

CLIMATE INVESTMENT FUNDS

PPCR/SC.6/3
June 7, 2010

Meeting of the PPCR Sub-Committee
Washington DC
June 23, 2010

CAMBODIA: PROPOSAL FOR PHASE 1 FUNDING

Proposed Sub-Committee Decision

The PPCR Sub-Committee reviewed the proposal PPCR/SC.6/3, *Cambodia: Proposal for Phase 1 Funding*, and approves \$1.5 million in financing to support the preparation of Cambodia's Strategic Pilot Program. The Sub-Committee invites the Asian Development Bank and the World Bank Group to work with Cambodia, in consultation with other development partners, to prepare of the Cambodia's Strategic Program for Climate Resilience.

**PILOT PROGRAM FOR CLIMATE RESILIENCE
Summary Phase 1 Grant Proposal**

1. Country/Region:	Cambodia	2. CIF Project ID #:	{Trustee will assign ID.}
3. Date of First Joint Mission:	<i>October 12 – 22, 2009</i>		
4. Funding request:	US\$1,500,000.00		
5. Type of request:	<i>Accelerated funding for phase 1:</i> <input type="checkbox"/> Yes X <input checked="" type="checkbox"/> No		
6. Multilateral Development Banks/focal points:	<i>International Bank for Reconstruction and Development (Lead); Asian Development Bank; International Finance Corporation</i>	<i>Samuel Wedderburn – Senior Natural Resources Management Specialist Ancha Srinivasan – Senior Climate Change Specialist Eleonore Richardson – Project Manager</i>	
7. National Implementing Agency: Ministry of Environment , Climate Change Department; National Focal Point: Ministry of Economy and Finance			
8. Project Description:			
(i) Key development challenges (vulnerability) related to climate change/variability:			
<ul style="list-style-type: none"> • Increased severity and frequency of flood and drought events and their negative impacts on agriculture, particularly on rice production; • Increased rainfall variability impacts surface and ground water availability including potable water supply, flood protection and irrigation • Changes in hydrological flow regimes in seasonality, timing and duration adversely affect sensitive and economically productive wetland ecosystems such as Tonle Sap and fisheries productivity, a major livelihood. • Damage to infrastructure, especially rural, from excessive rainfall 			
(ii) Areas of intervention – sectors and themes (indicative): The SPCR would focus on the following:			
<ul style="list-style-type: none"> • Integrating climate resilience into policies and plans at national and sub-national levels • Climate resilient rural infrastructure investments • Addressing vulnerabilities in the agriculture sector • Eco-system and community based adaptation investments • Strengthening the provision of scientific information for climate risk management 			
(iii) Outcome:			
<ul style="list-style-type: none"> • Climate resilience mainstreamed into key national and sub-national policies, plans, processes and investments in the key vulnerable sectors • Communities adaptive capacity improved through access to relevant information on weather forecasting and climate patterns, increased access to risk management options and livelihoods that are less vulnerable to climate risks 			
(iv) Key Results:			
<ul style="list-style-type: none"> • Planning, budgeting and investment proposals of key ministries include consideration of climate resilience • Investments at sub-national level in local governance, local development and natural resources management include climate resilience concerns • Vulnerable groups, such as subsistence farmers and fisher folk, have more stable sources of income • Early warning systems that provide daily weather predictions and reliable seasonal forecasts 			

PILOT PROGRAM FOR CLIMATE RESILIENCE
Summary Phase 1 Grant Proposal

9. Budget (indicative):

Expenditures	Amount (\$) - estimates
Consultants: International	1,235,000
Equipment:	40,000
Workshops/seminars:	130,000
Incremental Operating Costs:	20,000
Contingencies:	75,000
Total Cost:	1,500,000

Other contributions (bilateral or private sector):

10. Timeframe (tentative) – milestones

Submission for Trust Fund Committee approval: June, 2010

Phase I – Second Joint mission: September, 2010

SPCR for Trust Fund Committee approval: July, 2011



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MINISTRY OF ECONOMY AND FINANCE

N° 2754 MEF/DIC

Date: 07 May 2010

Ms. Patricia Bliss-Guest
Program Manager
Climate Investment Funds, Administrative Unit
The World Bank
Washington, D.C. 20433, USA
Fax: (202) 473 1000

Subject: Submission of the description of the Proposal Phase 1 Activities Report on the Pilot Program for Climate Resilience (PPCR) Process in Cambodia.

