



THE CENTER FOR
PEOPLE AND FORESTS

Community forestry adaptation roadmap to 2020 for Cambodia



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Introduction

During the course of the twenty-first century, Asia and the Pacific's forest-dependent communities will bear the brunt of climate change impacts – specifically, the 2.2 billion people living in the region's rural areas, and the 450 million people in the Asia-Pacific region who rely on forest resources to some degree. Forestry and climate change policies, laws, projects, financing and capacity building efforts must address these people's interests through climate change adaptation.

Community forestry supports local level climate change adaptation by enhancing resilience in multiple ways: supporting livelihoods and income, increasing food security, leveraging social capital and knowledge, reducing disaster risks and regulating microclimates. However, adaptation planning has, by and large, not included community forestry as a viable climate change adaptation tool. To address this, RECOFTC – The Center for People and Forests has developed a set of roadmaps to help guide the meaningful inclusion of community forestry in climate change adaptation planning through the year 2020.

To develop the roadmaps, RECOFTC – The Center for People and Forests conducted a desk-based literature review on the link between community forestry and climate change adaptation in the region, and in the selected countries. Based on the review, a ten-question interview template was drafted to gather primary data from experts, defined as practitioners, policy-makers and researchers with experience in community forestry and/or adaptation in the included countries. The information provided by these interviews informed the analysis and recommendation of these reports.

Key messages and recommendations

Cambodia's legal framework for community forestry has been under development since 2002 (Forestry Law), and holds much potential for contributing to the country's resilience to climate change. However full implementation of community forestry has progressed slowly and there is an urgent need to streamline the process and build institutional capacity to support its implementation.

- **Policies and planning** – The National Community Forestry Programme Coordination Committee (NCFPCC) and Technical Working Group on Forestry Reform (under the Forestry Administration) should prioritize adaptation in their agendas especially at sub-national levels. The guidelines and steps for the Community Forestry Management Planning must be simplified and reformed to allow for the up-scaling of community forestry, and its application in strengthening national climate change resilience.
- **Legal reform** – The duration of community forestry tenure should be extended and secured to allow communities to invest and plan over the long term. There is also a need for improved coordination within MAFF to ensure community forests are not enveloped within Economic Land Concessions (ELCs), which undermines the growth of community forestry and its role in strengthening climate resilience across the country.
- **Project development** – The use of community-based agroforestry has shown great potential in Cambodia and should be scaled up urgently. As adaptation projects are still in their pilot stages, a network is needed to bring together the diverse project developers, service providers and organizations engaged in climate change adaptation to share lessons learnt and best practices and enhance synergies.
- **Public funding and private investment** – Cambodian government and NGOs should take advantage of the country's eligibility for multiple adaptation funding sources and apply for funding to scale up community-based forestry and agroforestry climate adaptation projects. It is also important to ensure that multi-lateral and bi-lateral funding for REDD+ (Reduced Emissions from Deforestation and Degradation +) readiness provides support for forest and community-forestry based climate adaptation activities.
- **Capacity development** – The National Capacity Self Assessment (NCSA) should be revised to include community forestry in its analysis of national environmental management competencies. Training for local government staff on climate change issues also needs to be scaled up, beyond NGO-led initiatives. At the community level, the MoE and the Climate Change Department and MAFF should disseminate information on climate change during the community forest management planning process.

Acronyms

AECID	Spanish Agency for International Development Cooperation
AIACC	Assessment of Impacts and Adaptation to Climate Change
BPWS	Boeung Per Wildlife Sanctuary
CCCA	Cambodia Climate Change Alliance
CCCO	Cambodia Climate Change Office
CPF	Community-based Production Forestry
CCCCO	Cambodian Climate Change Office
CCF	Community Conservation Forestry
CPAMC	Community Protected Areas Management Committee
CFMP	Community Forestry Management Plan
CFMC	Community Forestry Management Committee
CPAs	Community Protected Areas
CBPF	Community-based Production Forestry
DANIDA	Danish International Development Agency
ELC	Economic Land Concession
FA	Forestry Administration
FAO	Food and Agricultural Organization of the United Nations
FiA	Fisheries Administration
GAIN Index	Global Adaptation Institute Index
GDP	Gross Domestic Product
GDANCP	General Department of Administration for the Nature Conservation and Protection
GEF	Global Environmental Facility
Ha	Hectare
IPCC	Intergovernmental Panel on Climate Change
LAAR	Local Administration and Reform Programme
MAFF	Ministry of Agriculture, Forestry and Fisheries
MOWRAM	Ministry of Water Resources and Meteorology
MIME	Ministry of Industry, Mines and Energy .
MoE	Ministry of Environment
NAPA	National Adaptation Plan of Action
NCCC	National Climate Change Committee
NCDM	National Committee for Disaster Management
NCFP	National Community Forestry Programme NCFP
NCSA	National Capacity Self Assessment
NFP	National Forest Programme
NGO	Non-Governmental Organization
NTFP	Non-timber Forest Products
NSDP	National Strategic Development Plan
PA	Protected Area
PF	Partnership Forestry
RCAPD	Research and Community Protected Areas Development
RGC	Royal Government of Cambodia
RECOFTC	Regional Community Forestry Training Center for Asia and the Pacific (known as RECOFTC - The Center for People and Forests)
REDD+	Reduced Emissions from Deforestation and Degradation +
SIDA	Swedish International Development Cooperation Agency
TWG-F&E	Technical Working Group on Forests and Environment
TWG – F&R	Technical Working Group on Forestry Reform
UN REDD	United Nations Collaborative Programme on Reducing Emissions from Deforestation and Degradation in Developing Countries
UNDP	United Nations Development Programme



Overview and key statistics

Key statistics	
Total population	14,864,646 ¹
Total land area (ha)	17,652,000
Total forested area (ha)	10,094,000
Forest under community management (ha)	397,745.02 ha over 451 sites
Forest-dependent population	1,400,000 ²
Rate of deforestation (ha/year)	127,000 (2005 - 2010 average); 163,000 (2000-2005 average); 140,000 (1990-2000 average) ³
Global Adaptation Institute (GAIN) Index⁴	<p>Overall Ranking: 140 out of 179 countries (1 is best) Overall Score: 48.5 (100 is best) <i>Worse than expected given the GDP per capita⁵</i></p> <p>Vulnerability: 0.493 (0 is best) <i>More vulnerable than expected given the GDP per capita</i></p> <p>Readiness: 0.464 (1 is best) <i>As ready as expected given the GDP per capita</i></p>
Climate Risk Index⁶	Between 1991 and 2010, Cambodia is the 37th country in the world to be most impacted by extreme weather events.
Major expected climate change impacts	<ul style="list-style-type: none"> • Change in the flow of the Mekong river in response to high intensity rainfall and prolonged periods of drought; this will primarily impact the Tonle Sap area; • Sea level rise, increased erosion and salinization in coastal areas; • More frequent and longer duration of flooding; • Irregular monsoon season impacting rain-dependent agriculture.
Level of national adaptation planning and preparedness (H/M/L)	Medium
Reference to forestry in national adaptation planning (H/M/L)	Medium (Forestry identified as a high priority area in Cambodia's NAPA)

¹. The World Bank 2012, *World Bank Indicators*. Available from: <data.worldbank.org/indicator>. [9 October 2013].

². Chao, S 2012, *Forest Peoples: Numbers across the world*, Forest Peoples Programme. Available from: <http://www.forestpeoples.org/sites/fpp/files/publication/2012/05/forest-peoples-numbers-across-world-final_0.pdf>. [21 October 2013].

³. FAO 2010, *Global Forest Resources Assessment*. Available from: <http://www.fao.org/forestry/fra/fra2010/en/> [June 3, 2012].

⁴. Global Adaptation Institute Index 2011, Cambodia. Available from: <http://index.gain.org/country/cambodia>. [28 February 2013].

⁵. There is a strong correlation between a country's GDP per capita and its overall and readiness scores, and an inverse correlation with vulnerability. To account for this relationship, each of the overall, vulnerability and readiness scores have corresponding "GDP Adjusted" scores as well.

⁶. Harmeling, S 2012, *Briefing Paper: Global Climate Risk Index 2012*. Available from: <http://germanwatch.org/klima/cr.html>. [26 June 2012].

Community forestry in Cambodia

Nearly half the rural population of Cambodia, more than five million people, depends on the forests for 20–50 percent of their livelihoods.⁷ The vast majority of rural households rely on wood and charcoal as fuel sources, while many also rely on other forest products such as rattan, resin and mushrooms. In light of climate change, which will impact agriculture and forest product collection across Cambodia, it is vital to secure local people's rights over forest areas and support them to build resilience by diversifying their livelihood.

Inequality of land distribution is one of Cambodia's most pressing challenges. Half of the entire rural population cumulatively owns less than 0.75 ha of land.⁸ Land disputes are estimated to have affected 400,000 people since 2003 and property rights remain unclear. As of 2009, 80 percent of rural landowners lacked formal land titles and landless communities made up an estimated 12–20 percent of the population.⁹ Without secure tenure or management rights, rural communities will continue to suffer from food insecurity and decreased agricultural income, leaving them highly vulnerable to the slow onset (e.g. higher temperatures) and stochastic events (e.g. flooding) associated with climate change. In this context, it will be vital for local people to be able to access forest resources and diversify household income.

Over the last few decades, a significant proportion of rural communities across Cambodia have lost access to their local forest areas to private concessions. By the late 1990s, more than half of the nation's forestlands had been licensed to 30 companies as logging concessions.¹⁰ Rampant illegal logging and unsustainable harvesting practices prompted the government to enact a moratorium on logging concessions in 2002. However, soon after, the government began to grant ELCs, which allowed forests to be cleared for agro-industrial crops such as rubber, cassava, oil palm, cashews and acacia.¹¹ According to the NGO Forum on Cambodia, 252 ELCs covering 1.8 million ha were granted as of December 2010.¹²

In May 2012, Prime Minister Hu Sen placed a moratorium on ELCs. Nevertheless, as of January 2013, 32 additional ELCs covering a total of 208,000 ha had been approved after the ban; the Prime Minister stated that the process for receiving ELC approval had begun before the moratorium was placed.¹³ Overall, the concessions system remains poorly monitored, lacking transparency and accountability.

Economic Land Concessions and illegal logging practices have rapidly depleted Cambodia's forest resources over the past three decades. According to the Food and Agriculture Organization of the United Nations (FAO), Cambodia was the third most deforested country in the world between 2000 and 2005, only behind Nigeria and Vietnam. The most significant forest losses occurred in the northwest provinces of Banteay Meanchey, Battambang, Siemreap, Oddar Meanchey and Pailin provinces.¹⁴ As of 2006, Cambodia had around 59 percent forestland covering 10.7 million ha. In 2007, only 322,000 ha of primary forests were left.¹⁵

⁷ Vong, S. and Dutschke, M. 2009, *Integrating Climate Change into the National Forest Programme in Cambodia*, National Forest Programme Facility, Royal Government of Cambodia and FAO, Cambodia.

⁸ Wingqvist, G. 2009, *Cambodia Environmental and Climate Change Policy Brief*, University of Gothenburg, Department of Economics.

⁹ Ibid

¹⁰ RECOFTC 2012, *Community Forestry in Cambodia*. Available from: <<http://www.recoftc.org/site/Community-Forestry-in-Cambodia>>. [25 January 2013].

¹¹ Open Development Cambodia 2013, *Economic Land Concessions*. Available from: <<http://www.opendevelopmentcambodia.net/briefings/economic-land-concessions/>>. [25 January 2013].; RECOFTC 2012, *Community Forestry in Cambodia*. Available from: <<http://www.recoftc.org/site/Community-Forestry-in-Cambodia>>. [25 January 2013].

¹² Sothath, N. and Sophal, C. 2012, *Economic Land Concessions and Local Communities*, NGO Forum on Cambodia.

