sup>16</sup>
- 15. The National REDD+ Strategy's (NRS) (2017-2026) three priorities are: 1) Improving management and monitoring of forest resources and land use; 2) Strengthening the implementation of sustainable forest management; and 3) Mainstreaming approaches to reduce deforestation.

<sup>&</sup>lt;sup>9</sup> ADB FP (2018), p.6.

<sup>&</sup>lt;sup>10</sup> ADB FP (2018), p.7.

<sup>&</sup>lt;sup>11</sup> ADB (2017), p.7.

<sup>&</sup>lt;sup>12</sup> ADB FP (2018), p.6.

<sup>&</sup>lt;sup>13</sup> <u>https://opendevelopmentcambodia.net/topics/aid-and-development/</u>

<sup>&</sup>lt;sup>14</sup> DCPR (2016), p.25.

<sup>&</sup>lt;sup>15</sup> FIP (2017), p.7.

<sup>&</sup>lt;sup>16</sup> FIP (2017), pp.7-10



#### 2 Context and timeline of GEF, CIF, AF and GCF interventions

- 16. This case study focuses on funding initiatives addressing the following main areas:
  - i) Rural, coastal and urban infrastructure;
  - ii) Agriculture (from commercial over trade-oriented local to subsistence agriculture) with a strong focus on water management and resilient farming practices;
  - iii) Natural, especially forest, resource restoration and protection.
- 17. In 2002, the UNDP/LDCF "Programme of Action for Adaptation to Climate Change" (ID 1869) started to support Cambodia's first National Adaptation Programme of Action (NAPA) which was ultimately published in 2006. A first NAPA Follow-up Programme began in 2007.
- 18. The GEF-SGP launched activities in 2004 with the first project being implemented in 2005. Since the beginning, SGP projects were focusing on community-based adaptation and community-based adaptation –around 10% of the projects dealt with climate change mitigation.
- 19. In 2009 the preparations for the Strategic Programme for Climate Resilience (SPCR), the investment plan for CIF's Pilot Program for Climate Resilience (PPCR). The plan was endorsed by CIF in June 2011 and the PPCR was launched in 2011. The PPCR is implemented by ADB and consists of four programme components with several sub-projects. The last sub-project of the PPCR officially started in 2015.
- 20. Although not funded by any of the Climate Funds included in this study, the Cambodia Climate Change Alliance launched in 2010 is another important programme that was- among other things tasked with strengthening capacities within the government to coordinate climate actions within Cambodia.
- 21. At about the same time, other larger-scale initiatives and programmes funded by GEF and the Adaptation Fund (AF) gradually launched their activities. The ADB/GCF "Climate-friendly Agribusiness Value Chains Sector Project" began in May 2018.
- 22. With a few exceptions, there is a clear thematic division between funds and implementing agencies: ADB is using CIF and GCF funds for climate-proofing of infrastructure and agribusiness. The LDCF-funded projects as well as the Adaptation Fund (AF) project are targeting smallholder agriculture (the AF project includes agroforestry) with a focus on climate-proof agricultural practices, water management and ecosystem services. These are implemented by UNDP, UNEP and FAO. Another group of projects is related to forests, agroforestry and related ecosystem protection and rehabilitation. These are financed through the GEF Trust Fund and the Adaptation Fund and implemented by ADB, UNDP and UNEP.
- 23. Table 1 shows how the main thematic areas are distributed between funds and agencies. Please note that this grouping only refers to focal areas of the several initiatives and that there can be thematic overlaps.
- 24. The projects will be discussed in more detail in the following sections. Further details about all projects including funding amounts and funding structures can be found in Annex I.



		CIF - PPCR ADB	GCF ADB	GEF SGP UNDP	LDCF (NAPA) UNDP, FAO, UNEP	AF; UNEP	GEF TF GMS- Forest/ Biodiversity Program; ADB, UNDP	GEF TF (biodiversity, forests); UNDP, UNEP
Rural and coastal infrastructure	Rural roads (hazard mapping, construction, upgrading, etc.)	•	•	-	-	-	-	-
	Flood control and protection	● (inland/ coast)	-	•	• (coast)	-	-	-
Construction / upgrading of urban infrastructure	Climate-proofing of buildings and sewage systems; waste management; DRRM & early warning systems	•	-	-	-	-	-	-
Commercial agriculture	Water resource management / irrigation / drought management	•	•	-	-	-	-	-
	Protection from seawater intrusion	•	-	-	-	-	-	-
	Climate proofing of commercial, business- focused agriculture; resilient crops	•	•	-	-	-	-	-
	Climate-friendly agriculture practices	-	-	-	-	-	-	-
	Crop / harvest insurance scheme	•	-	-	-	-	-	-
Small to medium- size agribusiness; Subsistence agriculture	Climate proofing of subsistence agriculture / agribusiness; increasing food security	•	•	•	● (inland/ coast)	•	-	-
	Climate-friendly agriculture	-	•	-	-	0	-	-

#### Table 1: Overview on main thematic areas addressed by the climate funds (•: strong focus, O: topic addressed, but not main focus)



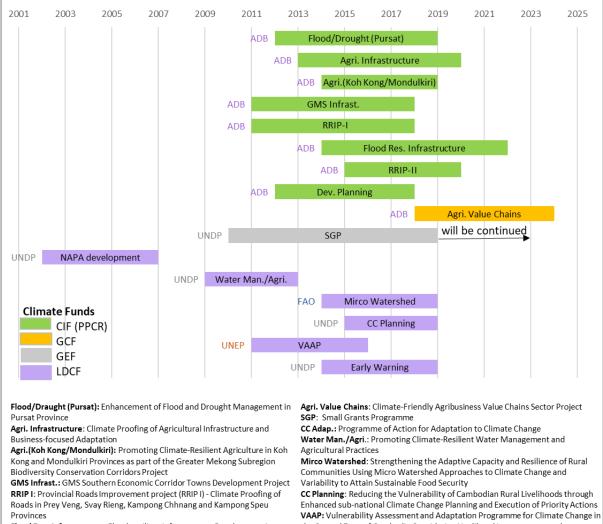
		CIF - PPCR ADB	GCF ADB	GEF SGP UNDP	LDCF (NAPA) UNDP, FAO, UNEP	AF; UNEP	GEF TF GMS- Forest/ Biodiversity Program; ADB, UNDP	GEF TF (biodiversity, forests); UNDP, UNEP
	Crop / harvest insurance scheme	-	•	-	-	0	-	-
	Water resource management; watersheds	•	0	•	•	•	•	-
	Livelihood diversification for persons in rural areas	-	-	0	•	•	•	0
	Climate information/early warning systems	-	-	0	•	-	0	-
	Agroforestry	-	-	-	-	•	•	•
Natural resources	Forest protection and restoration, forest management; biodiversity	0	-	-	-	•	•	•
	Law enforcement	-		-				•
	Carbon stock	-		-			•	•
	Reduce soil erosion, soil conservation, conservation agriculture	-		•		•	•	-
	EbA, Ecosystem services	•	-	ο	•	•	•	•
Renewable Energy	Small-scale bioenergy	-	•	-	-	-	-	O (cooking)
	Small-scale RE for rural energy supply (excl. bioenergy)	-	0	-	-	-	-	-



#### 2.1 Projects related to infrastructure, water management and agriculture

25. This section presents those projects which are related to climate-proofing of infrastructure, water management and agriculture. These encompass initiatives within ADB's Pilot Program for Climate Resilience (PPCR), ADB's GCF project, the GEF SGP as well as community and livelihoodoriented GEF/LDCF funded projects. The GEF/LDCF funded projects have been added to this group as they have contact points with the ADB agriculture and water management programmes. Figure 1 provides the timeline of these initiatives.

Figure 1: Timeline of climate financed interventions related to infrastructure, water management and agriculture



Flood Res. Infrastructure: Flood-resilient Infrastructure Development in Pursat and Kampong Chhnang Towns as part of the Integrated Urban Environmental Management in the Tonle Sap Basin Project

RRIP-II: Climate resilient Rural Infrastructure in Kampong Cham Province as part of Rural Roads Improvement Project (RRIP-II) Dev. Planning: Mainstreaming Climate Resilience into Development Planning

/ Technical Assistance: Mainstreaming Climate Resilience into Development Planning of Key Vulnerable Sectors

the Coastal Zone of Cambodia Considering Livelihood Improvement and Ecosystems

Early Warning: Strengthening Climate Information and Early Warning Systems in Cambodia to Support Climate Resilient Development and Adaptation to Climate Change

Source: Own diagram based on data from the respective fund's project web pages. Note: Start dates are approval dates by the respective funds, actual implementation may have been delayed in some cases.



### 2.1.1 CIF's Pilot Program for Climate Resilience (PPCR): Strategic Program for Climate Change (SPCR)

- 26. In Cambodia, SPCR planning and project portfolio development began in 2009. With its approval in late 2010, the SPCR became effective in June 2011 as a result of a cooperation between the Royal Government of Cambodia (RGoC), the World Bank<sup>17</sup> which administered the process MDBs and other stakeholders.<sup>18</sup> In 2013 and 2014, the SPCR was revised to relocate funding from an irrigation project, which was cancelled due to delays<sup>19</sup>, to an additional rural roads infrastructure project.<sup>20</sup> Furthermore, the funding volume of the technical assistance component was increased so that the total grant funding grew from US\$ 50 million to US\$ 55 million. Concessional lending from the PPCR amounts to US\$ 41 million, complemented by US\$ 465 million in co-financing.<sup>21</sup>
- 27. The SPCR has the following four components:<sup>22</sup>
  - <u>Component I:</u> Promoting Climate-Resilience of Water Resources and Related Infrastructure (reduced from 2 to 1 sub-project in the revised SPCR of 2013)
  - <u>Component II:</u> Enhancing Climate-Resilient Agriculture and Food Security (with 2 subprojects)
  - <u>Component III:</u> Improving Climate-Resilient Infrastructure (increased from 3 to 4 sub-projects in revised SPCR)
  - <u>Component IV:</u> Technical Assistance (TA) for Strengthening Capacity to Mainstream Climate Resilience into Development Planning (TA component)
- 28. The one remaining project of Component I is enhancing flood and drought management in Pursat province by improving water-related infrastructure and introducing warning systems and improving hydraulic standards.
- 29. Component II is focusing on agriculture: The first sub-project is enhancing climate-resilience of more than a dozen irrigation projects. The second project is aiming at the construction of rainwater harvesting ponds, sea-barriers against saltwater intrusion and the introduction of Ecosystem-based Adaptation (EbA) approaches in community catchments and climate-resilient irrigation techniques.
- 30. Component III is increasing climate-resilience of infrastructure through four sub-projects: Two of these projects are climate-proofing infrastructure of towns, for instance wastewater treatment systems, flood protection infrastructure, landfills, buildings etc. The other two initiatives are mainly working on the climate-proof rehabilitation of rural roads and the introduction of appropriate maintenance regimes.