Dear Ms. Patricia Bliss-Guest,

The Ministry of Economy and Finance, on behalf of the Royal Government of Cambodia, wishes to formally forward the Description of Proposal Phase 1 Activities report with its annex on the Pilot Program for Climate Resilience in Cambodia. This report is an outcome of the Joint Mission consultative process that took place from October 12 to 22, 2009 and from April 21 to 26, 2010 under the leadership of the Royal Government of Cambodia.

The objectives of the mission were to develop a Proposal Phase 1 Activities for the formulation of a Strategic Program for Climate Resilience, through broad-based consultation dialogue with key stakeholders, and analysis of key development plans, policies and strategies.

Prior to the mission, activities that included stocktaking of relevant information on climate resilience, compilation of all country level programs and activities that were relevant to the PPCR and initial consultation with relevant stakeholders were reviewed.

With regards to the above, therefore, the Royal Government of Cambodia wishes to proceed with the implementation of Proposal Phase 1 activities as contained in the report.

Details of the submission are as outlined in the emailed documentation and the Climate Investment Funds (CIF) Administration Unit may publish the information.

Please accept the assurances of our consideration.

Sincerely yours,



Keat Chhon
Deputy Prime Minister
Minister of Economy and Finance

- cc: - All concerning Ministries and PPCR's Focal points
- World Bank Cambodia Country Office
- Cambodia Resident Mission ADB
- UNDP



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Pilot Program for Climate Resilience

Royal Government of Cambodia

Proposal for Phase 1

May 17, 2010

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List of Abbreviations

ADB	Asian Development Bank
CCA	Climate Change Adaptation
CCCA	Cambodian Climate Change Alliance
CCCO	Cambodian Climate Change Office (former CCD)
CCD	Climate Change Department
CCEP	Climate Change Enabling Project
CCNP	Climate Change National Programme
CCSAP	Climate Change Strategy and Action Plan
CDC	Council for the Development of Cambodia
CCTT	Climate Change Technical Team
CNMC	Cambodian National Mekong Committee
CRM	Climate Risk Management
D&D	Decentralisation and De-concentration
DANIDA	Danish International Development Agency
DFID	United Kingdom Department of International Development
DOM	Department of Meteorology
DP	Development Partner
DPLA	Department of Planning and Legal Affairs
DRR	Disaster Risk Reduction
DRM	Disaster Risk Management
EU	European Union
GDCC	Government Donor Coordination Committee
GDP	Gross Domestic Product
GEF	Global Environment Facility
GFDRR	Global Fund for Disaster Risk Reduction
GMAP	Gender Mainstreaming Action Plan
IFC	International Finance Corporation
INC	Initial National Communication
JICA	Japan International Cooperation Agency
KAP	Knowledge, Awareness and Perception
MAFF	Ministry of Agriculture, Forestry and Fisheries
MDB	Millennium Development Bank
MEF	Ministry of Economy and Finance
MEYS	Ministry of Education, Youth and Sports
MoE	Ministry of Environment
MoH	Ministry of Health
MoI	Ministry of Interior
MOI	Ministry of Information
MOP	Ministry of Planning

MFAIC	Ministry of Foreign Affairs and International Cooperation
MLMUPC	Ministry of Land Management, Urban Planning and Construction
MOWA	Ministry of Women's Affairs
MOWRAM	Ministry of Water Resource and Meteorology
MPWT	Ministry of Public Works and Transport
MRC	Mekong River Commission
MRD	Ministry of Rural Development
NAPA	National Adaptation Programme of Action
NCCC	National Climate Change Committee
NCDD	National Committee for Democratic Development
NCDDS	National Committee for Democratic Development Secretariat
NCDM	National Committee on Disaster Management
NCSA	National Capacity for Self-Assessment
NGO	Non- Governmental Organisation
NIS	National Institute of Statistics
NP-SNDD	National Program for Sub-National Democratic Development
ODA	Overseas Development Assistance
PDNA	Post-disaster Damage and Needs Assessment
PDoP	Provincial Department of Planning
PGA	Partnership for Gender Equity
PIP	Public Investment Program
PPCR	Pilot Program on Climate Resilience
RCG	Royal Government of Cambodia
SEA START	South East Asia global change SysTEM for Analysis Research and Training
SIDA	Swedish International Development Cooperation Agency
SNAP	Strategic National Action Plan for DRR
SNC	Second National Communication
TWG	Technical Working Group
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
USD	United States Dollars
V&A	Vulnerability and Adaptation Assessment