¹³ Peter, Zsombor and Aun Pheap, (2012, *32 Land Concessions Approved since Moratorium*. The Cambodia Daily. Available from: <http://www.cambodiadaily.com/news/32-land-concessions-approved-since-moratorium-5725/> [January 25, 2013)

¹⁴ Vong, Sopanha and Michael Dutschke. (2009, *Integrating Climate Change into the National Forest Programme in Cambodia*. National Forest Programme Facility, RGC and FAO.

¹⁵ FAO, (2007, *Brief on National Forest Inventory (NFI): Cambodia*.

The Royal Government of Cambodia (RGC) has the goal of maintaining national forest cover at the current level of 60 percent. To do this, the government seeks to suspend future concessions and hold existing concessions responsible for their Strategic Forest Management Plans and Environmental and Social Impact Assessments. With further controls placed on concessions, community forestry has the potential to become a more central aspect of the nation's sustainable forest management framework.¹⁶

Although mangroves are not considered to be forests, they play a key role for climate change adaptation in coastal communities. Traditionally mangroves have provided communities with a barrier from storm surges and sea level rise, in addition to supporting the habitat for fisheries. About 70 percent of the coastal population relies on products and resources from the mangrove ecosystems.¹⁷ However, commercial fish farming and charcoal production have dramatically reduced mangrove cover in Cambodia – from 94,000 ha in 1973 to 56,241 in 2002.¹⁸ Strong community rights over mangrove resources will be an essential component of climate resilience over the coming years.

Emergence of community forestry

For the purposes of this analysis for Cambodia, “community forestry” (lowercase) will be used as an umbrella term when speaking generally about the various models of community-based forest and mangrove management in Cambodia. This general term should not be confused with the particular modality of Community Forestry (uppercase) as detailed in the Sub-decree and “Prakas” on Community Forestry.

RGC first experimented with community forestry in the mid-1990s through a national working group of civil society, donors and government, to develop the necessary policy and legal framework. In 2002, the Forestry Administration (FA) within the Cambodian Ministry of Agriculture, Forestry and Fisheries (MAFF) began granting areas of production forest for local management. The Community Forestry Sub-decree of 2003 cemented community forestry into the national policy landscape. While the Sub-decree was a significant step forward, guidelines were still lacking on how to establish Community Forests and safeguard against land concessions and external pressure.¹⁹ The 2006 MAFF Community Forestry guidelines or “Prakas,” addressed this gap, documenting the process for communities to identify, legalize and manage the forests.²⁰ In addition, the National Community Forestry Programme (NCFP) was established in 2006 to help formalize official recognition of Community Forests and to train communities in sustainable forest management practices.²¹

In 2010, community forestry was incorporated as one of six key components of the Cambodia National Forest Programme 2010–2029 (NFP). The NFP outlines seven steps that communities must take to gain legal rights for Community Forestry.²² The NFP sets the goal of granting legal status to 1,000 Community Forests by 2029, and to increase the total national land area under community forestry to 2 million ha, i.e. around 20 percent of land area.²³

^{16.} Vong, Sopanha and Michael Dutschke. (2009, *Integrating Climate Change into the National Forest Programme in Cambodia*. National Forest Programme Facility, RGC and FAO.

^{17.} RGC Ministry of Environment (MoE), (2009, *Cambodia Environment Outlook*.)

^{18.} Ibid.

^{19.} RECOFTC, (2012, *Community Forestry in Cambodia*. Available Online: <http://www.recoftc.org/site/Community-Forestry-in-Cambodia> [January 25 2013].

^{20.} Ibid

^{21.} Cambodia Ministry of Agriculture, Forestry and Fisheries, (2010, *National Forest Programme (2010-2029)*).

^{22.} Kao, Dana. (2012, *Regulatory barriers to communities and smallholders earning their living from timber and timber products in Cambodia*. Forestry Administration of Cambodia.

^{23.} RECOFTC, (2012, *Community Forestry in Cambodia*. Available Online: <http://www.recoftc.org/site/Community-Forestry-in-Cambodia> [January 25, 2013]; Vong, Sopanha and Michael Dutschke. (2009, *Integrating Climate Change into the National Forest Programme in Cambodia*. National Forest Programme Facility, RGC and FAO

Community forestry in Cambodia today

Over the past few years, RGC has increasingly acknowledged the widespread benefits of involving communities in natural resource management. As of 2012, there were 451 Community Forests under development, covering a total area of 397,745 ha (see Figure 1). The first Community Forestry Management Plan (CFMP) was approved by FA on 8 October 2012 at the Trapeang Rong Community Forest in Kampong Thom Province, with assistance from RECOFTC, the Spanish International Cooperation Agency (AECID) and the European Union.²⁴ This key milestone may pave the way for future approval of management plans, which are legally required for communities to sell timber and timber products.²⁵

Figure 1 - Community forestry statistics as of December 2012

	CFs under development			CFs approved by MAFF			CFs with agreements		
	No. of CFs	HHs	Ha	No. of CFs	HHs	Ha	No. of CFs	HHs	Ha
Total in Cambodia	451	106,694	397,745.02	288	67,454	250,106.02	229	54,354	183,724.61

Community Forests can be initiated and established by either the local community or the FA. After submitting a request to FA, the community must elect a Community Forestry Management Committee (CFMC) to manage procedures, run meetings and carry out management activities. Community forestry member user rights include:²⁶

- sustainable use of forest resources within granted area under a Community Forest Agreement;
- Customary User Rights as described in Article 401 of the Law on Forestry, protecting traditional user rights for customs, beliefs, religions and other cultural use;²⁷
- the rights to sell, transport, barter, and process, Non-timber Forest Products (NTFPs);²⁸
- traditional *swidden* agriculture during specific periods of time as determined in the Community Forest Management Plan (Article 373, Law on Forestry);
- the rights to appeal decisions that impact local community rights.

A number of other modalities for community based natural resource management have been established in Cambodia in recent years. For the purposes of this paper, community forestry in Cambodia can be broken down into six modalities of practice, overseen by two ministries:

- The Ministry for Agriculture Forests and Fisheries (MAFF), by the FA and Fisheries Administration (FiA):

²⁴ RECOFTC, (2012, *Cambodia's First Community Forest Management Plan Gives More Legal & Technical Support for Communities to Sustainably Manage their Community Forest*. Available Online: <http://www.recoftc.org/site/resources/Cambodia-s-First-Community-Forest-Management-Plan-Gives-More-Legal-Technical-Support-for-Communities-to-Sustainably-Manage-their-Community-Forest.php> [January 29, 2013].

²⁵ Kao, Dana. (2012, *Regulatory barriers to communities and smallholders earning their living from timber and timber products in Cambodia*. RGC Forestry Administration.

²⁶ RGC Forestry Administration(2003, *Sub-Decree on Community Forestry Management: Article 6*; Kao, Dana. (2012, *Regulatory barriers to communities and smallholders earning their living from timber and timber products in Cambodia*. RGC Forestry Administration.

²⁷ RGC, (2007, *Thematic Assessments and Action Plan For The Three Conventions CBD, UNFCCC and UNCCD To Contribute to Poverty Alleviation*.

²⁸ RGC, (2002, *Article 40(B)2, point 5, Law on Forestry*.

- **Community forestry** – as detailed in Community Forestry Sub-decree of 2003 and MAFF Prakas of 2006
- **Community conservation forestry (CCF)** - for communities living in FA's Protection Forest; limited user rights subject to conservation rules²⁹
- **Partnership forestry** - Occurs when a Commune Council (the local government administrative body) seeks more direct involvement in forest management. In this case the commune council serves as the management body, rather than the CFMC.
- **Community-based production forestry (CPF)** - may be established over large forest areas for greater commercial potential, involving communities in commercial forestry enterprises.
- **Community fisheries (CFis)** - may include bylaws to protect mangroves, and sometimes even support community mangrove plantation projects. Small-scale community based management of fisheries began in 1994, but was formalized into a Royal Decree on the Establishment of Community Fisheries in 2005.³⁰ Establishment of collective ownership over natural resource management in CFis has, in some cases, stopped the indiscriminate cutting of mangroves, as seen with the CFI in Tum Nup Rolok.³¹

The Ministry of Environment (MoE) by the General Department of Administration for the Nature Conservation and Protection (GDANCP):

- **Community protected areas (CPAs)** - involve communities living in Protected Areas under control of Ministry of Environment. In 2003, MoE's Department of Nature Conservation and Protection issued a proclamation encouraging relevant communities to take up local forest management in zoned areas for NTFP. As it stands, however,³² CPAs do not allow for commercial timber utilization.³³ The number of CPAs rose from 59 in 2005, to 82 in 2008.³⁴
- Ministry of Interior
 - **Indigenous community lands** - Legally registered indigenous community groups made up of Cambodia's ethnic minorities may register for collective title over customary territories, as stipulated in the Land law of 2001 and the Sub-Decree on Procedures of Registration of Land of Indigenous Communities No. 83 ANK (2009). With regards to forest rights, indigenous communities may establish collective title over spiritual forestland and burial ground forestland, each not exceeding seven ha per community. In addition, communities may leverage customary rights for collection of NTFP in local forest areas, with approval from local forest management institution.

While Cambodia has made great strides over the past decade to give communities user and management rights over forests, there remains a need to streamline the implementation process and build institutional capacity for community forestry (as discussed in the following sections).

²⁹. RECOFTC, (2012, *Community Forestry in Cambodia*. Available Online: <http://www.recoftc.org/site/Community-Forestry-in-Cambodia> [25th January 2013].

³⁰. American Friends Service Committee & Fisheries Action Coalition Team, (2007, *Experiences from Three Marine Community Fisheries: Chikhor Krom and ChroySvay communes, Koh Kong Province and Stung Hav district, Kompong Som Province*.)

³¹. Chansothea, Tep, Meng Kimsan, Deap Polin and Chap Sopanha, (2009, *Chapter 11: Understanding the Rights and Responsibilities of Small-Scale Fishing Communities in Cambodia*. In: *Emerging Trends, Challenges and Innovations for CBNRM in Cambodia* (CBNRM 2nd ed). Phnom Penh: CBNRM Learning Institute

³². Socheat Leakhena San, (2006, *Indicating Success: Evaluation of Community Protected Areas in Cambodia*. MoE Department of Nature Conservation Protection. Published in: Sango Mahanty, Jefferson Fox, Michael Nurse, Peter Stephen, and Leslie McLees (eds.), *Hanging in the Balance: Equity in Community-Based Natural Resource Management in Asia*, Bangkok: RECOFTC; Honolulu: East-West Center.

³³. RECOFTC, (2012, *Community Forestry in Cambodia*. Available Online: <http://www.recoftc.org/site/Community-Forestry-in-Cambodia> [January 25, 2013].

³⁴. RGC, (2009, *National Strategic Development Plan Update 2009-2011*.)