<sup>&</sup>lt;sup>17</sup> The World Bank needed to withdraw its support for the further development of the SPCR in 2011 due to matters related to the implementation of an ongoing World Bank project (ADB 2017, p.10). These matters are not specified further.

<sup>&</sup>lt;sup>18</sup> ADB (2017), pp. 7-8.

<sup>&</sup>lt;sup>19</sup> Project "Climate Risk Management and Rehabilitation of Small- and Medium-scale Irrigation Schemes in Tonle Sap Basin."

<sup>&</sup>lt;sup>20</sup> Project "Climate Resilient Rural Infrastructure (RRIP-II)"

<sup>&</sup>lt;sup>21</sup> PPCR IP (2013), pp. v-vi.

<sup>&</sup>lt;sup>22</sup> PPCR IP (2011), p. ii.

- 31. Although first projects were already approved by CIF in 2011 and 2012, actual implementation of the first project (i.e. the Provincial Roads Improvement Project RRIP<sup>23</sup>-I) began in 2013. It is noteworthy that the seven investment sub-projects were derived from the existing ADB investment pipeline, something that still can be recognized by the fact that most PPCR projects are embedded in more comprehensive ADB investment programmes.<sup>24</sup>
- 32. An overview of all sub-projects including financial structuring and addressed thematic areas as well as their connection to overarching ADB programmes is provided in Annex I.

#### 2.1.2 GCF ADB - Agribusiness Value Chain Sector Project

- 33. In March 2018, the GCF approved its first funding of a project in Cambodia (US\$ 30 million grant and US\$ 10 million loan): the **Climate-Friendly Agribusiness Value Chains Sector Project** (2018-2024), which is also implemented by ADB. The project is addressing both, climate change mitigation and adaptation, but focusses on the latter. The improvement of infrastructure resilience to climate change and the "last mile" connectivity will be achieved through (1) the investment in climate smart agribusiness value chain infrastructure, (2) strengthening of the institutional capacity for climate friendly agriculture, and (3) enabling the environment for agribusiness policy and investments.<sup>25</sup>
- 34. The project is part of an overarching ADB programme in three countries of the Greater Mekong Subregion (GMS): Cambodia, Myanmar and Lao PDR. In Cambodia, the project is mainly funded by the GCF and co-financed by ADB.<sup>26</sup> Like in the case of the SPCR, the GCF programme is complementing a more comprehensive ADB programme which encompasses a total of eleven project activities of which two (i.e. the rehabilitation of water management infrastructure and the improvement of climate-resilient farm road networks) are funded through the loan component by the GCF.<sup>27</sup>

#### 2.1.3 GEF Small Grants Programme

- 35. Since 2004, the **GEF SGP** is funding projects in Cambodia and has financed 214 projects to date. Most projects are in the field of community-based adaptation (40% of the portfolio), followed by biodiversity projects (35%), and climate change mitigation (12%). The remaining projects fall in the categories of land degradation, international waters and chemicals. The SGP is managed by the UNDP Country Office.<sup>28</sup>
- 36. The SGP in Cambodia not only comprises GEF-funded projects but a group of 46 projects under the Cambodia Community Based Adaptation Programme (CCBAP) funded by the Swedish International Development Cooperation Agency (Sida) and Australian Agency for International Development (AusAID). These were implemented between 2010 and 2013. Overall, 46 local Non-

<sup>&</sup>lt;sup>23</sup> Note that the first initiative was called the Provincial Roads Improvement Project but that it is frequently abbreviated as RRIP I, probably referring to the follow-up projects, i.e. Rural Roads Improvement Project II and III

<sup>&</sup>lt;sup>24</sup> ADB (2017), p. 9.

<sup>&</sup>lt;sup>25</sup> ADB FP (2018), p. 2.

<sup>&</sup>lt;sup>26</sup> ADB FP (2018), p. 8; ADB Project Database (2019).

<sup>&</sup>lt;sup>27</sup> ADB FP (2018), p. 4.

<sup>&</sup>lt;sup>28</sup> SGP Cambodia (2012).



governmental Organization (NGOs)/ Community-Based Organizations (CBOs) have been funded to plan and implement adaptation measures at the community level in 18 provinces. Although the CCBAP had different funding sources, it was docked to the SGP implementation structure, used GEF processes, i.e. the National Steering Committee for project reviews and approvals as well as SGP's disbursement mechanism.<sup>29,30</sup>

## 2.1.4 LDCF projects under Cambodia's National Action Programme for Adaptation to Climate Change (NAPA)

- 37. The National Adaptation Program of Action to Climate Change (NAPA) was developed between 2003 and 2005 in a cooperation between the Cambodian Ministry of Environment and UNDP and became effective in 2006. The NAPA identifies 28 non-health priority projects in the thematic areas of coastal protection and water resources in conjunction with agriculture as well as five cross-sectoral projects. Five projects have been implemented so far: three in the area of water management/agriculture (two implemented by UNDP and one by FAO), one is addressing adaptation in coastal areas (UNEP) and one climate information and early warning systems (UNDP). In addition to the LDCF funded projects, the NAPA is also one of the key references that informed the PPCR SPCR development (see chapter 3). Note that the National Adaptation Plan (NAP) is currently under preparation.<sup>31</sup>
- 38. The first NAPA project promoted climate-resilient water management and agriculture and was implemented by UNDP. It established a community-based climate information system and implemented demonstration projects. The second project in this thematic area is implemented by the FAO and works on agricultural and food security policies, micro watershed management and demonstrates resilient agricultural practices. The third project implemented by UNDP is addressing small-scale water management and offer TA on resilient agricultural practices, but in different provinces than the FAO project.
- 39. The coastal adaptation project by UNEP addressed coastal adaptation planning and demonstrated coastal flood management measures including EbA resilience measures.
- 40. Last, but not least, the UNDP project on climate information and early warning systems is strengthening climate observing infrastructure and building capacity to use this kind of information for responding to climate hazards on national as well as on the local level.

#### **2.2** Projects related to forests and biodiversity

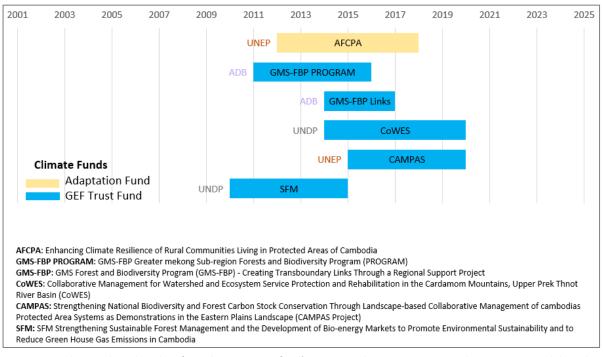
41. Projects related to forests and biodiversity encompass the Adaptation Fund project as well as biodiversity/forest programmes funded by the GEF TF and implemented by ADB, UNDP and UNEP. Figure 2 provides the timeline of these programmes and initiatives.

<sup>&</sup>lt;sup>29</sup> 41 projects have been funded by Sida, 5 projects by AusAID via the Mekong-Asia-Pacific Community Based Adaptation (MAP-CBA) programme.

<sup>&</sup>lt;sup>30</sup> Carter Sok (2013).

<sup>&</sup>lt;sup>31</sup> <u>https://www4.unfccc.int/sites/NAPC/News/Pages/national\_adaptation\_plans.aspx</u>





#### Figure 2: Timeline of climate financed interventions related to forests and biodiversity

Source: Own diagram based on data from the respective fund's project web pages. Note: Start dates are approval dates by the respective funds, actual implementation may have been delayed in some cases.

- 42. With the focus on forest restoration and conservation in conjunction with agriculture, the Adaptation Fund is funding one project in Cambodia. The project **Enhancing Climate Resilience of Rural Communities Living in Protected Areas of Cambodia (AFCPA)** has been implemented by UNEP in four provinces.<sup>32</sup> The project contributes to priorities identified in the NAPA of 2006, namely the rehabilitation of Upper Mekong and provincial waterways through forest restoration in the Upper Mekong catchment, vegetation planting for flood and windstorm protection in selected areas and the promotion of household integrated farming.<sup>33</sup>
- 43. Under the umbrella of the Greater Mekong Sub-region Forests and Biodiversity Program (GMS-FBP), ADB is implementing a national project in Cambodia and a regional project in all GMS countries. The national project Collaborative Management for Watershed and Ecosystem Service Protection and Rehabilitation in the Cardamom Mountains, Upper Prek Thnot River Basin (CoWES) is implemented by UNDP in the Kampong Speu province.<sup>34</sup> Initially, the project was proposed by ADB together with the Cambodian Ministry of Agriculture, Forestry and Fisheries (MAFF). In 2016, however, the ADB submitted a proposal to the GEF CEO, requesting the implementing agency to UNDP which was subsequently approved.<sup>35</sup> The regional project Greater Mekong Sub-region Forest and Biodiversity Program (GMS-FBP) Creating Transboundary Links Through a Regional Support Project funded by GEF/TF is implemented

<sup>&</sup>lt;sup>32</sup> McCue/Kassam (2018), p. 8.

<sup>&</sup>lt;sup>33</sup> UNEP PD (2012), p. 56.

<sup>&</sup>lt;sup>34</sup> UNDP (2017), pp. 1-8.