Expected climate change impacts in Cambodia

Climate change, which is already occurring throughout Cambodia, will increasingly place a heavy burden on rural communities. From 1960 to 2008, the average temperature in Cambodia increased by 0.8 °C, and rainfall patterns have become increasingly irregular.³⁵ Cambodia has already seen a delay in the wet season from April to June, the strongest windstorms in 30 years occurred in 2011, and the worst flooding in recent history which occurred in the year 2000.³⁶ Since the 1960s, the frequency of hot days and nights has increased by 13 percent and 17 percent respectively. Changes in weather patterns like these are only expected to continue over the coming years, with mean annual temperature expected to increase between 0.7 °C and 2.7 °C until 2060, and between 1.4 °C and 4.3 °C until 2090.³⁷ Likewise, the amount of hot days and nights during summer time are projected to double by 2090.³⁸

Cambodia is especially vulnerable to extreme weather events. A MoE Climate Change Department survey found that 93 percent of people had been affected by at least one extreme weather event in the preceding year (see Figure 2 below).³⁹ According to the National Adaptation Plan of Action (NAPA), Cambodia will experience increased frequency and intensity of floods, with more flooded areas with longer flood duration.⁴⁰ Severe flooding from 2000 to 2002 caused 438 casualties and US \$205 million in damages.⁴¹ Prey Veng province is especially vulnerable to flooding risks, while Battambang is the most vulnerable to floods.⁴²

In recent decades, tropical cyclones originating in the Pacific have become more intense and more frequent.⁴³ Cyclones originating in the Bay of Bengal and the Arabian Sea have decreased in number but have become more intense, causing severe damage to coastal areas.⁴⁴ Additionally, along Cambodia's 435 kilometer coastline and over large parts of the Mekong River plain, sea level rise threatens to impact nearly 25 percent of the population living within 10 meters above the sea level.⁴⁵

According to the Holdridge Classification System, Cambodia's forest profile includes 60 percent dry forest, 20 percent wet forest, and 20 percent moist forest. Climate change would decrease the total wet forest area, increase moist forest area, and have no effect on dry forest area. Consequently, climate change, in combination with high rates of deforestation, will impact forest productivity and biodiversity.⁴⁶

³⁵ Suzuki, R (ed.), (2012, *Linking Adaptation and Mitigation through Community Forestry: Case Studies from Asia*. RECOFTC. Available from: <http://www.recoftc.org/site/resources/Linking-Adaptation-and-Mitigation-through-Community-Forestry-Case-Studies-from-Asia.php> [Oct 15, 2013]; McSweeney et al. (2008, UNDP Climate Change Country Profiles: Cambodia

³⁶ Ibid

³⁷ McSweeney et al., (2008, *UNDP Climate Change Country Profiles: Cambodia*)

³⁸ Vong, Sopanha and Michael Dutschke. (2009, *Integrating Climate Change into the National Forest Programme in Cambodia*. National Forest Programme Facility, RGC and FAO.

³⁹ MoE, (2011, *Understanding Public Perceptions of Climate Change in Cambodia*)

⁴⁰ Wingqvist, GunillaÖlund. (2009, *Cambodia Environmental and Climate Change Policy Brief*. University of Gothenburg, Department of Economics.

⁴¹ RGC, (2006, *National Adaptation Programme of Action to Climate Change (NAPA)*.

⁴² Vong, Sopanha and Michael Dutschke. (2009, *Integrating Climate Change into the National Forest Programme in Cambodia*. National Forest Programme Facility, RGC and FAO.

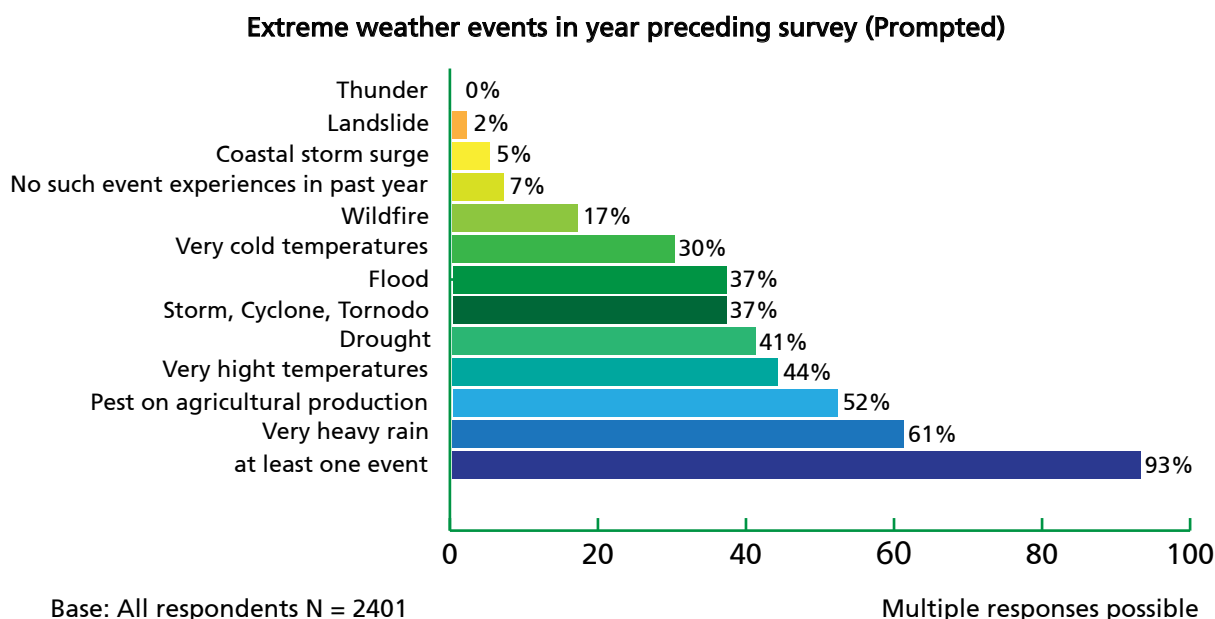
⁴³ Intergovernmental Panel on Climate Change (IPCC), (2007, *IPCC 4th Assessment Report: Chapter 10*.

⁴⁴ Ibid

⁴⁵ MoE, Cambodia, (2006, *Second National Communication to UNFCCC: Project Document*.)

⁴⁶ Cambodia Water Partnership, (2010, *The state of climate change management in Cambodia*.)

Figure 2 - Community perception of extreme weather events in preceding year⁴⁷



Vulnerability

According to the Global Adaptation Institute’s Index as of 2013, which ranks countries according to their vulnerability to climate change impact and preparedness to adapt, Cambodia is ranked 28th among the most vulnerable countries to the impacts of climate change, and the 46th country least ready to adapt.⁴⁸ The Index attributes the country’s low readiness to relatively low level of tertiary education, low level of control over corruption, and inadequate rule of law, among other factors. Cambodia is particularly vulnerable due to relatively low food and fresh water capacity (both of which are in decline), and a very low percentage of paved roads. Climate change would only augment future natural resource constraints likely to be caused by population pressure.

Food security is a key issue, as variable rainfall, floods, temperatures and availability of water will cause declines in agricultural production around the world.⁴⁹ Between 1998 and 2002, floods accounted for 70% of total rice production losses, while drought was responsible for 20 percent of the losses.⁵⁰ As demonstrated in the RECOFTC publication “Linking Adaptation and Mitigation through Community Forestry,” Cambodia’s Andong Kraloeng, O’ronaa and Gay communities in Monduliri Province’s Seima Protection Forest have observed more extreme weather with greater heat and aridity in the dry seasons. The case study demonstrates how weather events in these three communities contributed to declines in upland rice yields – between 20 to 50 percent; and an overall decline in agricultural production since 2005 of 10 to 15 percent.⁵¹

⁴⁷ SMOE, (2011, *Understanding Public Perceptions of Climate Change in Cambodia*)

⁴⁸ Global Adaptation Institute Index (GAIN, Cambodia Country Profile. Available from: <http://index.gain.org>. (Last accessed 8/26/2013).

⁴⁹ UNDP, (2007, *Human Development Report 2007/2008, Fighting Climate Change: Human solidarity in a divided world*).

⁵⁰ Vong, Sopanha and Michael Dutschke, (2009, *Integrating Climate Change into the National Forest Programme in Cambodia*. National Forest Programme Facility, RGC and FAO.

⁵¹ Suzuki, R (ed.), (2012, *Linking Adaptation and Mitigation through Community Forestry: Case Studies from Asia*. RECOFTC. Available from: <http://www.recoftc.org/site/resources/Linking-Adaptation-and-Mitigation-through-Community-Forestry-Case-Studies-from-Asia.php> [Oct 15, 2013].

Changes to the Mekong River and Tonle Sap, the largest freshwater lake in South East Asia, will further impact food security for the local people. The Mekong river basin is considered among the world's most severely impacted by climate change. Changes to the water cycle will shift rainfall patterns and seasons, altering basin hydrology and flow patterns, which will impact agriculture and food production.⁵²

Combining these climate change effects with proposed hydropower projects on the Mekong will leave downstream Tonle Sap communities extremely vulnerable over the coming years. In the floating villages of Tonle Sap, communities are dependent on the inundated forests, which provide everything from fish to fuel wood. In total, 1.2 million people directly depend on Tonle Sap for food and freshwater. Changing rainfall cycles in China and Lao PDR, are shrinking the lake's floodplain, damaging fishery yields and freshwater stocks.⁵³

^{52.} Rodgers et al., (2012, *Resilience on the Mekong: A Vulnerability and Adaptation Assessment in North-East Cambodia*. WWF-Cambodia.
^{53.} UNFCCC. *Tonle Sap*. Available Online: <http://unfccc.int/files/adaptation/application/pdf/37eba.pdf> [28 January 2013].



Community forestry and climate change adaptation

In light of the various climate change impacts, community forestry helps to strengthen the resilience of Cambodian rural communities in five key ways:

Supporting livelihoods and income

Decreased agricultural productivity has made communities increasingly reliant on forest ecosystems for food, fuel-wood and NTFPs for subsistence and income generation.⁵⁴ Through sustainable management of timber and NTFP products, community forestry diversifies livelihoods and thus increases resilience to changes in productivity from other livelihood sources such as agriculture. Community forestry supports NTFP collection rights, which are especially critical for communities living in Protected Areas (PAs) that directly rely on local forest products for livelihoods, and lack alternative climate-resistant livelihoods.⁵⁵

Increasing food security

With 1.4 million forest dependent people in Cambodia,⁵⁶ food from forests plays a major role in national food security. Forest ecosystems provide an important diversity of food species to complement agricultural staples, and are particularly important in times of crop failure exacerbated by climate change.

Cambodia's mangrove ecosystems also provide key breeding grounds for fish and other marine fauna, which has served as an integral source of food, income, and a mainstay of livelihoods in Cambodia for centuries.

Cambodia's Tonle Sap Lake and its floodplains serve as one of the most productive inland fisheries in the world, and provide fertile land for rice production. Millions of Cambodians rely on food and water from the lake. Annual inland fishery production is estimated to be between 300,000 to 400,000 tons, which means Cambodia's freshwater capture fisheries ranks fourth in the world.⁵⁷ Furthermore, the Tonle Sap Lake achieves the highest productivity worldwide.⁵⁸ However, over the last three decades more than 95% of the lake's inundated forest cover (also known as flooded forest) has been lost, which has posed a significant threat to fisheries that rely on the inundated forest's spawning grounds. Fisheries management will be further impacted by climate change as the duration and intensity of annual surge of floodwaters from the Mekong will be altered.⁵⁹ Strong community-based natural resource management institutions are needed to plan for future shocks. There are some encouraging signs, with some communities having begun to protect mangroves through CFis initiatives.⁶⁰

⁵⁴ United Nations Environment Programme (UNEP, *UNEP Adaptation Funds Projects/Programmes: Cambodia*. Available Online: <http://www.unep.org/climatechange/adaptation/AccessToAdaptationFinance/AdaptationFundProjects/Cambodia.aspx> [January 28, 2012].

⁵⁵ MoE, (2012, *Capacity Strengthening for Community Protected Areas Development (CPA) Communities in Boeung Per Wildlife Sanctuary to Adapt to the Impacts of Climate Change: Project Factsheet 2012*; UNEP. *UNEP Adaptation Funds Projects/Programmes: Cambodia*. Available Online: <http://www.unep.org/climatechange/adaptation/AccessToAdaptationFinance/AdaptationFundProjects/Cambodia.aspx> [January 28 2012].

⁵⁶ Chao, S. (2012, *Forest Peoples: Numbers across the world*. Forest Peoples Programme. Available from: http://www.forestpeoples.org/sites/fpp/files/publication/2012/05/forest-peoples-numbers-across-world-final_0.pdf [Oct 21, 2013].

⁵⁷ Van Zalinge, N.p. and N. Thuok (eds), (1999, *Present status of Cambodia's freshwater capture fisheries and management implications*. Proceedings of the Annual Meeting of the department of Fisheries of the Ministry of Agriculture, Forestry and Fisheries, 19-21 January 1999, Phnom Penh, Cambodia. Mekong River Commission and Department of Fisheries, Phnom Penh, Cambodia.

⁵⁸ Baran, E. (2005, *Cambodia inland fisheries: Facts, figures and context*. The World Fish Center, Penang, and inland Fisheries research and development institute, Phnom Penh, Cambodia.)

⁵⁹ Centro Agronómico Tropical de Investigación y Enseñanza (Cantie), (2011, *Draft Principles and Guidelines for Integrating Ecosystem-based Adaptation Approaches to Adaptation in Project and Policy Design*.)

⁶⁰ Marschke, M. and Nong, K., (2002, *Community-Based Coastal Resource Management (CBCRM) in Cambodia: Lessons and Responses*. MoE.)

Leveraging social capital and knowledge

Adaptation projects would benefit from working through CFMCs, which already play a key role in managing local natural resources. Community forestry has the potential to strengthen autonomous adaptation initiatives that are already taking place in Cambodia, such as those initiated after the 2009 floods.⁶¹ The MoE and United Nations Development Programme (UNDP) joint paper “Climate Change and Local Action” under the Cambodia Human Development Report 2011 notes – “Local-level institutions are most likely to allow for the degree of learning and flexibility in the face of uncertainty and heightened risks, building on knowledge, experience and practices at community level.”⁶²

Reducing disaster risks

Community fisheries create natural barriers to sea level rise and buffers for other coastal natural disasters like typhoons and tsunamis, by protecting mangrove forest ecosystems.⁶³

Regulating microclimate

With temperature set to become more extreme throughout Cambodia, the restoration and maintenance of forest cover through community forestry can contribute to regulating the microclimate through providing shade, increasing atmospheric humidity, cooling the air and dispersing local wind patterns. The MoE Climate Change Department survey of public perceptions found that 67% of respondents believe that deforestation causes changes to local weather patterns.⁶⁴

The following sections on policies and planning, legal reform, capacity development, funding, and project development summarizes existing approaches and provides recommendations on how to leverage community forestry to advance climate change adaptation efforts. A roadmap diagram at the end of this report visually demonstrates the recommended actions for relevant stakeholders to uptake through the years until 2020.

⁶¹. Personal Communication, Edwin Payuan and Kaylan Hou, (2012)

⁶². MoE and UNDP Cambodia, (2011, *Climate Change and Local Action: Cambodia Human Development Report 2011*.)

⁶³. Silori, Chandra, (2012) “Mangroves Under Pressure: Forgotten Wetlands in the Changing Climate.” RECOFTC. Available Online: <http://recoftc.wordpress.com/2012/12/07/mangroves-under-pressure-forgotten-wetlands-in-the-changing-climate/> [Jan 28, 2013].

⁶⁴. MoE, (2011, *Understanding Public Perceptions of Climate Change in Cambodia*.)

CASE STUDY: Strengthening the capacity for communities in community protected area in Boeung Per Wildlife Sanctuary to adapt to the impacts of climate change

Project duration: October 2011 to April 2013

Project manager: Ministry of Environment (MoE) Research and Community Protected Areas Development (RCAPD)

Partner: RECOFTC – The Center for People and Forests

Donor: Cambodia Climate Change Alliance (CCCA)

Project area: Boeung Per Wildlife Sanctuary (BPWS) includes 19 CPAs in Kampong Thom, Siem Reap and Preah Vihear, and covers 45,701 ha of forests, with 8,313 families and 26,287 persons in 34 villages (50 percent women).



(Photo Credit: Hou Kalyan, Phnom Balang Community Protected Area, Chykreang district, Kvav commune, Siem Reap province. [20 November 2012]

Project outcomes and lessons learned: The communities living within BPWS are very vulnerable to the impacts of climate change. Community members who live in extremely remote locations, are heavily dependent on forest resources, products and services. With only 25 percent of the target population having access to sufficient food supply, the communities are very vulnerable to climate change. The area is already prone to flooding, drought, and storms (e.g. the 2009 typhoon Ketsana), while community preparedness to deal with extreme weather events is low.

However, there is great potential to increase local resilience through the CPA framework. The MoE's Climate Change Department, together with RECOFTC – The Center for People and Forests, initiated a 15-month USD 373000 project to build awareness on climate change adaptations and to pilot adaptation measures in 19 Community Protected Areas of Kampong Thom, Siem Reap and Preah Vihear provinces. The project used a "training for action" approach, training government officials from diverse departments in topics including "Introduction to Community Protected Area Development, Facilitation Skills and Training of Trainers (ToTs)," and "Community Protected Areas Adaptation to Climate Change: Vulnerability Analysis." Following these ToT sessions, materials were adapted and simplified in order to train local people in Community Protected Areas Committees on climate change adaptation issues in their local contexts.

Vulnerability assessments were conducted in the 19 CPAs, and the following key adaptation strategies were suggested based on time and resources available: a) repairing water systems that are already in place; b) developing agroforestry techniques in home gardens; and c) building nurseries through grafting techniques. Based on the assessments, a follow-up training on "Community Protected Area Adaptation to Climate Change: Home Gardens & Community Based Adaptation Learning Network" was developed and delivered for the targeted national and provincial government staff. At the end of the project, a number of pilot field climate change adaptation learning demonstration sites were identified and Community Based Adaptation Networks in selected CPAs were established.

A lack of formally approved CPA management plans in targeted areas was a key challenge to project implementation. With only 1 CPA in the designated area that has an approved plan, there lacks a strong platform to integrate adaptation into planning. Lessons generated through this project underscore the need for expedited management plan development to provide the foundation to integrate community-based adaptation activities.



Policies and planning

Incorporating community forestry into national climate change strategies, and incorporating climate change adaptation into forest policy frameworks and practices, is critical to advancing community forest-based adaptation in Cambodia. There has been moderate progress in both these areas over the past few years. There are a number of key government institutions and policies that should pave the way for securing community forestry for climate change adaptation.

Key institutions

The National Climate Change Committee (NCCC) was established in 2006 under the sub-decree No. 35; it serves as the national focal point for climate change with senior representatives from 20 ministries. The goal of the inter-agency NCCC is to mainstream climate change adaptation into all relevant sectors, promoting sustainable agricultural, forestry, water and land development. The Climate Change Department under MoE serves as the NCCC secretariat, and coordinates mitigation and adaptation activities across all government sectors, NGOs, donor agencies. It also serves the Designated National Authority for the Clean Development Mechanism and focal point for United Nations Framework Convention on Climate Change, IPCC, and the Kyoto Protocol. The Office of Vulnerability and Adaptation falls under the Climate Change Department. The NCCC also has an ad hoc inter-ministerial working group on forestry, which could play an important role in recognizing and promoting the role of community forestry in climate change adaptation.

Beyond the NCCC, other institutions that address climate change adaptation activity in Cambodia include MAFF, the National Committee for Disaster Management (NCDM), the Department of Meteorology in the Ministry of Water Resources and Meteorology (MOWRAM), the Ministry of Industry, the Mines and Energy (MIME), the National Climate Change Network, the Climate Change Alliance, the UN Disaster Management Team and the Humanitarian Accountability Network, which includes international and national NGOs working on disaster management.⁶⁵

There is a need for improved coordination among these various climate change institutions, and increased linkages with institutions involved in community forestry. The FA under MAFF, looks after the permanent forest reserves and houses the Community Forestry Programme, while the FiA under MAFF manages community fisheries. For CPAs, the key institutions are the GDANCP under the MoE, which stewards Cambodia's 23 protected areas, and the Department of Research and Community Protected Area Development.

The current Community Forestry Programme under the NFP (2010-2029) builds off the 2006 NCFP and has set the target for putting 2 million ha of national forestlands under community forestry. The NCFP mentions the potential benefit of community forestry to contribute to climate mitigation but does not explicitly mention climate adaptation.⁶⁶ However, the recognized links between community forestry, socioeconomic development and mobilization of human resources, inherently promote resilience in the face of adaptation, even if not explicitly addressed.⁶⁷ The FA has begun to discuss adaptation issues within the Technical Working Group on Forests and Environment (TWG-F&E) now renamed as Technical Working Group on Forestry Reform (TWG-FR), with participants from ministries, donors and NGOs.⁶⁸ The National Community Forestry Programme Coordination Committee, established in 2007 and led by the FA with participation from NGOs and donors, has not yet discussed climate adaptation and was reactivated in recent years after remaining dormant for years.

⁶⁵ UNDP, Cambodia, (2012, *Cambodia Climate Change Alliance*. Available Online: <http://www.un.org.kh/undp/what-we-do/projects/cambodia-climate-change-alliance> [January 28, 2013].

⁶⁶ Ministry of Agriculture, Forestry and Fisheries, Cambodia, (2010, *National Forest Programme (2010-2029)*).

⁶⁷ Ibid

⁶⁸ The REDD Desk, (2012, *National Community Forestry Programme Coordination Committee*. Available from: http://www.thereddesk.org/countries/cambodia/info/resources/organisations/national_community_forestry_programme_coordination_committee (Last accessed January 29 2013].

Key policies

In general there is a need to further mainstream climate change into all relevant national and sub national policies, including budgetary and planning processes. Farming and fishing dependent communities, who are especially vulnerable to climate change, should be the targets of decentralized economic planning. The current planning focus is on the management of crises such as food and livelihood insecurity and post-disaster emergency relief. However, there is a need for a greater focus on planning for slow onset and long-term impacts from climate change.⁶⁹ Policies relevant to community forest-based adaptation in Cambodia are listed in Table 1.

Decentralization activities have taken place across Cambodia's ministries over the past five years and there is an opportunity under the Organic Law (2008) to promote climate change adaptation activities at the sub-national level. An increasing number of commune councils have become involved in natural resource management through the Commune Development Plan and Investment Programme.⁷⁰ Recent legislation requires all communes to make Commune Land Use Plans (CLUP), which has the potential to facilitate participatory environmental planning at the local level.⁷¹ However, communes have not been given adequate funding, human resources, or enforcement power to attend to this new assignment.⁷² In the future, commune councils, CFMCs and Community Protected Area Management Committees (CPAMCs) should be given adequate resources and training to make natural resource management plans in light of climate change and disaster risk management.

Table 1 - Policies relevant to community forest-based adaptation

<p>The National Strategic Development Plan (NSDP) Update 2009-2013</p>	<p>The NSDP was prepared to carry out policies prioritized in the "Rectangular Strategy Phase II," of Cambodia's central development strategy. "Forestry Reform" is listed as a central priority, located in side four of Rectangle one of the Strategy. Climate change appears throughout the NSDP as a key issue affecting the forestry sector and national economy in general. One of the NSDP key goals is to strengthen RGC institutions that deal with climate change and disaster management capabilities. Community forestry is not mentioned in conjunction with climate change, even though it is mentioned as a key element in forest management in the future. One goal of the NSDP is to seek financial resources for addressing climate change adaptation, and to promote the implementation of NAPA.⁷³</p>
<p>The National Adaptation Programme of Action (2006) (NAPA)</p>	<p>Cambodia's NAPA was developed in 2006 by the Ministry of Environment, and serves as the central adaptation planning tool for Cambodia. Formulated to support Cambodia's larger development goals as determined in the Rectangular Strategy and the NSDP, the NAPA includes forestry as one of four key priority areas, alongside water resources and agriculture, health and the coastal zone.⁷⁴ The NAPA recognizes the important role of forests in climate adaptation for prevention of soil erosion, maintaining healthy watersheds, and providing sustainable forest products. The NAPA puts a heavy emphasis on streamlining community-level projects to address the gap in programming to build community capacity for adaptation. Out of the 39 project proposals in the NAPA, three involve community forestry – a)Vegetation Planting for Flood and Windstorm Protection; b)Community Mangrove Restoration and Sustainable use of Natural Resources; and c) Community Agroforestry in Coastal Areas (more on NAPA projects listed below in 'Projects' section).⁷⁵ Unfortunately, the momentum for the NAPA is decreasing, and there has been minimum implementation of the action plan.⁷⁶ Only a small number of NAPA projects will be implemented due to lack of adequate funding.⁷⁷ Other barriers to NAPA implementation include limited integration of climate change issues into broader national policies, as well as a general lack of awareness of climate change in the Cambodian population needed to carry out the Programme.⁷⁸</p>

^{69.} Adaptation Knowledge Platform, (2010, *Scoping Assessment for National Implementation in Cambodia-Summary*.)