<sup>&</sup>lt;sup>35</sup> UNDP Cambodia Website (2019a).

by ADB in all GMS countries to complement and augment the national projects under the GMS-FBP.<sup>36</sup>

#### 2.3 The Cambodia Climate Change Alliance

44. The **Cambodia Climate Change Alliance** is a programme that is not funded by any of the Climate Funds included in this case study.<sup>37</sup> But it is a key activity of the Ministry of Environment (MOE's) Department of Climate Change as it helps strengthening capacities to coordinate climate actions. To this end, the Cambodia Climate Change Alliance (CCCA) programme was launched in 2010 to coordinate and orient external funding, support administrative procedures to access new sources of climate funding and help mainstreaming results of climate initiatives. Specifically, the CCCA helped establish a donor coordination mechanism, built capacity in climate change financing and supported the accreditation process of entities to access the AF and GCF.<sup>38</sup> Besides this capacity building, other objectives of the CCCA programme are, for instance, to directly support communities to enhance their resilience to climate change, enhance climate change information and knowledge management, or the development of a climate change financing framework for Cambodia.

#### 2.4 Other projects omitted in this case study

- 45. The following projects have been omitted in this case study because they have had no activities in the country so far:
  - UNDP/GEF: Integrated Natural Resource Management (INRM) in the Productive, Natural and Forested Landscape of Northern Region of Cambodia. The project is in the concept phase.
  - UNEP/GEF: Building Resilience of Cambodian Communities Using Natural Infrastructure and Promoting Diversified Livelihood. The project is in the concept phase.
  - ADB/CIF SREP: National Solar Parks Programme. The project is in the concept phase.
  - ADB/CTF Dedicated Private Sector Program (DPSP): Mezzanine Financing for Climate Change. No investment in Cambodia so far.
  - GEF and SCCF: Other renewable energy initiatives implemented by the United Nations Industrial Development Organization (UNIDO) (Reduction of GHG Emission through Promotion of Commercial Biogas Plants; Climate Change Related Technology Transfer for Cambodia: Using Agricultural Residue Biomass for Sustainable Energy Solutions) and the International Fund for Agricultural Development (IFAD) (Building Adaptive Capacity through the Scaling-up of Renewable Energy Technologies in Rural Cambodia (S-RET) have not been analyzed further as the number of projects is very limited and there is little potential for synergies due to different technologies being in the focus.

<sup>&</sup>lt;sup>36</sup> ADB (2014), pp.1-8.

<sup>&</sup>lt;sup>37</sup> CCCA donors are the European Union, UNDP (TRAC), Swedish International Development Cooperation Agency (Sida) and Danish International Development Agency (Danida). In phase 2 (2014-2019), Danida has not funded the programme any more. Source: <u>http://www.camclimate.org.kh/en/activities/cambodian-climate-change-alliance/21-activities/ccca/ccca-core/46-ccca-background-and-approach.html</u>

<sup>&</sup>lt;sup>38</sup> http://www.camclimate.org.kh/en/activities/cambodian-climate-change-alliance.html



#### **3** Findings regarding synergies

## 3.1 Synergies through coordination, work division, cooperation and investment planning

- 46. Climate funds in Cambodia are thematically highly complementary and cover a wide spectrum of intervention areas mainly in climate change adaptation but also mitigation. In different thematic areas of climate intervention discussed above, it becomes clear that the agencies and the funds are coordinated in a way that they are working side by side with different but complementary thematic foci and approaches. In Cambodia, in particular, many projects work on the subnational level, and projects with similar topics complement each other also geographically.
- 47. It is noteworthy that the work of the different initiatives is strongly in line with Cambodia's NDC priority actions. NDC priorities which are covered by the climate funded initiatives are: community based adaptation, natural resource restoration, protected area management, early warning systems, flood protection for agricultural and urban development, development of agriculture systems responding to water variability, promotion of climate-smart farming, resilient crop variety development, rehabilitation of road infrastructure as well as capacity building in impact assessment and integration in development plans. Only four of thirteen NDC priorities are not addressed by the projects listed above (i.e. mobile pumping stations responding to droughts, resilient aquaculture systems, and malaria as well as other climate-related diseases). In mitigation, Land Use, Land-Use Change and Forestry (LULUCF) plays a prominent role in the NDC, correlating to the strong focus of climate funded initiatives on this area of intervention. Offgrid renewables and biodigesters play a small role in the NDC, as they do in the climate-funded projects. Larger-scale RE (except for the use of biowaste for energy generation), energy use in manufacturing and transport are other priorities of the NDC but are not yet covered by the funds included in this study.<sup>39</sup> The thematic division of work has – in parts - its origin in Cambodia's NAPA of 2006 where agriculture in conjunction with water resources, coastal zones and some cross-sectoral projects were prioritized. Forestry, however, only played a secondary role in the NAPA. Cambodia succeeded in establishing a clear "assignment" of NAPA-themes to specific funds. For instance, infrastructure, in rural, coastal and urban environments, is funded by CIF and GCF. Projects funded by the LDCF, GEF-SGP and AF address adaptation to climate change of rural communities, especially in the area of smallholder agriculture with a strong focus on water management. When defining priority activities, the Cambodian SPCR clearly refers to the NAPA, for instance by proposing TA activities to develop feasibility studies for unfunded NAPA projects or selecting three high priority NAPA projects to be started, complemented or continued through the PPCR.<sup>40</sup> Also, it is probable that the work of the climate initiatives has informed the preparation of the NDC.
- 48. The wide range of intervention areas and thematic complementarity is well reflected by a clear thematic demarcation between the funds and respective implementing agencies. ADB's CIF and GCF funded programmes are addressing rural, coastal and urban infrastructure and mainly

<sup>&</sup>lt;sup>39</sup> INDC (2015), pp.4-7.

<sup>&</sup>lt;sup>40</sup> PPCR IP (2011), pp. 17-18 and 83



commercial and trade-oriented agriculture. The GEF LDCF, SGP and AF are typically supporting CC adaptation of inland and coastal rural communities and their livelihoods (subsistence agriculture or small agribusiness with a strong focus on water management), implemented by UNDP, UNEP and FAO. Although the next thematic group of several projects is also concerned with livelihoods of rural communities, its focus lies on forestry, biodiversity related to forests, and carbon stock conservation. They are funded by GEF TF and implemented by ADB (several transboundary GMS FBP projects), as well as by UNDP and UNEP. Three smaller GEF TF and SCCF funded initiatives implemented by UNIDO and IFAD are seeking to introduce renewable energy applications in rural setting (bioenergy, small-scale RE power supply) as does ADB's GCF programme with a component promoting bioenergy and solar energy to reduce GHG emissions in the agricultural value chain. An overview of the thematic priorities and the thematic distribution between funds and agencies can be obtained from Table 1. Despite this relatively clear division of work, one can identify some important thematic overlaps, reflecting the country's priorities: Climate proofing of agriculture, water management and - to some extent - forestry can be found across several funds.

49. In addition to the thematic complementarity, climate-funded projects are also regionally complementary. Projects can be found nearly all over Cambodia and it can be observed that there is no particularly strong concentration of projects in any of the regions. Only one province has 4 projects, seven regions have 3, five regions have 2 projects and seven regions have 1 project (cf. Figure 3). One might argue that having four or three projects in one region already constitutes a high concentration of projects. Deeper analysis of the project portfolio shows, however, that there are only three regions where partial thematic and timely overlaps can be found: in Kampong Thom with 3 projects by FAO, UNDP and UNEP, and in Preah Vihear and Siem Reap provinces, both with the same 2 projects by FAO and UNEP as in Kampong Thom.<sup>41</sup> These projects do all have in common that they are addressing rural communities by reducing vulnerabilities and securing their livelihoods.

<sup>&</sup>lt;sup>41</sup> The projects are: <u>UNDP</u>: Reducing the Vulnerability of Cambodian Rural Livelihoods through Enhanced sub-national Climate Change Planning and Execution of Priority Actions; <u>FAO</u>: Strengthening the Adaptive Capacity and Resilience of Rural Communities Using Micro Watershed Approaches to Climate Change and Variability to Attain Sustainable Food Security; <u>UNEP</u>: Enhancing Climate Resilience of Rural Communities Living in Protected Areas of Cambodia



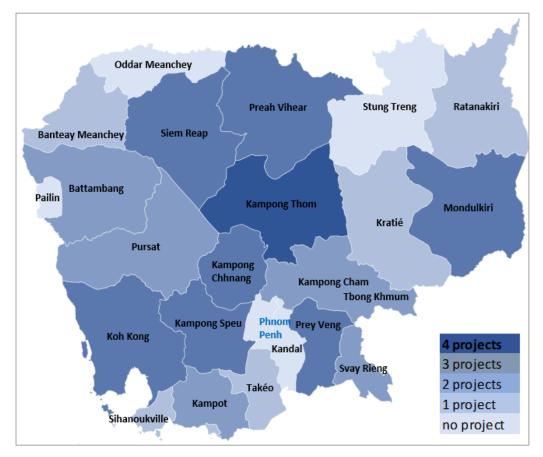


Figure 3: Distribution of projects over Cambodia

Note: Kampong Cham has been separated into two provinces in 2013, adding Tbong Khmum Source: Own diagram. Map: © GeoNames, Navteq

- 50. Climate activities have been coordinated by the National Climate Change Committee (NCCC) and from 2015 by the newly created National Council for Sustainable Development (NCSD). In 2006, the RGC established and mandated the NCCC to "prepare, coordinate and monitor the implementation of policies, strategies, legal instruments and programmes related to climate change". In 2015, these responsibilities have been taken over by the NCSD in which membership has been increased compared to the NCCC. The Council is chaired by the MOE and the Prime Minister (honorary chair), members of the Council are Secretary of States of 27 ministries, Secretary Generals of 7 Government Agencies and 25 Capital-Provincial Governors.<sup>42</sup>
- 51. Especially in the early stage of introducing climate initiatives, a donor funded initiative can help strengthening capacities within a national institutional framework which is mandated to coordinate climate actions. To this end, the Cambodia Climate Change Alliance (CCCA) programme was launched in 2010 to coordinate and orient external funding, support administrative procedures to access new sources of climate funding and help mainstreaming results of climate initiatives. The Programme Support Board comprises the Ministry of Energy (chair), two members of the National Council for Sustainable Development (NCSD) which superseded the NCCC in 2015 and the CCCA donors. UNDP is overseeing the programme, teams

<sup>&</sup>lt;sup>42</sup> <u>http://www.camclimate.org.kh/en/policies/ncsd-structure.html</u>



of the MOE and NCSD are implementing it with regards to CC mainstreaming, climate finance and knowledge management. Among other tasks, the programme has supported the National Climate Change Committee (NCCC) to 1) strengthen climate governance, 2) access and orient international and domestic public and private financing and 3) foster knowledge and know-how development and technology transfer.<sup>43</sup> Since the NCCC (later the NCSD) was the mandated entity of the Government to coordinate all aspects of climate change, its support through the CCCA was relevant for all international climate initiatives. Specifically, the CCCA helped establish a donor coordination mechanism, built capacity in climate change financing and supported the accreditation process of entities to access the AF and GCF.<sup>44</sup>

- 52. In its support to the NCCC, the CCCA with UNDP as its implementing agency seems to have been very aware of the necessity to coordinate well with the donors and their various initiatives and projects. The project document of 2013 notes, for instance, that the CCCA would overlap in parts with the PPCR and that the initiative would seek an agreement on a government-led distribution of responsibilities and close cooperation.<sup>45</sup> Another example is the clear commitment that the CCCA would coordinate closely and build synergies with the LDCF funded UNEP project "Vulnerability Assessment and Adaptation Programme for Climate Change in the Coastal Zone of Cambodia Considering Livelihood Improvement and Ecosystems" which began in 2011. The two initiatives were regionally complementary, the LDCF project covered four areas, the CCCA two other areas. Both projects shared central management structures, for instance the Project Steering Committee or the Senior Technical Advisor. Still, despite the overall synergetic effects of this tandem, confusion arose in some communities about the respective responsibilities of the two initiatives for certain outcomes and sequencing of certain activities could have been optimized.<sup>46</sup>
- 53. When the first NAPA Follow-Up project began in 2007, the implementing agency UNDP did not yet have significant experience with agricultural projects in Cambodia. This disadvantage was successfully overcome through a partnership agreement and cooperation with the IFAD project "Rural Livelihoods Improvement Project in Kratie, Preah Vihear and Ratanakiri (RULIP)" funded through the International Monetary Fund (IMF) Debt Sustainability Framework (DSF). Although the DSF is no climate fund, this is still an example that shows how thematically adjacent projects can be beneficial for each other and be synergistic. The Terminal Evaluation of the NAPA FU project finds several synergies from this cooperation: 1) the NAPA follow-up project benefited from RULIP experts in the field of agriculture; 2) climate change could be integrated into RULIP's educational materials; 3) IFAD experience in two provinces helped the NAPA FU to take a decision to choose suitable project locations; 4) Both initiatives shared the same Project Support Unit (PSU); 5) Mobilizing MAFF resources proved to be more cost effective in this arrangement; 6)

<sup>&</sup>lt;sup>43</sup> The initiative was launched in 2010 and is expected to end in June 2019. UNDP is responsible for programme oversight. It is funded by the EU (ca. US\$ 7.5 m), Sweden (ca. US\$ 3.8 m), UNDP Regular TRAC (ca. US\$ 1.2 m) and through in-kind contributions of the RGoC (ca. US\$ 0.8 m).

<sup>&</sup>lt;sup>44</sup> <u>http://www.kh.undp.org/content/cambodia/en/home/operations/projects/environment\_and\_energy/cambodiaclimate-change-alliance.html</u> and <u>http://www.camclimate.org.kh/en/activities/cambodian-climate-change-alliance/21-</u> activities/ccca/ccca-core/

<sup>&</sup>lt;sup>45</sup> CCCA (2013), p.7.

 $<sup>^{\</sup>rm 46}$  UNEP Evaluation Office of UN Environment (2017), pp. ix and xi.

Climate change concepts could be integrated into MAFF's annual climate change action plan in a more comprehensive manner than expected.<sup>47</sup>

- 54.A second example for successful cooperation is the joint venture between the SGP and the Cambodia Community Based Adaptation Programme (CCBAP) funded by Sweden and Australia. The CCBAP had different funding sources but was docked to the SGP implementation structure, used GEF processes, i.e. the National Steering Committee for project reviews and approvals, as well as SGP's disbursement mechanism.<sup>48,49</sup>
- 55. The availability of funds on the cross-cutting topic of biodiversity increases options for climate initiatives. In Cambodia, the GEF is funding several forestry projects through its biodiversity focal area. Through this, it is possible to reach numerous climate change related targets: mitigation by creating or protecting carbon sinks and adaptation by reducing erosion, creating buffers for severe weather events or creating options for improved livelihoods.

## 3.2 Synergies through co-financing and adding climate change to investment portfolios

- 56. CIF, GCF and GEF funds are complementing other sources of funding but not each other in Cambodia. 18 out of 23 initiatives<sup>50</sup> have a co-financing share of between 70 and 97 %. 13 initiatives are in the range of 70 to 85 % co-financing.
- 57. One important reason for this is that the CIF component of ADB's PPCR projects are frequently part of a more comprehensive ADB programme. These programmes were typically part of ADB's development project portfolio and did not yet include climate funding. In a review of the SPCR development phase, ADB finds that additional PPCR financing and the experience gained in the project has led to a "retrofit" of its project portfolio and pipeline with the topic of climate adaptation.<sup>51</sup> For instance, the PPCR project "Climate Proofing of Agricultural Infrastructure and Business-focused Adaptation" project is part of the "Climate Resilient Rice Commercialization Sector Development Program." In most PPCR initiatives, concessional ordinary capital resources are lent by ADB which are coming from the Asian Development Fund. Within the PPCR initiatives, the only exception is the sub-project "Climate-resilient Rural Infrastructure in Kampong Cham Province" as part of the "Rural Roads Improvement Project" where additional funding is provided by the Nordic Development Fund, the Government of Australia, Export-Import Bank of Korea and AFD. The only SPCR project with only 10 % co-financing is provided by the Nordic Fund.
- 58. A similar co-funding situation with high contribution of concessional loans can be found in ADB's GCF project. Here, ADB is adding US\$ 90 million concessional loans to the US\$ 10 million and US\$ 30 million GCF senior loan and grant, respectively. The approach is similar to the PPCR

<sup>&</sup>lt;sup>47</sup> UNDP TE (2014), pp. 22 and 25.

<sup>&</sup>lt;sup>48</sup> 41 projects have been funded by Sida, 5 projects by AusAID via the Mekong-Asia-Pacific Community Based Adaptation (MAP-CBA) programme.

<sup>&</sup>lt;sup>49</sup> Carter Sok (2013).

<sup>&</sup>lt;sup>50</sup> These 23 initiatives exclude the SGP initiative, projects in concepts phase and international projects which have Cambodia as target country but where no activity has taken place, yet.

<sup>&</sup>lt;sup>51</sup> ADB (na), p.22.



programme: It is using GCF funds to complement other, not directly climate-related interventions.<sup>52</sup>

- 59. All five LDCF funded NAPA follow-up initiatives receive co-financing between about 86 and 45 %. Almost all GEF TF and SCCF have cofinancing in the range of 97 to 70 %. The exception is the UNDP project "Collaborative Management for Watershed and Ecosystem Service Protection in the Cardamom Mountains" with only about 18 % co-financing. Co-financing sources in GEF funded projects are developed countries, different UN organizations (mostly providing grants and loans, and – in one case - in-kind contributions), the World Bank, NGOs, the private sector as well as in-kind funding by the RGoC.<sup>53</sup> The AF project is the only project with no co-financing. There is no example where the CIF, GCF or GEF funds are complementing each other in one initiative.
- 60. The concessional financing from GCF makes it possible to fund riskier and low return investments in Cambodia. The ADB administered GCF project has a total of eleven activities. Of these, only two sub-projects, which are expected to generate low returns and no visible immediate results, are using the GCF senior loan of USD 10 million (tenor: 32 years, 0.25 % interest rate). These sub-projects are addressing the rehabilitation of water management infrastructure and the improvement of climate-resilient farm road networks for better market access.<sup>54</sup>

#### 3.3 Synergies through learning

- 61. SPCR preparation activities helped build capacities with MOE and staff of other line ministries – including the Ministry of Economy and Finance which is the second CIF government focal point and oversight ministry. At the outset of the SPCR development, government – especially outside the MOE – and other stakeholders were still relatively new to the topic of climate change. During the process, capacity was systematically built up through targeted technical meetings, workshops and trainings. Members of the of the Provincial Roads Improvement Project<sup>55</sup> team stated that they had dealt with climate change resilience in road constructions for the first time in a comprehensive manner and that it would be their priority to share this knowledge "with other initiatives of the department."<sup>56</sup>
- 62. Critical reflection on experience and sharing lessons learned is benefitting future stakeholders addressing climate change in Cambodia. In 2017, ABD has published the study "Mainstreaming climate risk management in development Progress and lessons learned from ADB experience in the PPCR". It analyses challenges in adaptation funding and looks at human capacity, institutional and methodological constraints. The study identifies lessons learned and provides relevant information that can be useful for other ongoing and future activities.

<sup>&</sup>lt;sup>52</sup> These are: Upgrade of agricultural cooperative value chain infrastructure; Strengthening infrastructure for agricultural quality and safety testing; Promotion of farm mechanization and extension.

<sup>&</sup>lt;sup>53</sup> Details about co-financing in all projects can be found in Annex I.

<sup>&</sup>lt;sup>54</sup> ADB FP (2018), p.4.

<sup>&</sup>lt;sup>55</sup> Implemented by the Ministry of Public Works and Transport (MPWT).

<sup>&</sup>lt;sup>56</sup> ADB (2017), p. 20.