^{70.} The Learning Institute, (2009, *Overview of the past and present situation of CBNRM in Cambodia: Emerging Trends, Challenges and Innovations for CBNRM in Cambodia*.)

^{71.} Ibid

^{72.} Ibid

^{73.} RGC, (2009, *National Strategic Development Plan Update 2009-2011*.)

^{74.} WeAdapt, (2011, *Cambodia*. Available Online: <http://weadapt.org/knowledge-base/vulnerability/Cambodia>. (Last accessed: January 18 2013).

^{75.} RGC, (2006, *National Adaptation Programme of Action to Climate Change (NAPA)*.)

^{76.} Personal Communication, Emilia Pramova, (2012); WeAdapt (2011, *Cambodia* Available Online: <http://weadapt.org/knowledge-base/vulnerability/Cambodia>. (Last accessed: January 18 2013)

^{77.} Personal Communication, Emilia Pramova, (2012); Personal Communication, Sun Mao, (2012).

^{78.} RGC, (2006, *National Adaptation Programme of Action to Climate Change (NAPA)*.)

<p>The National Forest Programme 2010-2029 (NFP) (2010)</p>	<p>Developed by the National Forest Programme Task Force under the Technical Working Group on Forestry and Environment in 2009, the NFP links with national development strategies and Millennium Development Goals in providing strategic direction to the forest sector.⁷⁹ Community forestry is listed as one of its six central programmes. The NFP intends to develop community forestry as practiced through the Prakas, and to support pilot initiatives for other types of community forestry. During the NFP, the community forestry legal framework will be reviewed and revised based on the various pilot variations.⁸⁰ In addition, one of the NFP's nine central objectives is to "adapt to climate change and mitigate its effects on forest-based livelihoods."⁸¹ While climate change is given repeated mention throughout the NFP, it mostly focuses on mitigation and does not address adaptation in detail.</p>
<p>Integrating Climate Change Issues into the National Forest Programme in Cambodia (2009).⁸²</p>	<p>The FA along with FAO produced this planning document in 2009. The document outlines the relevant policies and initiatives that link climate change into forest policy or those that should if they do not already. This document primarily focuses on forests mitigation, and discusses the benefits of community forestry in terms of their ability to protect forests and sequester carbon. The document mentions community forestry, but offers little direction for how to streamline community forestry into adaptation.</p>
<p>The Green Growth Roadmap (2009)⁸³</p>	<p>The Green Growth Roadmap was produced to bring in climate change into national development objectives. It was developed by an inter-ministerial working group of 17 Cambodian ministries, in partnership with the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), NGOs and donors. While promoting multi-stakeholder collaboration on Green Growth, the Roadmap aims at growing a low-carbon economy, whilst improving resilience to adverse impacts of climate change. The Green Growth Roadmap is a comprehensive document with frequent mention of the importance of sustainable forest management. However, community forestry is not mentioned in the report.</p>

Recommendations for policy and planning

- **Promote participatory adaptation planning processes** – Participatory adaptation planning with local communities can capitalize on local knowledge of weather patterns and natural resource uses. Strategies and tools that are suggested during participatory planning processes should be scaled up to make adaptation policies more relevant and applicable on the ground.⁸⁴
- **Simplify the process for establishing community forests** – The bureaucratic process for approving CF management plans and gaining legal recognition for community forests must be reviewed and simplified to ensure long term sustainability and expansion of the community forestry programme.
- **Pilot adaptation strategies using a diversity of community forestry management models** – Piloting and policy development of community-based adaptation should occur not only for Community Forestry, but also for CPAs, private land, common property, and community fisheries with regard to mangrove projects.
- **Augment the role of the Cambodia Climate Change Office (CCCO)** – The CCCO could play a more active coordination role between government, donors and organizations involved in climate change adaptation in general and the role of community forestry in adaptation.

^{79.} Vong, Sopanha and Michael Dutschke. (2009, *Integrating Climate Change into the National Forest Programme in Cambodia*. National Forest Programme Facility, RGC and FAO.

^{80.} Ministry of Agriculture, Forestry and Fisheries, Cambodia, (2010, *National Forest Programme (2010-2029)*).

^{81.} Vong, Sopanha and Michael Dutschke. (2009, *Integrating Climate Change into the National Forest Programme in Cambodia*. National Forest Programme Facility, RGC and FAO.)

^{82.} Ibid

^{83.} MoE, (2009, *The National Green Growth Roadmap*.)

^{84.} Adaptation Knowledge Platform, (2010, *Scoping Assessment for National Implementation in Cambodia-Summary*.)

- **Highlight adaptation in the NSDP and NFP** – The revision of the NSDP for 2014-2018 should give increased priority to adaptation, emphasizing community based adaptation. This revision should match the priorities set out in the NAPA. For the NFP, specific guidelines and clarified approaches are needed to implement NFP’s current statement on adaptation, “Adapt to climate change and mitigate its effects on forest based livelihoods.”
- **Vulnerability assessments and local adaptation planning** should eventually be a required component of all CFMPs and CPAMPs. This can be incorporated into the development of a “Manual on Simplified Community Forestry Management Plan.”⁸⁵ Capacity development and support to communities will be needed to ensure their buy-in. Support should be given to communities to help include strategies and practices to help them adapt to variable climate and prepare for natural disasters (e.g. the MAFF National Biodigester Programme’s project “Adaptation to Climate Change Through Alternative Livelihoods in Community Forestry” – as discussed in the Projects section below)⁸⁶

⁸⁵. Kao, Dana. (2012, *Regulatory barriers to communities and smallholders earning their living from timber and timber products in Cambodia*. Forestry Administration of Cambodia.

⁸⁶. Personal Communication, Edwin Payuan and Kaylan Hou, (2012); MoE and UNDP Cambodia. (2011, *Climate Change and Local Action: Cambodia Human Development Report 2011*;



Legal reform

Community forestry

The legal framework for community forestry has progressed considerably over the past decade. Nevertheless, significant regulatory barriers have resulted in low levels of community forestry implementation, despite the momentum in policy discourse. These must be addressed first before community forest-based adaptation can take off. Please see Table 2 for a list of key laws relevant for community forestry-based adaptation

The process for establishing community forests remains complex and slow, and most community forests have not received legal recognition. While 451 community forests were under development across 20 provinces by 2012, only 229 had reached formal agreements with MAFF (see Figure 1). Furthermore it took until 2012 for the first CFMP to be approved.⁸⁷ Implementation has been slow for CPAs as well, with only two out of 84 CPAs reaching the final stages of registration by 2009.⁸⁸ Without formal legal standing, communities lack incentives to invest in sustainable management, and have instead sought alternative land uses.⁸⁹ Many NGOs, local FA and CFMC alike have called for a simplification of the CFMP requirements.⁹⁰

The legal framework also creates hurdles for communities to manage community forests. CFMCs have limited power on their own to impose sanctions on illegal activities.⁹¹ According to the NFP, forest dependent communities lack clear guidance on potential areas for accessing resources to address this.⁹² Unclear forestland demarcation is a significant threat to the legal standing of already established community forests, and has allowed for illegal activities and encroachment by companies and neighboring communities. Communities lack the resources to address illegal encroachment. Until these issues are resolved, the potential for community forestry to support climate resilience in Cambodia will not be realized.

Even though the Prime Minister issued a moratorium on new land concessions in May 2012, a number of concessions that were agreed on before the moratorium are moving forward, and may also threaten community forestry areas.⁹³ For example, two ELCs that were awarded overlap with the Ratanak Ruka community forest in Oddar Meanchey province. After petitioning the FA to retain their land rights, the communities agreed to reduce their total community forestry area from 21,000 to 12,782 ha.⁹⁴ Villagers were proud to retain a portion of their lands, despite losing 40% of community forestry territory, which demonstrates an overall lack of confidence in the government to respect community forestry tenure.⁹⁵ Additional projects to protect against land grabbing have been started under Sub Decree 55 on Procedure for Establishment, Classification and Registration of the Permanent Forest Estate.⁹⁶ However, encroachment and overlapping boundaries between ELCs and community forests remain critical issues.

⁸⁷ RECOFTC, (2012, *Cambodia's First Community Forest Management Plan Gives More Legal & Technical Support for Communities to Sustainably Manage their Community Forest*. Available from: <http://www.recoftc.org/site/resources/Cambodia-s-First-Community-Forest-Management-Plan-Gives-More-Legal-Technical-Support-for-Communities-to-Sustainably-Manage-their-Community-Forest.php> [January 29, 2013]

⁸⁸ MOE and UNDP Cambodia. (2011, *Climate Change and Forestry: Cambodia Human Development Report 2011*.)

⁸⁹ RGC Ministry of Agriculture, Forestry and Fisheries (MAFF), (2010, *National Forest Programme (2010-2029)*).

⁹⁰ Kao, Dana. (2012, *Regulatory barriers to communities and smallholders earning their living from timber and timber products in Cambodia*. Forestry Administration of Cambodia.)

⁹¹ MAFF, (2010, *National Forest Programme (2010-2029)*).

⁹² Ibid

⁹³ Biddulph, R (2012, *REDD and Poverty in Cambodia*, Focali Report No 2012:03, Gothenburg.

⁹⁴ Ibid.

⁹⁵ Ibid.

⁹⁶ Vong, Sopanha and Michael Dutschke, (2009, *Integrating Climate Change into the National Forest Programme in Cambodia*. National Forest Programme Facility, RGC and FAO.

The more rigid the controls over sustainable management of a community forest, the more limited adaptive capacity will be for communities. Many community forests are only granted secure tenure for 15 years, renewable for another 15 years, whereas ELCs can hold tenure for much longer.⁹⁷ This period is too short for communities to receive any significant returns on investments in long-term sustainable management.⁹⁸ Furthermore forestlands often allocated for community forestry are seriously degraded, while others sometimes overlap with ELCs.⁹⁹

There is a need to extend community forest tenure periods and to increase the amount of medium to high quality forest allocated to communities, in order to strengthen their climate resilience over the long term. In addition, adaptation capacity may vary across community forestry types, with varying flexibility in frameworks across CPAs, CFs, CCFs, Partnership Forestry, and CFis. Mechanisms should be in place across all systems to incorporate diverse economic activities into management plans.

Mangroves and inundated forests

For mangroves and inundated forest areas, the community fisheries framework is used over community forestry. Article 10 of the Sub-decree on Community Fisheries states that the roles and duties of community fisheries are to:

Participate in establishment of conservation areas within the community fishing area, protection and reforestation of inundated forest and mangrove forest, and restoration of shallow streams and lakes to improve ecosystems and fisheries environments.¹⁰⁰

Mangroves and inundated forests that are not situated in a Protected Area are under the authority of the Department of Fisheries (DoF). However, DoF must work with MoE when mangrove or inundated forest area falls within Protected Areas (e.g. Preah Sihanouk (Ream) National Park, Botum-Sako National Park, PreamKrasop Wildlife Sanctuary and KohKapik). Cambodians use mangroves and inundated forest for fuel wood and charcoal. Being that in the Sub-Decree on CFi Management there appears to be an emphasis on conservation, sustainable management of the mangroves, inundated forests and also NTFPs within the area should be built within the management plans and bylaws and guidelines of CFis as opposed to creating a separate CFi modality under community forestry framework.

Indigenous community lands

The framework for indigenous community lands is established in the Land Law 2001 and detailed in the Sub-Decree on Procedures of Registration of Land of Indigenous Communities – No. 83 ANK (2009). Registered indigenous communities are entitled to seven ha each for spirit forests and burial forests as Protection Forest through Article 45 of the 2001 Forestry Law, which must be maintained for these purposes and do not apply to community forestry. However indigenous communities can apply to expand upon their seven ha entitlements by establishing either a formal community forest or CPA depending on their location. In addition Article 37 of the Forestry Law establishes indigenous community rights to shifting cultivation, in coordination with local FA.