#### 4 Challenges

- 63. In the few initiatives which have thematic overlaps with each other, cooperation has potential to be enhanced. Since climate initiatives are thematically well-coordinated, the problem of overlaps is comparably small. Still, there are some topics such as water management, climate proofing of agriculture or forestry, which are addressed by different initiatives. In these cases, little evidence for active cooperation could be identified.
- 64. The problem might be that although cooperation is usually intended at the outset of the respective programmes actual cooperation is not taking place or only with little intensity. One example is UNEP's CAMPAS project<sup>57</sup> (GEF). One the one hand, the PIF states how synergies with ongoing projects would be sought. For instance, it is stated that the AF project could benefit from the CAMPAS project's national scale, law enforcement monitoring, or from lessons learned from CPA management and financing approaches.<sup>58</sup> The fact that both projects are managed by UNEP would certainly facilitate this approach. Unfortunately, no documentation about the actual cooperation can be identified, the Enhancing Climate Resilience of Rural Communities Living in Protected Areas of Cambodia (AFCPA) project's mid-term review of 2018 is not mentioning the CAMPAS project at all.<sup>59</sup> Possibly, UNEP, as global environmental authority, does not have enough resources on the ground to actively foster cooperation with other initiatives. In such a situation, partner NGOs working on the ground could at least partly fill a possible gap and actively seek cooperation with other initiatives.
- 65. The mid-term review (MTR) of the GEF/UNDP project "Reducing the Vulnerability of Cambodian Rural Livelihoods through Enhanced sub-national Climate Change Planning and Execution of Priority Actions" (GEIF ID: 5419) also finds that cooperation with other UNDP projects especially CCCA is not fully exploited. The evaluators acknowledge that information was exchanged with CCCA at meetings organized by the country office but that collaboration between the projects was not yet strategic. To achieve this, the evaluators recommend exploring "joint implementation tools related to training, awareness raising, planning, monitoring, evaluation, etc." A second recommendation is addressing the National Council for Sustainable Development (NCSD) which should support the strengthening of project linkages under its leadership and improve the project coordination framework.<sup>60</sup>
- 66. Another example is missed opportunities for closer cooperation between the UNDP/GEF project "Promoting climate resilient water management and agriculture practice in rural Cambodia" (ID 3404, often referred to as NAPA Follow-up project) and the ADB/CIF PPCR. On a positive note, there is evidence that experience from the earlier NAPA Follow-up project was taken up in the concept phase of the ADB PPCR: Component IV of the PPCR investment plan (TA for mainstreaming climate resilience into development planning) foresees to carry out feasibility studies for selected NAPA projects with the objective to prepare proposals for international

<sup>&</sup>lt;sup>57</sup> Full project title: "Strengthening national biodiversity and forest carbon stock conservation through landscape-based collaborative management of Cambodia's Protected Area System as demonstrated in the Eastern Plains Landscape" (GEF ID: 4905).

<sup>&</sup>lt;sup>58</sup> UNEP (2015), pp.43-46.

<sup>&</sup>lt;sup>59</sup> AF MTR (2018).

<sup>60</sup> UNDP MTR (2018), pp. 6 and 10



climate funding. The Investment Plan (IP) identifies three high priority areas of the NAPA (flood protection through dykes and vegetation planting and strengthening of community disaster preparedness) that could be started, continued and complemented through the PPCR. It seems, however, that potential interactions were not fully exploited: The Terminal Evaluation (TE) of the NAPA FU project notes that effective cooperation with ADB projects on the ground was difficult and that this problem might have to be resolved "at a high level" and that NAPA Follow-up activities were insufficiently considered in the PPCR.<sup>61</sup>

- 67. In 2017, the ADB published the report "Mainstreaming Climate Risk Management in Development" sharing experience and lessons learned in the PPCR.<sup>62</sup> This report finds that possibilities for "close cooperation and coordination with other climate change-related activities were not fully realized". It also admits that other initiatives would have been beneficial for the SPCR and mentions that neglecting to create stronger links with the CCCA (funded by the EU) was "a lost opportunity", especially with regards to mainstreaming of efforts. Consequently, ADB clearly states its intention to actively address this issue in the 2<sup>nd</sup> phase of the PPCR.
- 68. Excessive work loads for the government with regards to coordinate climate change combined with limited staff and capacities to deal with these are likely to impede better coordination of international initiatives. ADB (2017) describes a situation at the start of SPCR planning where the MOE was overburdened with UNFCCC responsibilities (national communications and NAPA), the implementation of GEF- and other donor-funded programmes as well as setting up the climate change strategy and action plan. Although the report does not refer to problems coordinating climate initiatives in this context, it is likely that this situation led to some inefficiencies and missing possibilities for more efficient coordination.<sup>63</sup>
- 69. Often, coordination is challenging when the government is dealing with a complicated donor landscape. ADB (2017) finds that the large variations between development partner approaches, different financial procedures as well as reporting requirements currently are a barrier for better coordination.<sup>64</sup>

#### **5** Conclusions and recommendations

70. Thematic and regional complementarity of climate initiatives can be achieved through careful and strategic coordination. This is possible if there is a government entity such as the National Council for Sustainable Development (NCSD) which has a clear mandate to coordinate initiatives. When the topic of climate change is still new to a government, there should be international support to build up required capacities. With growing maturity, instruments like LDCF's NAPA or CIF's SPCR are important to identify priority fields of intervention and thus help to structure and organize work and responsibilities. A positive side effect of preparing plans such as the SPCR is that involved stakeholders are considerably strengthening their knowledge on climate change

<sup>&</sup>lt;sup>61</sup> UNDP TE (2014), p.44.

<sup>&</sup>lt;sup>62</sup> ADB (2017).

<sup>&</sup>lt;sup>63</sup> ADB (2017), p.19.

<sup>&</sup>lt;sup>64</sup> ADB (2017), p.25.

related issues. Despite the successful coordination, there still seems to be room for improvement when it comes to the coordination framework provided by the NCSD.

- 71. Although Cambodia was generally quite successful in coordinating initiatives, there are signs that international responsibilities with regards to climate change (e.g. toward UNFCCC), investment plan development or the confrontation with a plethora of climate funds all having different procedures but also implementing agencies is a challenging task for responsible government entities. Accordingly, further streamlining efforts by funds and agencies could relieve governments but also other stakeholders.
- 72. Even if strong thematic complementarity and work division between implementing agencies has been achieved, there will still be thematic areas where climate initiatives are overlapping. In this case, cooperation should be actively sought to avoid unwanted redundancies and foster synergies. In Cambodia, there are many examples which demonstrate that implementing agencies are aware of other initiatives and willing to cooperate with or inform these. These intentions are typically formulated in early project documents such as funding proposals or similar. However, there is some evidence that these intentions are not being implemented and opportunities for cooperation have been missed. Reviews during the project can and should be used to point projects to this problem and call for increased activity in this regard.
- 73. Official partnerships between implementing agencies funded by different sources will foster synergies: If implementing agencies are joining forces for instance by sharing infrastructure, experts, steering committees or using the same procedures there will be efficiency gains through cost savings but also shorter communication channels.
- 74. Climate funding is adding value to development project portfolios. ADB has used PPCR funding to complement its project portfolio and pipeline with climate aspects. Thus, ADB can continue its commitment towards traditional development goals (e.g. the improvement of urban or rural infrastructure) but to add climate change to the equation. Reversely, the possibility to integrate funds of the GCF into a programme that not only addresses climate-related goals contributes to the attainment of multiple development goals.
- 75. The availability of funds on the cross-cutting topic of biodiversity increases options for climate initiatives. In Cambodia, the GEF is funding several forestry projects through its biodiversity focal area. Through this, it is possible to reach numerous climate change related targets: mitigation by creating or protecting carbon sinks and adaptation by reducing erosion, creating buffers for severe weather events or creating options for improved livelihoods.



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Implementing agency: Project	Start <sup>65</sup>	End	Funding and financing institution(s)	Short description			
Cambodia Strategic Program for Climate Change (SPCR): ADB's Pilot Program for Climate Resilience (PPCR)							
Component I: Promoting	g Climate-Re	esilience o	of Water Resources and Related Infrastructure				
ADB: Enhancement of Flood and Drought Management in Pursat Province <sup>66</sup> <u>as part of</u> the Greater Mekong Subregion (GMS) Flood and Drought Risk Management and Mitigation Project	11/2012 (A)	2019	US\$ 9.8 m from CIF (US\$ 5.8 m grant + US\$ 4 m loan from CIF-SCF) The project is part of the ADB's GMS Flood and Drought Risk Management and Mitigation Project which has a total volume of US\$ 44.8 m. Additional to the CIF funding, US\$ 35 m are added as loan from concessional ordinary capital resources lending by the Asian Development Fund.	The structural subproject adds climate-resilient features to the Damnak Cheukkrom Barrage, enhances flood diversion through a canal, improves Svay Donkeo River structures, and, increases local drainage. The non-structural subproject introduces an early warning system, improves hydraulic design standards in the Mekong Delta, and, offers TA to strengthen community capacities to deal with increasing weather extremes.			

<sup>&</sup>lt;sup>65</sup> 'A' stands for 'Approval of Implementation' by the funding organization; 'S' stands for 'Project start'.

<sup>66</sup> PPCR PAR (2012b), p.1.



Implementing agency: Project	Start <sup>65</sup>	End	Funding and financing institution(s)	Short description
ADB: Climate Proofing of Agricultural Infrastructure and Business-focused Adaptation <sup>67</sup> <u>as part of</u> the Climate Resilient Rice Commercialization Sector Development Program CRRC SDP	03/2013 (A)	2020	US\$ 9.5 m from CIF – SCF (US\$ 4.5 m grant + US\$ 5 m loan) The project is part of ADB's CRRC SDP which has a total volume of US\$ 79.1 m (US\$ 19.1 m grants + US\$ 60 m loans) coming from the Global Agriculture and Food Security Program, concessional ordinary capital resources lending by the Asian Development Fund and the CIF – SCF).	The CRRC SDP as a whole supports increased food security and furthers rice commercialization through improved value chains, enhancing legal/regulatory agricultural land management, make credits accessible for paddy producers and rice millers/exporters and making irrigation more efficient. The CIF-funded grant and loan are used for improving climate-resilience of and land leveling for 13 irrigation sub-projects (loan), design/supervision of these 13 sub-projects (grant), design and testing of a weather-indexed crop insurance scheme in 2 provinces (grant), miller capacity development (loan), and, consulting on how to incorporate climate resilience (grant).
ADB: Promoting Climate- Resilient Agriculture in Koh Kong and Mondulkiri Provinces <sup>68</sup> <u>as part of</u> the Greater Mekong Subregion Biodiversity Conservation Corridors (GMS-BCC) Project	09/2014 (A)	2019	US\$ 7.4 m from CIF – SCF (grant) complemented by US\$ 0.6 m ADB preparation funding (grant) The project is part of ADB's GMS-BCC Project which has a total volume of US\$ 27 m (Cambodia only) coming from concessional ordinary capital resources lending from the Asian Development Fund and the CIF – SCF.	This PPCR project is enhancing specific outputs of the GMS-BCC project by including the following additional interventions: Construction of a model rainwater harvesting pond, replication of the model in about 14 villages and skills development and training. Introduction of provincial authorities to climate-resilient irrigation (incl. rehabilitation of one irrigation system) and Cambodian System of Rice Intensification (SRI) techniques. Construction of 15 km of bioengineered sea barriers to protect communities from saltwater intrusion, introduction of salt-resilient crops and related capacity building. EbA in two catchments in communities living near or in protected forests in Mondulkiri.

Component III: Improving Climate-Resilient Infrastructure

<sup>67</sup> PPCR PAR (2013), p.4.

<sup>&</sup>lt;sup>68</sup> PPCR PAR (2014), pp.1-2.



Implementing agency: Project	Start <sup>65</sup>	End	Funding and financing institution(s)	Short description
ADB: GMS Southern Economic Corridor Towns Development Project - Climate-Proofing Infrastructure in the Southern Economic Corridor Towns <sup>69</sup>	10/2011 (A)	2018	Total: US\$ 47.9 m; including: US\$ 9.4 m from CIF – SCF (US\$ 4.4 m grant + US\$ 5 m loan), US\$ 37 m from concessional ordinary capital resources lending / Asian Development Fund (loan), and, US\$ 1.5 m from ADB's Urban Environmental Infrastructure Fund under the Urban Financing Partnership Facility.	Project supports towns' climate resilience in five subprojects in the thematic areas of wastewater treatment, and, flood control and protection. The CIF funded works will encompass the construction of improved or new structures for better flood management, rehabilitation and new construction of wastewater treatment plants, storm drainage and/or new canals, new sewage pipes, etc., as well as consultancy services and stakeholder training.
ADB: Provincial Roads Improvement Project (RRIP I) - Climate Proofing of Roads in Prey Veng, Svay Rieng, Kampong Chhnang and Kampong Speu Provinces <sup>70</sup>	11/2011 (A)	2018	Total: US\$ 75.5 m; including: US\$ 17 m from CIF – SCF (US\$ 7 m grant + US\$ 10 m loan), US\$ 58 m from concessional ordinary capital resources lending / Asian Development Fund (loan), and, US\$ 0.5 m from ADB's Technical Assistance Special Fund.	Project to rehabilitate ca. 157 km of provincial roads for all-year access (incl. bioengineering/EbA measures and hazard mapping), improve road asset management (incl. water capturing), enhance CC resilience of roads, and, support the mainstreaming of climate resilience in transport infrastructure.

<sup>69</sup> PPCR PAR (2012a), p.1.

<sup>&</sup>lt;sup>70</sup> PPCR PAR (2011), p.2.



as part of the integrated Urban Environmental Management in the Tonle Sap Basin Projectcapital resources lending / Asian Development Fund and the CIF – SCF.in Pursat's town centre; improvement of wastewater treatment; construction of a new landfill site, provision of solid waste collection equipment and improvement of landfill management.Sap Basin ProjectSap Basin Project09/2015 (A)US\$ 16 m from CIF – SCF (US\$ 7 m loan + US\$ 9 m grant)Community mobilization (urban poor) to address climate change and environment. Support of the Ministry of Public Works and Transport to strengthen climate resilient regulation wrt building codes.ADB: Climate resilient Rural Infrastructure in Kampong Cham Province <sup>72</sup> 09/2015 (A)2020US\$ 16 m from CIF – SCF (US\$ 7 m loan + US\$ 9 m grant)Project is part of ADB's Rural Roads Improvement Project (RRIP-II) which has a total volume of US\$ 174.92 m (US\$ 32,92 m grants + US\$ 142 m loans) coming from the Nordic Development Fund, Export-Import Bank of Korea, AFD and the CIFProject is part of Rural Roads Improvement Project (RRIP-II)Project is part of ADB's Rural Roads Improvement Project (RRIP-II) which has a total volume of US\$ 174.92 m (US\$ 32,92 m grants + US\$ 142 m loans) coming from the Nordic Development Fund, Export-Import Bank of Korea, AFD and the CIFProject is and disaster rise to the whole RRIP-II project that is improving roads in 10 provinces. Inis SCF is basically used in one of these 10 provinces, i.e. Kampong Cham (regine additional climate proofing measures such as jetty improvement will also be implemented).	Implementing agency: Project	Start <sup>65</sup>	End	Funding and financing institution(s)	Short description
Rural Infrastructure in Kampong Cham Province72(A)US\$ 9 m grant)regime of the Ministry of Rural Development, and mainstream climate change adaptation concerns in rural infrastructure development.Province72 	Infrastructure Development in Pursat and Kampong Chhnang Towns <sup>71</sup> <u>as part of</u> the Integrated Urban Environmental Management in the Tonle		2022	US\$ 5 m grant) The project is part of ADB's Integrated Urban Environmental Management in the Tonle Sap Basin Project which has a total volume of US\$ 47 m coming from concessional ordinary capital resources lending / Asian Development	<ul> <li>Environmental improvement of urban area (Kampong Chhnang): Improvement / new construction of embankments for flood protection along Tonle Sap river; construction of controlled landfill sites, provision of solid waste collection equipment and improvement of landfill management.</li> <li>Environmental improvement of urban area (Kampong Chhnang): construction of drains in Pursat's town centre; improvement of wastewater treatment; construction of a new landfill site, provision of solid waste collection equipment and improvement of landfill management.</li> <li>Community mobilization (urban poor) to address climate change and environment.</li> <li>Support of the Ministry of Public Works and Transport to strengthen climate resilient regulation wrt building codes.</li> <li>Cap. bldg. in project implementation and O&amp;M as well as flood mitigation strategies</li> </ul>
	Rural Infrastructure in Kampong Cham Province <sup>72</sup> <u>as part of</u> Rural Roads Improvement Project	-	2020	US\$ 9 m grant) The project is part of ADB's Rural Roads Improvement Project (RRIP-II) which has a total volume of US\$ 174.92 m (US\$ 32,92 m grants + US\$ 142 m loans) coming from the Nordic Development Fund, the Gov't of Australia, concessional ordinary capital resources lending / Asian Development Fund,	adaptation concerns in rural infrastructure development. The above information refers to the whole RRIP-II project that is improving roads in 10 provinces. This SCF is basically used in one of these 10 provinces, i.e. Kampong Cham (covering 240 km of roads, i.e. ~190 km on the mainland and ~ 50 km on the province's five islands where additional climate proofing measures such as jetty improvement will

<sup>71</sup> PPCR PAR (2013), pp.1-2.

<sup>72</sup> PPCR PAR (2015), pp.1-3.



Implementing agency: Project	Start <sup>65</sup>	End	Funding and financing institution(s)	Short description			
ADB: Mainstreaming Climate Resilience into Development Planning <sup>73</sup>	08/2012 (A); 10/2013 (S)	2018	Total: US\$ 11 m; including: US\$ 10 m grant from CIF-SCF and US\$ 1 m grant from the Nordic Development Fund	TA to enhance capacity for SPCR investments coordination & mainstreaming of adaptation concerns into national/sub-national development planning, prepare feasibility studies to prioritize projects of the National Adaptation Program of Action (NAPA), create mechanism to fund community-based adaptation initiatives and build capacity for climate resilience mainstreaming of CSOs and NGOs, and, develop, manage and disseminate knowledge toolkits for climate change adaptation (CCA) in key sectors.			
ADB GCF Agribusiness va	ADB GCF Agribusiness value chain infrastructure						
ADB: Climate-Friendly Agribusiness Value Chains Sector Project <sup>74</sup>	2018 (A)	2024	GCF: US\$ 30 m (grant), US\$10m (loan) <u>Co-financing:</u> ADB: US\$ 90 m (loan) RGoC: US\$ 7.6 m (in-kind) Beneficiaries: US\$ 3.8 m (in-kind)	The project has the objectives to enhance infrastructure resilience to climate change, the "last mile" connectivity in four provinces (Kampong Cham, Tbong Khmum, Kampot and Takeo) and to reduce GHG emissions in four value chains of agricultural products. The objectives will be achieved through: Improvement of climate smart agribusiness value chain infrastructure for four agricultural products (rice, maize, cassava and mango) Capacity strengthening in climate friendly agriculture Enabling environment for sound agribusiness policy Promotion of RE (in facilities related to the respective value chains) and introduction of biodigesters The project is linked to the regional project preparation TA project "Climate-Friendly Agribusiness Value Chains Sector" and to similar national projects in Myanmar and Lao PDR. All projects are implemented by ADB but financed by different donors.			
SGP							

<sup>73</sup> ADB PDS (2018), p.2.

<sup>74</sup> ADB FP (2018), p.2.



Implementing agency: Project	Start <sup>65</sup>	End	Funding and financing institution(s)	Short description
UNDP: GEF Small-grants Programme <sup>75</sup>	2004	ongoi ng	To date: Total grant amount: ca. US\$ 8 m Total cash co-financing: ca. US\$ 2 m Total in-kind co-financing: ca. US\$ 4.8 m	To date, the GEF SGP has implemented a total of 214 projects. These 214 projects include 46 projects by the Cambodia Community Based Adaptation Programme (CCBAP) (see next line) which have been administered by the SGP but funded by Sweden and Australia. Community-based adaptation and biodiversity are the main work areas, followed by climate change mitigation, land degradation and international waters and chemicals.
UNDP: Cambodia Community Based Adaptation Programme (CCBAP) <sup>76</sup>	2010 (S)	2014	Sida: US\$ 2.59 m (grant) AusAID: US\$ 0.25 m (grant) <sup>77</sup>	The programme is implemented via the GEF Small Grants Programme in nearly all provinces. It has the objective to improve community-based adaptation and climate resilience in vulnerable communities in flood and drought prone provinces. Integrating and mainstreaming resilience and adaptation measures on the commune level as well as incorporating them into the commune development plans Applying vulnerability reduction assessments (VRA) for livelihood improvement, disaster risk reduction planning and for community adaptation responses
Cambodia's National Ac	tion Prograi	mme for	Adaptation to Climate Change (NAPA) - LDCF	
UNDP: Programme of Action for Adaptation to Climate Change <sup>78</sup>	12/2002 (A)	06/20 07	LDCF: US\$ 200 k (grant)	The funding was used to assist the Cambodian government with the preparation of a national adaptation program of action (NAPA) which identifies the priority activities and urgent areas of action in key sectors such as agriculture, forestry, water resources, coastal zone and human health.
Agriculture and Water Ma	nagement	1	1	

<sup>&</sup>lt;sup>75</sup> <u>https://sgp.undp.org/component/countrypages/?view=countrypage&country=30&Itemid=271</u>

<sup>&</sup>lt;sup>76</sup> Carter/Sok (2013), p. 7.