⁹⁷. MoE and UNDP Cambodia. (2011, *Climate Change and Forestry: Cambodia Human Development Report 2011.*)

⁹⁸. Ibid.

⁹⁹. Ibid.

¹⁰⁰. RGC, (2005, *Sub-decree on Community Fisheries Management.* Available from: <http://faolex.fao.org/docs/pdf/cam85864.pdf> [Oct 15, 2013].

Table 2- Laws relevant for community forestry-based adaptation

Land Law (2001)	This law sets the stage for indigenous land titling. The law gives provisions for native ethnic minorities to assert community title on private or state lands, with the stipulation that the land cannot be sold. ¹⁰¹ According to the NSDP, the Ministry of Interior is given the task of registering indigenous communities as a legal entity. ¹⁰²
Law on Forestry (2002)	This law states the right of indigenous and local peoples to engage in customary forest uses on state forestlands outside of the permanent forest reserves. ¹⁰³
Sub-Decree on Community Forest Management (2003)	This decree establishes Community Forests as state public property to be set up within production forests of permanent RGC forest reserves. ¹⁰⁴ The Sub-Decree defines a 'community' as "a group of residents in one or more villages in the Kingdom of Cambodia who share a common social, cultural, traditional and economic interest and use the natural resources in an area that they live in or near, in a sustainable way for subsistence and livelihood improvement purposes." ¹⁰⁵
Prakas on CF Guidelines, MAFF- (2006)	Prakas provides the guidelines and steps for identifying, establishing, legalizing and managing community forests. The FA produced these to formalize the nebulous concept of community forestry of the 2003 CF Sub-Decree, however some issues still require greater simplification and transparency. ¹⁰⁶
Protected Areas Law (2008)	This law assigns the Nature Protection and Conservation Administration with the responsibility to coordinate with indigenous peoples, and formulate agreements on CPAs. The law divides protected areas into four zones including Core, Conservation, Sustainable Use and Community zones. According to Article 22, "Access to traditional uses of natural resources and customary practices of local community and indigenous ethnic minority groups on family scale may be allowed within sustainable use zone and conservation zone following guidelines which shall be prescribed in the Prakas of the Ministry of Environment." Article 25 states that CPAs shall be given tenure for 15 years. Community Protected Areas must create a natural resource management plan every 3 years for approval by the Nature Protection and Conservation Administration. ¹⁰⁷
Department of Fisheries (MAFF) Sub-Decree No. 25 (RGC) on Management of Fishing Communities (2007)	This decree sets forth the procedures and rules for establishing and managing community fisheries. It establishes community fishery sites as state public property, and stipulates that any Cambodian citizen may establish and participate in community fisheries. Instructions are included for creating management plans, which may also include initiatives for sustainable mangrove and inundated forest management on behalf of fishery stocks. ¹⁰⁸

¹⁰¹. Vong, Sopanha and Michael Dutschke. (2009, *Integrating Climate Change into the National Forest Programme in Cambodia*. National Forest Programme Facility, RGC and FAO.

¹⁰². RGC, (2009, *National Strategic Development Plan Update 2009-2011*.)

¹⁰³. RGC, (2007, *Thematic Assessments and Action Plan For The Three Conventions CBD, UNFCCC and UNCCD To Contribute to Poverty Alleviation*.)

¹⁰⁴. RGC, (2003, *Sub-Decree on Community Forestry Management: Article 3*.)

¹⁰⁵. Ministry of Agriculture, Forestry and Fisheries, Cambodia, (2010, *National Forest Programme (2010-2029)*); RGC (2003, *Sub-Decree on Community Forestry Management: Article 5*.)

¹⁰⁶. RECOFTC, (2012, *Community Forestry in Cambodia*. Available Online: <http://www.recoftc.org/site/Community-Forestry-in-Cambodia> [January 25, 2013].

¹⁰⁷. RGC, (2008, *Law on Nature Protection Area*.)

¹⁰⁸. FAOLEX 2007, Sub-Decree No. 25 (RGC) on management of fishing communities. Available from: <http://www.fao.org/fishery/shared/faolextrans.jsp?xp_ISIS_MFN=065944&xp_faolexLang=E&xp_lang=en>. [29 January 2013].

Sub-Decree on Procedures of Registration of Land of Indigenous Communities - No. 83 ANK (2009)

Article 2 states, "*The objectives of this Sub-Decree are to provide indigenous communities with legal rights over land tenure, to ensure land tenure security, and to protect collective ownership by preserving the identity, culture, good custom and tradition of each indigenous community.*" If interested, the chairman of the community committee must work with District Office of Land Management to submit application for 'Collective Title' which is defined as "*jointly owned land of an indigenous community and this ownership is not private individual ownership of the community member. Each member or family of the community does not have the right to dispose of any community ownership.*" The Sub-decree states that legally registered communities can practice collective land management according to land type and use forestlands for traditional NTFP and water use, as long as they reach agreement with the local State institution.¹⁰⁹

Recommendations for legal reform

- **Revise the community forestry sub decree** – The decree must provide guidance on adaptation. The National Community Forestry Programme Coordination Committee and Technical Working Group on Forestry Reform (under FA) should prioritize adaptation in their agenda especially at a sub-national level.
- **Extend the duration of community forest tenure** – The current tenure allotment of fifteen years with renewable fifteen years should be extended, especially given the arduous processes required to secure community forestry. This would give communities appropriate incentives for long-term sustainable management, and to enhance their ability to use forest resources for climate adaptation over the coming decades.
- **Increase efforts to demarcate land and reduce encroachment from ELCs** – Proper land demarcation of community forest areas must be addressed immediately in order for communities to protect their rights to local land and resources. There is a need for improved coordination within MAFF to ensure community forests are not enveloped within concession areas. The MAFF must be given more resources and authority to enforce Social and Environmental Impact Assessments before concessions are granted (assuming more will be granted after the 2012 moratorium).
- **Revise the legal framework to allow economic activities to be included within designated areas within CPAs and CCFs** – This may include forest restoration or agroforestry projects within a degraded forest area, as well as eco-tourism activities in healthy forest areas.

¹⁰⁹ RGC 2009, *Sub-Decree on Procedures of Registration of Land of Indigenous Communities*.

Project development

There are a relatively high number of rural climate adaptation projects in Cambodia, and many have begun to include forestry and community-based approaches to forestry in recent years. However, only a small number of these projects apply legally-recognized community forestry frameworks.

There are various innovative strategies being applied across these projects that link community forestry and climate adaptation. For example, the Provincial Department of Agriculture, with the support of SNV, is linking together the Community Forestry Programme with the National Biodigester Programme in order to boost climate change resilience amongst communities. In addition, four NAPA projects have been identified, which incorporate community forest and community mangrove approaches, but have not yet been implemented. Table 3 lists examples of community forest-based adaptation projects that are being undertaken in Cambodia.

Table 3 – Existing climate change adaptation and community forestry projects in Cambodia

Project and partner(s)	Project description
Adaptation to Climate Change Through Alternative Livelihoods in Community Forestry ¹¹⁰ (National Biodigester Programme: MAFF and SNV; 2012-2013, 15 months)	The Provincial Department of Agriculture for Implementation of the Biodigester Programme is carrying out this 15 month USD \$312,202 project. The aim is to build community adaptive capacity strengthening CF sector in Pursat, SiemRiep, Kampong Thom, Kampot and SvayRieng provinces. Integrating the National Community Forestry Programme (NCFP) with the National Biodigester Programme (NBP), this project aims to increase the participation of local commune councils and community forest management committees in Cantontment level community forestry planning and coordination committees (CCFPCC). The project links CF with adaptation in three ways: supporting local decision making processes for adaptation, promoting sustainable CF management as adaptation strategy and, promoting CF use of biodigesters as adaptation strategy. This latter idea seeks to reduce women’s time collecting firewood and cooking through integrating home garden enterprises with use of biodigesters (which convert organic material into gas).

¹¹⁰. Ministry of Environment 2013, *Adaptation to Climate Change through Alternative Livelihoods in Cambodia*. Available from: <<http://www.camclimate.org.kh/index.php/project-factsheets/grant-project-under-1st-call-for-proposal/40-adaptation-to-climate-change-through-alternative-livelihoods-in-community-forestry.html>>. [29 January 2013].

¹¹¹. Adaptation Fund 2012, *Enhancing Climate Change Resilience of Rural Communities Living in Protected Areas of Cambodia*. Available from: <<http://www.adaptation-fund.org/project/enhancing-climate-resilience-rural-communities-living-protected-areas-cambodia>>. [28 January 2013].

¹¹². UNEP 2013, *Cambodia*. Available from: <<http://www.unep.org/climatechange/adaptation/AccessToAdaptationFinance/AdaptationFundProjects/Cambodia.aspx>> [29 January 2013].

¹¹³. UNEP 2013, *Project Document: Vulnerability Assessment and Adaptation Programme for Climate Change within the Coastal Zone of Cambodia Considering Livelihood Improvement and Ecosystems*. Available from: <[http://www.thegef.org/gef/sites/thegef.org/files/gef_prj_docs/GEFProjectDocuments/Climate%20Change/Cambodia%20-%20\(3890\)%20-%20Vulnerability%20Assessment%20and%20Adaptation%20Programme/11-03-2010%20ID3890%20-%20Cambodia_prodoc_.pdf](http://www.thegef.org/gef/sites/thegef.org/files/gef_prj_docs/GEFProjectDocuments/Climate%20Change/Cambodia%20-%20(3890)%20-%20Vulnerability%20Assessment%20and%20Adaptation%20Programme/11-03-2010%20ID3890%20-%20Cambodia_prodoc_.pdf)>. [29 January 2013].

¹¹⁴. The Cambodian Rural Development Team 2013, *About*. Available from: <<http://www.crdt.org.kh/about>>. [29 January 2013].

¹¹⁵. Personal Communication, Sun Mao, (2012).

¹¹⁶. USAID 2012, *About Cambodia HARVEST*. Available from: <<http://www.cambodiaharvest.org/about.aspx>>. [29 January 2013].

¹¹⁷. USAID 2012, *Who We Are*. Available from <<http://www.cambodiaharvest.org/index.aspx>>. [29 January 2013].

¹¹⁸. Marschke, M and Nong, K 2002, *Community-Based Coastal Resource Management in Cambodia: Lessons and Response*, Ministry of Environment, Cambodia.

¹¹⁹. Mangrove Action Project 2008, *Cambodian Mangroves*. Available from: <http://mangroveactionproject.org/news/current_headlines/cambodian-mangroves>. [28 January 28, 2013].