<sup>&</sup>lt;sup>77</sup> UNDP (2013), p. 3.

<sup>&</sup>lt;sup>78</sup> UNDP/RGoC (2002), p. 5.



Implementing agency: Project	Start <sup>65</sup>	End	Funding and financing institution(s)	Short description
UNDP: Promoting Climate-Resilient Water Management and Agricultural Practices <sup>79</sup>	2009 (A); 2009 (S)	2013	LDCF: US\$ 1.85 m (grant) <u>Co-Financing</u> : UNDP: US\$ 1.31 m (grant) RGoC: US\$ 180 k (in-kind)	<ul> <li>Based on the NAPA, the follow-up project aimed to increase the adaptive capacity of key stakeholders in the agricultural and water resource management in two provinces (Preah Vihear, Kratié).</li> <li>Establishment of community-based climate information systems and accompanied trainings</li> <li>Demonstration projects</li> <li>Increase of awareness through educational programs, learning networks, media releases and lessons learned sharing</li> </ul>
FAO: Strengthening the Adaptive Capacity and Resilience of Rural Communities Using Micro Watershed Approaches to Climate Change and Variability to Attain Sustainable Food Security <sup>80</sup>	06/2014 (A)	2019	LDCF: US\$ 5.17 m (grant) <u>Co-Financing:</u> US\$ 18.81 m RGoC: US\$ 1 m (in-kind) European Union: US\$ 11.12 m (grant) Spain: US\$ 3.35 m (grant) Italy: US\$ 0.46 m (grant) FAO: US\$ 1.27 m (grant); US\$ 0.31 m (loan) UNREDD: US\$ 1.3 m (grant)	Implementation of micro watershed management and climate resilient agriculture practices to increase adaptive capacity and reduce the vulnerability to climate change through Integration of climate change adaptation into agricultural and food security policies and planning Participatory integrated micro watershed management to reduce climate impacts on natural resources and agriculture Demonstrating and promoting climate resilient agricultural practices through farmer field schools Piloting climate-resilient alternative livelihood options targeted at women
UNDP: Reducing the Vulnerability of Cambodian Rural Livelihoods through Enhanced sub-national Climate Change Planning and Execution of Priority Actions <sup>81</sup>	03/2015 (A); 2015 (S)	2019	LDCF: US\$ 4.57 m (grant) <u>Co-Financing:</u> RGoC: US\$ 14.5 m (grant) UNDP: US\$ 1 m (grant); US\$ 0.3 m (in-kind)	The project has the objective to improve sub-national administration systems affecting investments in rural livelihoods through climate sensitive planning, budgeting and execution. The project is implemented in the two provinces, Banteay Meanchey and Battambang. The sub-national administrations will be supported for the following activities: Increasing investments in small-scale water management infrastructure TA for resilient agricultural practices Capacity building for improved food production on the individual level

<sup>79</sup> Borde/Chun (2014), p.16.

<sup>80</sup> FAO (2011), pp. 1-2.

<sup>81</sup> UNDP (2014b), pp. i-ii.



Implementing agency: Project	Start <sup>65</sup>	End	Funding and financing institution(s)	Short description
Coastal Zone				
UNEP: Vulnerability Assessment and Adaptation Programme for Climate Change in the Coastal Zone of Cambodia Considering Livelihood Improvement and Ecosystems (VAAP) <sup>82</sup>	03/2011 (A)	09/20 16	LDCF: US\$ 1.64 m (grant) <u>Co-Financing:</u> RGoC: US\$ 1.68 m (cash); US\$ 0.32 m (in-kind)	The project has the aim to reduce the vulnerability of coastal communities to climate change in the four coastal provinces (Koh Kong, Preah Sihanouk, Kampot and Kep) by Strengthening national policy, regulatory and institutional coordination for managing climate change adaptation programmes Vulnerability assessment and adaptation planning for coastal zone adaptation Demonstrating coastal flood measures in agricultural zones of livelihood significance Demonstrating coastal ecosystem-based resilience measures VAAP is complemented by the Cambodia Climate Change Alliance's (CCCA) Coastal Adaptation and Resilience Planning (CARP) project. Both projects were implemented in parallel and closely coordinated, incl. sharing of central management structures. Both projects were administered separately.
Climate Information and Ea	arly Warning	Systems	•	·
UNDP: Strengthening Climate Information and Early Warning Systems in Cambodia to Support Climate Resilient Development and Adaptation to Climate Change <sup>83</sup>	10/2014 (A); 2015 (S)	2019	LDCF: US\$ 4.91 m (grant) <u>Co-Financing</u> : RGoC: US\$ 20.2 m (cash); US\$ 0.6 (in-kind) Mekong River Commission (MRC): US\$ 0.39 m (cash) Japanese International Cooperation Agency (JICA): https://www.thegef.org/project/sfm- strengthening-sustainable-forest- management-and-development-bio-energy- markets-promoteUS\$ 0.68 m (grant)	The project aimed to strengthen the climate observing infrastructure and increase the capacity to utilize climate and environmental information for responding to climate hazards and planning adaptation to climate change. Mainstreaming adaptation in broader development frameworks at the local and national level Increasing the knowledge about climate variability and climate change induced threats at local and national level Enhancing the enabling environment to support adaptation-related technology transfer

<sup>&</sup>lt;sup>82</sup> McCue/Kassam (2018), p. 1; UNEP (2009), pp. 1-4.

<sup>&</sup>lt;sup>83</sup> UNDP (2014a), pp. 1-5.



Implementing agency: Project	Start <sup>65</sup>	End	Funding and financing institution(s)	Short description
UNEP: Enhancing Climate Resilience of Rural Communities Living in Protected Areas of Cambodia (AFCPA) <sup>84</sup>	06/2012 (A); 05/2013 (S)	2018 (est.)	AF: US\$ 4.95 (grant)	The project had the goal to increase food supply and reduce soil erosion in five rural communities within protected areas in four provinces (Preah Vihear, Kampong Thom, Siem Reap and Mondulkiri). Resilience to climate change induced irregular rainfall was enhanced through: Increased technical expertise and enabling framework for forest restoration and conservation on the local level Establishment and maintenance of multi-use forests and diversified agricultural practices Mainstreaming of restoration and conservation agriculture interventions into the national adaptation policy
GEF Umbrella project GM	MS Forest ar	nd Biodiv	versity Program (FBP)	
ADB: GMS Forest and Biodiversity Program (GMS-FBP) - Creating Transboundary Links Through a Regional Support Project <sup>85</sup>	5/2014 (A)	2017	GEF TF: US\$ 0.46 m (grant) SCCF: US\$ 0.46 m (grant) <u>Co-Financing:</u> ADB: US\$ 13 m (investment) World Bank: US\$ 11.9 m (soft loan) WWF: US\$ 5.8 m (type not specified)	The regional support project was designed to complement and augment the national projects under the GMS-FBP with the Development of conservation strategies for six transboundary landscapes and establishment of collaborations for managing these landscapes Development of framework to integrate EBA into conservation strategies of transboundary landscapes and assessment of climate vulnerability for the landscapes Set-up of regional knowledge base and exchange mechanisms The project is implemented in all GMS countries: Cambodia, People's Republic of China (PRC), Lao PDR, Myanmar, Thailand and Vietnam.

<sup>&</sup>lt;sup>84</sup> McCue/Kassam (2018), p. 8.

<sup>&</sup>lt;sup>85</sup> ADB (2014), pp. 1-8.



Implementing agency: Project	Start <sup>65</sup>	End	Funding and financing institution(s)	Short description
UNDP: Collaborative Management for Watershed and Ecosystem Service Protection and Rehabilitation in the Cardamom Mountains, Upper Prek Thnot River Basin (CoWES) <sup>86</sup> ; this is a national sub-project under the regional GMS- FBP	07/2014 (A); 07/2017 (S)	06/20 20 (est.)	GEF TF: US\$ 1.1 m (grant) <u>Co-Financing:</u> RGoC: US\$ 0.24 m (in-kind)	The project is the national sub-project under the regional GMS-FBP and implemented in a priority degraded area in Kampong Speu province. It was designed to restore and maintain forest cover and watershed stability functions trough the Improvement of on-farm soil conservation and agro-forestry practices Restoration and sustainable management of community forest areas Improvement of watershed management, incl. monitoring capacity
GEF TF funded projects with focus on forests (incl. related agroforestry, biodiversity, EbA)				

<sup>86</sup> UNDP (2017), p. 8.



Implementing agency: Project	Start <sup>65</sup>	End	Funding and financing institution(s)	Short description
UNEP: Strengthening National Biodiversity and Forest Carbon Stock Conservation through Landscape-based Collaborative Management of Cambodia's Protected Area System as Demonstrated in the Eastern Plains Landscape (CAMPAS Project) <sup>87</sup>	8/2015 (A)	07/20 20	GEF TF: US\$ 4.7 (grant) <u>Co-Financing:</u> <b>Total: US\$ 7.8 m (cash); US\$ 6.77 m (in-kind)</b> ADB: US\$ 3.75 m (cash); US\$ 3.75 m (in-kind) UNEP: US\$ 1.16 m (in-kind) RGoC: US\$ 0.05 m (in-kind) WWF: US\$ 1.5 m (cash); US\$ 0.4 m (in-kind) WCS: US\$ 1.5 m; US\$ 0.7 m (in-kind) USAID SFB: US\$ 0.5 m (cash); 0.51 m (in-kind) Bird Life US\$ 0.5 m (cash); US\$ 0.05 m (in-kind) Live&Learn: US\$ 0.05 (cash); US\$ 0.1 m (in-kind) ERECON: US\$ 0.05 m (in-kind)	The project has the objective to enhance the effectiveness of protected area management and secure forest carbon through improving inter-sectoral collaboration, landscape connectivity and sustainable forest management. On the national level, the project aims to strengthen unity and support for landscape- based protected areas and forest management through Establishing the enabling environment at national level through communications and awareness raising activities Strengthening the protected area governance incl. inter-agency cooperation Demonstrating sustainable financing options On the demonstration site level, the project aims to work on possibilities to support biodiversity in conservation landscape for up-scaling at the national level by Delivering a sub-regional planning approach for the Eastern Plains Landscape Integrating forest conservation with sub-regional economic development planning Fostering integration opportunities with similar initiatives, like the ADB BCC or the UNEP Adaptation Fund project The project is actually deeply interlinked with other projects as it was designed to complement and support other baseline projects, f. ex. the Adaptation Fund Project, the national GMS-FBP project or the PPCR funded project under ADB's GMS-BCC programme.

<sup>87</sup> UNEP (2015), pp. 1-3; pp. 54-62.



Implementing agency: Project	Start <sup>65</sup>	End	Funding and financing institution(s)	Short description
UNDP: SFM Strengthening Sustainable Forest Management and the Development of Bio- energy Markets to Promote Environmental Sustainability and to Reduce Green House Gas Emissions in Cambodia <sup>88</sup>	05/2010 (A); 03/2011 (S)	12/20 15	GEF TF: US\$ 2.36 m (grant) <u>Co-Financing:</u> Danida: US\$ 3.75 m (n.s.) UNDP: US\$ 2.38 m (n.s.) GERES: US\$ 1.1 m (n.s.) RGoC: US\$ 0.6 m (in-kind)	The project had the objective to strengthen authorities on the national and local level as well as communities regarding the conservation of biodiversity and the adaptation to climate change. The project focused on four provinces (Kampong Speu, Kampong Chhnang, Pursat and Battambang) with the possibility of supporting selected activities in other provinces. Creation of national capacities and tools to facilitate the widespread implementation of sustainable community-based forest management and technologies that reduce demand for fuel wood Implementation of community-based sustainable forest management within a context of cantonment, province, district and commune level planning delivering concrete benefits to local communities Strengthening demand and supply chain for energy efficient cook stoves and end fuels
UNIDO: Reduction of GHG Emission through Promotion of Commercial Biogas Plants <sup>89</sup>	03/2015 (A)	2019	GEF TF: US\$ 1.51 m (grant) <u>Co-Financing:</u> RGoC: US\$ 0.12 m (in-kind) FTB: US\$ 0.26 m (in-kind), US\$ 10 m (soft loan) Private Sector: US\$ 2 m (investment) UNIDO: US\$ 0.9 m (in-kind), US\$ 0.6 m (cash)	The project has the objective to increase the usage of biogas technology for electricity generation in the commercial animal farms for productive use. Therefore, the project focuses on The increase of awareness and knowledge in climate change topics and commercial biogas power plants among various stakeholders The establishment of a financing facility supporting commercial biogas technology Demonstration of biogas based mini-grid technologies in commercial farms with cumulative 1.5 MW installed at least

<sup>88</sup> UNDP (2016), pp. 1-3.

<sup>89</sup> UNIDO (2014), pp. 1-3.



Implementing agency: Project	Start <sup>65</sup>	End	Funding and financing institution(s)	Short description
IFAD: Building Adaptive Capacity through the Scaling-up of Renewable Energy Technologies in Rural Cambodia (S-RET) <sup>90</sup>	05/2016 (A)	2020 (est.)	SCCF: US\$ 4.6 m (grant) <u>Co-Financing:</u> RGoC: US\$ 3.5 m (in-kind) IFAD: US\$ 18.5 m (loan and grant) Beneficiaries: US\$ 1 m (in-kind)	The project focuses on the large-scale adoption of Renewable Energy Technologies (RET) in the agricultural sector in five provinces (Kampot, Kandal, Prey Veng, Svay Rieng and Takeo). Testing high potential RE technologies (e.g. solar water pumping, biomass cookstoves, biogas digesters) Increase the usage of RET Establishing enabling conditions for scaling-up through agriculture policy making and incentive framework
UNIDO: TT-Pilot (GEF-4): Climate Change Related Technology Transfer for Cambodia: Using Agricultural Residue Biomass for Sustainable Energy Solutions <sup>91</sup>	05/2012 (A); 08/2012 (S)	2018	GEF TF: US\$ 1.69 m (grant) <u>Co-Financing:</u> RGoC: US\$ 150 k (in-kind) UNIDO: US\$ 100 k (in-kind); US\$ 200 k (grant) Private Sector: US\$ 3.4 m (cash) National Cleaner Production Office Cambodia: US\$ 115 k (in-kind)	The project has the aim to transfer cost effective, efficient and biomass energy technology systems derived from agricultural waste (to replace fossil fuels for powered generators and boilers) for power generation and thermal energy applications. It has the following five outcomes: Transfer of clean and energy efficient low carbon technologies Supply of national service providers in technology evaluation and technology transfer Stronger institutional framework in place to ensure long-term support for renewable energy biomass promotion Increased adoption of energy generation technologies by Cambodian businesses and private investors, creating a market for biomass technologies Establishment of policy, legal and regulatory frameworks that sustainably promote and support renewable energy generation

<sup>&</sup>lt;sup>90</sup> IFAD (2016), p. vii; IFAD (2015), pp. 1-3.

<sup>&</sup>lt;sup>91</sup> Wong/Uy (2015), p. 6; UNIDO (2009), pp. 1-3.



Implementing agency: Project	Start <sup>65</sup>	End	Funding and financing institution(s)	Short description
UNEP: Renewable Energy Enterprise Development - Seed Capital Assistance Facility (SCAF I) <sup>92</sup>	05/2007 (A)	12/20 14	GEF TF: US\$ 8.4 m (grant) <u>Co-Financing:</u> UN Foundation: US\$ 0.7 m (cash) Cooperating Funds: US\$ 50.9 US\$ (cash) Financiers: US\$ 1.5 m (in-kind) UNEP/ADB/AfDB: US\$ 1.37 m (in-kind)	The project was implemented in countries across Asia and Africa and included the establishment of a Seed Capital Assistance Facility (SCAF) to increase the availability of investment for early-stage development of low-carbon projects. Therefore, the Facility provided financial support to low-carbon projects via private equity and venture capital funds. No information about investments in Cambodia publicly available.
ADB: Mezzanine Financing for <sup>Climate</sup> Change <sup>93</sup>	12/2015 (A), 2016 (S exp.)	2019 (exp.)	CTF: US\$ 1.5 m (grant); US\$ 33 m (mezzanine) <u>Co-Financing:</u> ADB: US\$ 16.5 m (equity); US\$ 21 m (debt and/or additional equity) Govt of UK: US\$ 16.5 m (equity) Private Sector: US\$ 133 m (equity or debt)	During the global project that includes 13 countries and the Pacific Region a Mezzanine Finance Facility was established to co-finance mitigation projects (solar, wind, hydro) to reach financial close in tandem with ADB's climate equity investment program Asia Climate Partners (ACP). Currently, no investments have been made in Cambodia via ACP.
National Solar Parks Program				https://www.adb.org/sites/default/files/tenders/cam51182-national-solar-park- project-aa.pdf
GEF projects in concept ph	ase			
UNDP: Integrated Natural Resource Management (INRM) in the Productive, Natural and Forested Landscape of Northern Region of Cambodia	concept approved (Novembe r 2017)	n.a.	GEF TF: US\$ 3.34 m (grant) <u>Co-Financing:</u> US\$ 10 m – Grants and in kind; provided by recipient government, UNDP, Wildlife Conservation Society, IUCN and ADF.	Promotion of integrated landscape management to conserve and sustainably use natural resources and ecosystem services in northern Cambodia.
UNEP: Building Resilience of Cambodian Communities Using Natural Infrastructure and Promoting Diversified Livelihood	concept approved (February 2018)	n.a.	GEF TF: US\$ 0.5 m (grant) <u>Co-Financing:</u> US\$ 1.96 m (no further information about co- financing available)	Restoration and protection of mangroves to contribute to water, food and ecosystem security in the Prey Nob region.

<sup>&</sup>lt;sup>92</sup> SCAF Project Website; UNEP (2004), pp. 1-2.

<sup>&</sup>lt;sup>93</sup> Asia Climate Partners Website, ADB (2015), pp. 1-2.



Implementing agency: Project	Start <sup>65</sup>	End	Funding and financing institution(s)	Short description			
Thematically related initiat	Thematically related initiatives with other funding than by GCF, GEF, AF or CIF						
UNDP: Cambodia Climate Change Alliance (CCCA), Phase 1 <sup>94</sup> and Phase II <sup>95</sup>	2010 2014	2014 2019	Phase I Total:         US\$ 10.85 m           European Union:         US\$ 2.86 m           Sida:         US\$ 4.43 m           Danida:         US\$ 0.56 m           UNDP:         US\$ 3.0 m           Phase II Total:         US\$ 13.19 m           European Union:         US\$ 7.47 m           Sida:         US\$ 3.78 m           UNDP:         US\$ 1.15 m           RGoC:         US\$ 0.79 m (in-kind)	<ul> <li>The CCCA is a multi-donor initiative with the aim to improve the enabling environment to respond to climate change by focusing on capacity building and strengthening institutional structures on different administrative levels but especially the National Climate Change Committee (NCCC).</li> <li>Improving capacity of policy coordination and monitoring the implementation of policies and strategies</li> <li>Improving access to climate change information, knowledge and learning opportunities</li> <li>Strengthening capacity within NCCC regarding the management of a climate change trust fund and set-up of a fund</li> <li>Increasing adaptation planning, implementation planning of local projects and lessons-learned sharing to the national level</li> <li>Strengthening capacity in national agencies and CSOs for developing and implementing climate change response initiatives through the increased access to financial and technical resources</li> </ul>			
UNDP: Cambodia UN- REDD National Programme (CNP) <sup>96</sup>	2011	2015	<u>Total:</u> US\$ 2.81 m FAO: US\$ 1.22 m (n.s.) UNDP: US\$ 1.45 m (n.s.) UNEP: US\$ 0.14 m (n.s.)	<ul> <li>The UN-REDD programme had the objective to support the readiness of Cambodia for the implementation of the UNFCCC REDD+ mechanism.</li> <li>Effective National Management of the REDD+ Readiness and stakeholder engagement in accordance with the Roadmap principles</li> <li>Development of the National REDD+ Strategy and Implementation Framework</li> <li>Improved capacity to manage REDD+ at subnational levels</li> <li>Design of a Monitoring System and capacity for implementation</li> </ul>			

<sup>95</sup> UNDP Cambodia Website (2019b).

<sup>&</sup>lt;sup>94</sup> Carter/Thuon (2012), p. 7.

<sup>&</sup>lt;sup>96</sup> Gapare/Thuon (2015), pp. 18-21.