Project and partner(s)	Project description
Enhancing Climate Resilience of Rural Communities Living in Protected Areas of Cambodia – 2012-2017 ¹¹¹ (UNEP and MoE)	Financed through the Adaptation Fund, UNEP, MoE, and C4 Eco Solutions are collaborating to enhance the climate resilience of communities living in Cambodia's protected areas. This \$4.9 million project targets communities that are vulnerable to erratic rainfall, whose food supply is diminished due to drought and loss of topsoil during floods. The goal is to increase food supply and reduce soil erosion surrounding the following CPAs: Chiork Beungprey, Chom Thlork, Skor Mreach (all in Beung Per Wildlife Sanctuary), Ronouk Khgeng (Phnom Preach Wildlife Sanctuary), and Chop Tasok (Phnom Kulen National Park). The goal is to restore 2,500 ha of degraded forest, and to diversify home gardens of at least 2,500 families. The project attempts to employ the "ecoagricultural approach," ¹¹² carrying out landscape-level planting of indigenous trees that provide food and stabilize soils, in addition to testing drought-tolerant agricultural species. In addition, multi-use tree species will be planted along rice paddy boundaries and other cultivated areas to enhance crop productivity. If the project proves successful in pilot communities, ecoagricultural concept may be scaled up to other PAs.
Vulnerability assessment and adaptation programme for climate change within the coastal zone of Cambodia considering livelihood improvement and ecosystems (Jointly run by MoE; National Coastal Steering Committee of Cambodia; and UNEP-DHI Centre on Water and Environment) ¹¹³	Running from 2011 through 2014, this project works to increase the resilience of coastal communities through a) planting trees on dune systems, and restoring Mangrove ecosystems to create a coastal buffer in the Peam Krasoap district. If the demonstration sites prove successful, the project will be scaled up to other districts. The project will involve local governments and communities in rehabilitating mangrove forest, and related awareness-raising activities. Funding comes from Least Developed Countries Fund (LDCF); Cambodia Climate Change Alliance (CCCA); Ministry of Water Resources and Meteorology (MoWRAM); Ministry of Agriculture, Forestry and Fisheries (MAFF) and Ministry of Environment (MOE).
Cambodia Rural Development Team projects ¹¹⁴	The Cambodian Rural Development Team (CRDT) is a local NGO founded in 2011, working to reduce poverty and environmental degradation, through an integrated programme of alternative livelihoods, agricultural training, water supply, NRM and community based organizations (CBOs). The CRDT has capacity development projects on climate change adaptation, vulnerability assessments (working with UNDP), agricultural yield and income generation, working in Kratie, Stung Trent, and Monduliri provinces in Northeast Cambodia. ¹¹⁵ CRDT carried out climate vulnerability assessments for project provinces and made key linkages between poverty, climate adaptation and community needs. Forests and natural resources are mentioned often as key resources for adaptation, though CF is not directly mentioned.
Helping Address Rural Vulnerabilities and Ecosystem Sustainability (HARVEST) (USAID) ¹¹⁶	This USAID project focuses on agricultural based climate adaptation, to secure livelihoods for 70,000 rural households in four provinces around Tonle Sap lake. The project, while focusing on resilient agricultural practices, does include community forest areas in its geographic scope. According to USAID, around 8,500 households have already been impacted through establishment of woodlots, tree nurseries and agroforestry areas. ¹¹⁷
Participatory Management of Mangrove Resources (PMMR) (Ministry of Environment, International Research Centre-Canada) ¹¹⁸	The Participatory Management of Mangrove Resources (PMMR) project started in 1997 and, focused on promoting community based management of coastal resources in Koh Kong province. The project helped facilitate the first village management committee within Peam Krasoap's Wildlife Sanctuary. ¹¹⁹ Lessons learned from this project have contributed to GEF's "Vulnerability Assessment and Adaptation Programme for Climate Change in the Coastal Zone of Cambodia" (see above).

Project and partner(s)	Project description
Mekong Adaptation and Resilience to Climate Change (Mekong ARCC) (USAID)	This regional USAID project (2011-2016) will work in Lao PDR, as well as the other three lower Mekong countries (Cambodia, Thailand and Vietnam), to 1) research and identify key climate change impacts for the region's most vulnerable populations, and 2) assist communities in highly ecologically sensitive areas to adapt. As of July 2013, the project received proposals to fund "Ecosystem and Community-based Climate Adaptation and Resilience Building Initiatives" for the provinces of Khammouan and Champhasak, Lao PDR. ¹²⁰
Capacity Strengthening for Community Protected Area (CPA) Communities in Boeung Per Wildlife Sanctuary to Adapt to the Impacts of Climate Change. ¹²¹ (MoE and RECOFTC) (2012-2013, 15 months)	(See Case Study Box)

Recommendations for project development

- **Secure funding for the four planned NAPA projects** – this would significantly expand the level of support provided to climate adaptation from community forestry in the country.
- **Scale-up agroforestry and forest based enterprise development** – the use of community-based agroforestry has shown great promise in Cambodia and should be scaled up immediately.
- **Employ participatory approaches to project design** – the participation of stakeholder communities and user groups in the design of natural resource projects in Cambodia is relatively new and remains limited in practice. Adaptation projects would particularly benefit from participatory approaches to identify changes already occurring, and local solutions for overcoming these issues.
- **Create a platform for sharing project success and failures** – as adaptation projects are still in their pilot stages in Cambodia, a network is needed in order to bring together the diversity of project developers and organizations engaged in climate change adaptation to share their lessons learnt and avoid overlap.

¹²⁰. Mekong ARCC 2013, *Our Work*, USAID. Available from: <<http://mekongarcc.net/ourwork/our-work>>. [9 October 2013].

¹²¹. Ministry of Environment 2013, *Capacity Strengthening for Community Protected Area Development (CPA) Communities in Boeung Per Wildlife Sanctuary to Adapt to the Impacts of Climate Change*. Available from: <<http://www.camclimate.org.kh/index.php/project-factsheets/grant-project-under-1st-call-for-proposal/41-capacity-strengthening-for-community-protected-area-development-cpa-communities-in-boeung-per-wildlife-sanctuary-to-adapt-to-the-impacts-of-climate-change.html>>. [29 January 2013].

¹²². Global Environmental Facility 2011, *Request for CEO Endorsement/Approval – Vulnerability Assessment and Adaptation Programme for Climate Change within the Coastal Zone of Cambodia Considering Livelihood Improvement and Ecosystems*. Available from: <<http://www.thegef.org/gef/sites/thegef.org/files/documents/document/2-7-11%20-%20Webposting.pdf>>. [29 January 2013].

¹²³. Ministry of Environment 2013, *Trust Fund News*. Available from: <<http://www.camclimate.org.kh/index.php/trust-fund-news.html>> [January 29, 2013].

Public funding and private investment

As a Least Developed Country (LDC), Cambodia has access to various funding sources that may support community forest-based adaptation measures. The Least Developed Countries Fund (LCDF) and the Special Climate Change Fund (SCCF) have approved two UNEP projects of relevance to date. One of these projects, “Vulnerability Assessment and Adaptation Programme for Climate Change in the Coastal Zone of Cambodia” will allocate USD \$5.8 million towards building climate resilience for coastal communities. The project design aims to address key the goals of the NAPA, including “community mangrove restoration and sustainable use of natural resources” (high priority project 4B).¹²²

In addition, the Cambodia Climate Change Alliance (CCCA), under the MoE Climate Change Department channels money from donors such as UNDP, European Union, Sida and the Danish International Development Agency (DANIDA). The CCCA Trust Fund, managed in the interim by UNDP, serves as the central engagement point for international stakeholders to direct funds, which are then disseminated at the national and local levels.¹²³ The alliance has already allocated \$7 million USD to government institutions and CSOs to establish policies and pilot adaptation projects. Existing projects are expected to impact around 170,000 Cambodians. The forestry sector has been prioritized, and some community forest projects have received funding in support of climate adaptation. The CCCA put out a call for proposals in 2012 to allocate \$2 million towards addressing climate change and disaster risks, with plans to follow up on two main NAPA suggested activities. They are currently working with applicants to strengthen proposals.

There are other emerging international funds for adaptation that Cambodia could access and channel towards community forestry initiatives. The Adaptation Fund has promised USD \$166 million in funding for climate adaptation projects worldwide, including \$4.9 million in Cambodia for its “Enhancing Climate Resilience of Rural Communities Living in Protected Areas of Cambodia project (2012-2017)” (see Projects section),¹²⁴ and more funding may be available for similar projects.

Cambodia has been selected as one of 10 countries to participate in the Pilot Programme for Climate Resilience (PPCR), under the Climate Investment Fund’s (CIF) Strategic Climate Fund, and will receive USD \$50 million to build on NAPA and streamline adaptation into policies and national development plans.¹²⁵ Under this fund, RGC, World Bank, the Asian Development Bank and the International Finance Corporation have jointly formulated a Strategic Programme for Climate Resilience. The Programme provides a platform for development agencies, the private sector, and NGOs to invest in and collaborate with the government on integrating climate resilience into core national development strategies.¹²⁶ However, the eight projects under the Strategic Programme focus predominantly on agriculture and water resources, with little attention being paid to forests.¹²⁷

There are also avenues for local organizations to receive adaptation funding for community forestry-based adaptation. The Learning Institute is in the process of allocating USD\$1.5 million in the form of smaller grants for local research projects on the theme “food security, climate change and natural resource management in Cambodia,” (2010-2014).¹²⁸ Building on recent decentralization policies, RGC encourages commune councils to incorporate Community and Partnership Forestry in Commune Land Use Plans and Commune Development Plans.

¹²⁴ Adaptation Fund 2012, *Enhancing Climate Change Resilience of Rural Communities Living in Protected Areas of Cambodia*. Available from: <<http://www.adaptation-fund.org/project/enhancing-climate-resilience-rural-communities-living-protected-areas-cambodia>>. [28 January 2013].

¹²⁵ WeAdapt 2011, *Cambodia*. Available from: <<http://weadapt.org/knowledge-base/vulnerability/Cambodia>>. [18 January 2013].

¹²⁶ Wedderburn, S 2012, *Notification of Joint Multilateral Development Bank (MDB) Programming Mission to Support Cambodia’s Preparation Towards Developing the Pilot Programme for Climate Resilience (PPCR) Strategic Programme for Climate Resilience*, Climate Investment Funds. http://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/cambodia_joint_mission_notification.pdf>. [29 January 2013].

¹²⁷ RGC 2011, *Strategic Programme for Climate Resilience*, Climate Investment Fund. Available from: <<http://www.climateinvestmentfunds.org/cifnet/sites/default/files/Cambodia%20SPCR%20Presentation%20to%20PPCR%20Sub-Committee.pdf>>. [29 January 2013].

¹²⁸ The Learning Institute 2010, *Projects (On Going)*. Available from: <http://www.learninginstitute.org/index.php?page=project_ongoing_community>. [29 January 2013].

In addition, new community forest-based adaptation projects may be developed through employing statutory Commune Investment Funds.¹²⁹ The Social Development Funds, provided under Local Administration and Reform Programme (LAAR), makes available \$3-5,000 for up to three consecutive years for socially focused investments in commune planning. However, this funding requires matching funds from communes to encourage project sustainability.¹³⁰

It should also be noted that there is continuing investment both at a national and project level in the development of REDD+ (Reduced Emissions from Deforestation and Degradation +). Cambodia is a UN-REDD country and the Social and Environmental Principles and Criteria for UN-REDD reference climate adaptation,¹³¹ with Criterion 14 stating the need to 'Ensure consistency with and contribution to national climate policy objectives, including those of mitigation and adaptation strategies and international commitments on climate (p.6).' If this criterion is applied properly during the implementation of the programme then it may be expected that UN-REDD resources will also help to support forest-based, and perhaps community forestry-based, climate adaptation.

Regarding domestic funding sources, there is still a critical disconnect in Cambodia between environmental policies and corresponding public investment decisions.¹³² The MoE, which sits at the center of all climate change adaptation initiatives, only received 0.3 percent of total government expenditures in 2011, which falls short of the World Bank recommended 1.4-2.5 percent for developing countries.¹³³ According to the NAPA, relatively low government salaries and incentives to promote or manage climate change projects are key barriers to its implementation.¹³⁴

Presently, the Community Forestry Programme remains underfunded and short-term donor projects have been the principle source of funding for community forestry in Cambodia.¹³⁵ Self-sustaining community forestry enterprises have been limited because of the restrictive legal framework and difficulty in accessing adequate capital, technology and skilled manpower.¹³⁶

Recommendations for funding

- **Direct multilateral adaptation funds towards community forestry climate resilience projects** – Cambodian organizations and the government should take advantage of the country's eligibility for multiple adaptation funding sources and apply for funding to scale up community-based forestry and agroforestry climate adaptation projects.
- **Ensure that multi-lateral and bi-lateral funding for REDD+ readiness provides support for forest and community-forestry based climate adaptation activities.**
- **Invest in increasing the financial self-sufficiency of community forestry** – identify community forestry projects where investments could help community groups achieve financial self-sufficiency and reduce dependence on external funding support in the long-term.
- **Enhance domestic investment towards the Community Forest Programme** – to allow the Ministry to sufficiently support the expansion of community-level adaptation initiatives, including community-forestry based adaptation.

¹²⁹ Ministry of Agriculture, Forestry and Fisheries 2010, *National Forest Programme (2010-2029)*; Pact Cambodia 2013, *Local Administration and Reform Progress*. Available from: <http://www.pactcambodia.org/Programs/Programme_LAAR.htm>. [29 January 2013].

¹³⁰ Pact Cambodia 2013, *Local Administration and Reform Progress*. Available from: <http://www.pactcambodia.org/Programs/Programme_LAAR.htm>. [29 January 2013].

¹³¹ UN-REDD Programme 2012, *UN-REDD Programme Social and Environmental Principles and Criteria*, UN-REDD Programme Eighth Policy Board Meeting 25-26 March 2012, Asuncion, Paraguay.

¹³² Wingqvist, G 2009, *Cambodia Environmental and Climate Change Policy Brief*, University of Gothenburg, Department of Economics.

¹³³ Ibid

¹³⁵ Ministry of Agriculture, Forestry and Fisheries 2010, *National Forest Programme (2010-2029)*, Cambodia.

¹³⁶ Ibid

Capacity development

Cambodia has made great strides in the past few years to build national capacity for climate adaptation as well as for community forestry. With conceptual acceptance of community forestry at the Ministerial level, further strategic planning is needed to direct financial and human resources towards skill development for research and community-based planning.¹³⁷

The Global Environmental Facility (GEF) has provided funding and technical support for Cambodia's National Capacity Self Assessment Project (NCSA) through the MoE.¹³⁸ Climate change is one of three central concerns of the NCSA, along with biodiversity and land degradation. However, the NCSA does not mention community forestry in its assessment of national environmental management capacity.¹³⁹

Research

Because of a lack of national climate change data, as well as the scientific capacity for analyzing the data it is difficult to prioritize and target adaptation activities in Cambodia, especially at the local level. The NAPA attributes the shortage of climate change studies to a lack of national training and research institutions.¹⁴⁰ Investments in climate modeling and adaptive capacity monitoring indicators are critical for building climate change adaptation capacity.¹⁴¹

Various academic institutions, international NGOs and local civil society organizations have begun to address this gap. The Royal University of Phnom Penh Faculty of Environmental Science has contributed to the preliminary national studies, with the help of NAPA, and has begun mainstreaming findings into school curricula. In addition, the Regional Climate Change Adaptation Knowledge Platform has conducted research on Cambodia. Its "Scoping Assessment for National Implementation in Cambodia" provides a thorough synthesis report on the current capacity for adaptation.¹⁴² Moreover, the Assessment of Impacts and Adaptation to Climate Change (AIACC) has conducted a three-year investigation of climate change impacts and vulnerability in Southeast Asian countries and facilitated multiple trainings in Cambodia.¹⁴³

Capacity development and network building

There is a lack of FA staff trained in community forestry development, and a subsequent lack of coordination between CFMCs, local FA and central FA in Cambodia.¹⁴⁴ Investing in human resources for the Community Forestry Programme is a critical step needed to strengthen the role community forestry in adaptation. Furthermore, local level government, local NGOs and community forestry groups typically have a very low awareness of the basic principles of climate change adaptation and the relevant national-level plans on these issues.¹⁴⁵ Awareness raising activities are needed, especially among local government officials, to cover the basic principles of climate change adaptation, community-based adaptation and the content of national plans such as the NAPA.

¹³⁷ Wingqvist, G 2009, *Cambodia Environmental and Climate Change Policy Brief*, University of Gothenburg, Department of Economics.

¹³⁸ Global Environmental Facility 2012, *Detail of GEF Project #1493*. Available from: <http://www.thegef.org/gef/project_detail?projID=1493>. [29 January 2013].

¹³⁹ RGC 2007, *Thematic Assessments and Action Plan For The Three Conventions CBD, UNFCCC and UNCCD To Contribute to Poverty Alleviation*.

¹⁴⁰ Wingqvist, G 2009, *Cambodia Environmental and Climate Change Policy Brief*, University of Gothenburg, Department of Economics.

¹⁴¹ Adaptation Knowledge Platform 2010, *Scoping Assessment for National Implementation in Cambodia-Summary*.

¹⁴² Ibid

¹⁴³ Leary, N, et. al 2007, *Assessment of Impacts and Adaptation to Climate Change: Final Report of the AIACC Project*, The International START Secretariate. Available from: <<http://start.org/download/publications/AIACCfullreport.pdf>>. [29 January 2013].

¹⁴⁴ Ministry of Agriculture Forestry and Fisheries 2010, *National Forest Programme 2010-2029*.

¹⁴⁵ WeAdapt 2011, *Cambodia*. Available Online: <<http://weadapt.org/knowledge-base/vulnerability/Cambodia>>. [18 January 2013].

There are a small number of leading initiatives already underway which seek to address this gap (see Case Study Box). The SIDA-financed Joint Climate Change Initiative (2010-2012) worked with 22 local organizations to integrate climate change into their rural development activities.^{146,147} The Learning Institute is also leading the “Participatory Management of Coastal Resources Project,” with MoE and Canada’s International Development Research Center, which seeks to educate coastal communities on the principles of community-based natural resource management.¹⁴⁸

Although there are a variety of networks in Cambodia that provide an avenue for information exchange on community forestry and climate change, many networks lack adequate funding, and have remained dormant when funding from international NGOs runs out.¹⁴⁹ Drawing on this experience, the NCCC and the CCCO must be provided with adequate long-term resources to facilitate communication and promote synergies across networks at three levels, including:

- Regional collaborations - e.g. Asian Social Forestry Network, Partnerships for Disaster Reduction Southeast Asia, Mekong River Commission Climate Change Adaptation Initiative, UNEP Global Climate Adaptation Network, Regional Knowledge Platform for Climate Adaptation, Forest, Climate and Livelihood Research Network
- National forums - e.g. NGO Forum project on Forestry Rights, which links diverse NGO members dealing with the loss of local forest rights to concessions and promoting alternative livelihoods.
- Provincial community forestry networks - e.g. Kompong Chhnang community forestry network.¹⁵⁰

Recommendations for capacity development

- **Invest in human resources for the Community Forestry Programme** – the government and donors must direct more funding to the FA to train staff in community forestry development at the national and subnational levels.
- **Develop trainings and increase information sharing for local government on climate change** - existing climate change information required to make forest management decisions is difficult to access and rarely disseminated through lower tiers of government.¹⁵¹ Training for local government staff on climate change issues needs to be scaled up beyond NGO-led initiatives.
- **Incorporate climate change education into community forest management planning** - the Climate Change Department and MAFF should disseminate information on climate change during the community forest management planning process.
- **Leverage formal and informal networks** – national forestry networks should be used as a channel exchange climate adaptation research and practices.¹⁵²
- **Revise the National Capacity Self Assessment (NCSA)** – to include community forestry in its analysis of national environmental management competencies.

^{146.} Wingqvist, Gunilla Ölund 2009, *Cambodia Environmental and Climate Change Policy Brief*, University of Gothenburg, Department of Economics.

^{147.} Personal Communication, Sun Mao, 2012.

^{148.} The Learning Institute 2013, *Selected Experiences and Lessons Learned*. Available Online: <http://www.learninginstitute.org/pub_detail.php?id=13>. [28 January 2013].

^{149.} Ministry of Agriculture Forestry and Fisheries 2010, *National Forest Programme 2010-2029*.

^{150.} WeAdapt 2011, *Cambodia*. Available Online: <<http://weadapt.org/knowledge-base/vulnerability/Cambodia>>. [18 January 2013].; http://www.communityforestryinternational.org/publications/research_reports/NRM_Network_Report.pdf

^{151.} MoE and UNDP Cambodia 2011, *Climate Change and Local Action: Cambodia Human Development Report 2011*; WeAdapt 2011, Cambodia. Available Online: <<http://weadapt.org/knowledge-base/vulnerability/Cambodia>>. [18 January 2013].

^{152.} Adaptation Knowledge Platform 2010, *Scoping Assessment for National Implementation in Cambodia-Summary*.



Cambodia's community forestry and adaptation roadmap to 2020

Cambodia	Immediately	2015	2020
Policies and planning	<ul style="list-style-type: none"> The guidelines and steps for the CFMP process must be simplified and reformed to allow for the up-scaling of community forestry, and its application in strengthening national climate change resilience. The revision of the NSDP should give high priority to climate change adaptation and emphasize ecosystem and community based adaptation, and match the priorities set out in the NAPA. 	<ul style="list-style-type: none"> By 2015, strengthen the mandate of the CCCO so that it can play a more active coordination role between government, donors and organizations involved in climate change adaptation and the role of community forestry in adaptation. 	<ul style="list-style-type: none"> By 2020, climate change vulnerability assessments and local adaptation planning should be a required component of all CFMPs and CPAMPs.
Legal reform	<ul style="list-style-type: none"> The bureaucratic process for approving community forestry management plans should be reviewed and streamlined. The FA and MAFF's Economic Land Concessions unit needs to decide on the demarcation of ELCs and community forestry areas, to allow for communities to plan future land use. 	<ul style="list-style-type: none"> By 2015 CFMCs have the power to impose sanctions on illegal activities, with support from the FA. 	<ul style="list-style-type: none"> By 2020, the duration of community forestry tenure is extended.
Project development	<ul style="list-style-type: none"> Secure funding for the four planned NAPA projects which incorporate community management of mangrove forest restoration . Establish a platform for organizations working on community-based climate adaptation projects to share project successes and failures. Special attention should be given to scaling up successful agroforestry practices in adaptation projects. Climate change adaptation planning is mainstreamed within the management planning process for community forestry projects across the country. 	<ul style="list-style-type: none"> By 2015, the number of climate adaptation projects applying legally recognized community agroforestry and forestry approaches has doubled. By 2015, REDD+ projects and programs mainstream climate adaptation objectives within their design and implementation. By 2015, the community-based adaptation platform is meeting regularly and helping to improve the effectiveness of project implementation across the country. 	<ul style="list-style-type: none"> By 2020, climate adaptation vulnerability assessment and planning is mainstreamed across all community forestry projects in Cambodia. By 2020, in each rural province of the country there are climate adaptation projects applying legally recognized community agroforestry and forestry approaches.
Cambodia	Immediately	2015	2020

<p>Public funding and private investment</p>	<ul style="list-style-type: none"> • Seize the opportunity presented by Cambodia's eligibility for multi-lateral adaptation funding and increase the emphasis on community and community forestry based adaptation within new proposals to these funds. • Identify community forestry projects where investments could help community groups achieve financial self-sufficiency, improve climate resilience and reduce dependence on external funding support in the long-term • Review and identify where multi-lateral, bi-lateral and project-level funding for REDD+ can better support forest and community-forestry based climate change adaptation 	<ul style="list-style-type: none"> • By 2015 the Community Forestry Program is sufficiently funded to allow it to expand support for community-level adaptation initiatives, including community-forestry based adaptation • By 2015 both multi-lateral and bi-lateral funding for REDD+ readiness supports the advancement of Community Forestry in the country and provides support for forest based climate adaptation activities. 	<ul style="list-style-type: none"> • By 2020, there are examples in each rural province of fully financially sustainable community forestry enterprises, supporting climate change resilience • By 2020 the results of funding for community forestry-based climate adaptation are assessed and lessons used to support the scaling up of community forestry-based adaptation activities across each rural province
<p>Capacity development</p>	<ul style="list-style-type: none"> • Revise the National Capacity Self Assessment (NCSA) to include community forestry in its analysis of national environmental management competencies. • The government and donors must direct more funding to the FA to train staff in community forestry development at the national and sub-national levels. • Training for local government staff on climate change adaptation needs to be scaled up beyond NGO-led initiatives. 	<ul style="list-style-type: none"> • By 2015, the MoE and the Climate Change Department and MAFF have disseminated information on climate change . Subsequently, this information has begun to be used by local government and communities during the community forest management planning process. • By 2015, there is a government-led training program for local FA /GDANCP staff on climate change adaptation and the process of community-based adaptation planning. 	<ul style="list-style-type: none"> • By 2020, there are fully trained FA/ GDANCP staff available in each province who can assist community forestry groups in planning for climate adaptation.