Proposal for Phase 1 of the Pilot Program for Climate Resilience (PPCR) in Cambodia

I. Overview

i. Country Context

- The Mekong River and its tributaries dominate Cambodia's hydrology.** Cambodia covers an area of 181,035 km² extending approximately 580 km from east to west and 450 km from north to south. Cambodia's topography broadly consists of the low lying central plains surrounded by mountainous and highland regions, and a 435 km coastline to the south. The Tonle Sap Lake, an outlet of the Mekong during the rainy season, covers an area of up to 10,400 km² in the northwest. Cambodia's tropical monsoon climate is characterized by a rainy season (May-October) accounting for 90 percent of annual precipitation and a dry season (November – April). The average annual rainfall is about 1407 mm. However, over the past decade, some inland provinces have experienced less than 600 mm of rainfall annually, while precipitation has reached 3,800mm in coastal areas¹.



- The Cambodian population is predominantly rural.** The population of Cambodia increased from 5.7 million in 1962 to 11.4 million in 1998 to 13.4 million in 2008². More than 51 percent of the population is female (6.9 million) and about 80 percent of people live in rural areas (1621 communes and 14073 villages). Phnom Penh and other urban areas account respectively for 10 percent and 9.5 percent of the population. The sex ratio (number of males per 100 females) was very low (86) in 1980 due to male casualties during the Khmer Rouge years but it gradually improved to 94.2 in 2008. Approximately 52 percent of the population lives in the central plains, 30 percent around Lake Tonle Sap, 11 percent in the highlands and mountainous areas, and 7 percent in coastal areas. The national average population density is low for the region at 75 people per km².

¹ Ministry of Environment, Draft of Second National Communication to the United Nations Framework Convention on Climate Change (UNFCCC), in preparation.

² National Institute of Statistics, Ministry of Planning 2008. General Population Census of Cambodia 2008.

3. **Cambodia's GDP is strongly influenced by the climate.** Because of a high reliance on agriculture and fisheries, extreme climate events such as flood and drought have significant adverse impact on Gross Domestic Product (GDP). Annual GDP growth rate from 2000 to 2009 fluctuated widely from 5 to 13% (2005)³. In 2008, GDP grew by 6.5% with agriculture, fisheries and forestry accounting for 32.4 percent of GDP, industry for 22.8 percent and services for 38.8 percent. The contribution of industry to GDP has doubled since 1993, but a substantial proportion of the population is dependent on the farming and fisheries sectors.
4. **Economic opportunities and challenges vary greatly across Cambodia.** Development trends reveal a high degree of spatial heterogeneity, calling for a local approach to development and flexible policies, tailored to the characteristics of different places. In particular, progress in the achievement of the Millennium Development Goals varies greatly across different provinces and between rural and urban areas. Diversity and complexity are further exacerbated *within* provinces at district and commune levels. This suggests the need for a strong focus on understanding and tackling local development dynamics.
5. **Cambodia is one of the most vulnerable countries to climate change.** Cambodia's vulnerability to climate change is linked to its characteristics as a post-civil war, least developed, agrarian country with nearly 80 percent of the population living in rural areas, weak adaptive capacity, and poor infrastructure. Climatic events such as floods and droughts are recognised by the Government as one of the main contributors to poverty. During the 20 year period from 1987-2007 a succession of droughts and floods resulted in significant loss of life and considerable economic losses. Over the period 1998-2002, as much as 70 percent of rice production loss was attributed to floods and 20 percent to drought. For example, the severe floods that occurred from 2000 to 2002 resulted in 438 casualties and caused damages amounting to US \$205 million⁴.
6. **Climatic variations are anticipated to further increase the severity and frequency of flood and drought events with lowland areas more affected than highland areas.** Rainfall increases are anticipated predominantly in the central agricultural plains stretching from southeast to northwest – a high population area historically of low rainfall yet known to be vulnerable to flooding and drought. Recent findings from the Mekong River Commission (MRC) suggest that the Mekong region in general, and Cambodia in particular, will generally experience a shorter rainy season and a longer dry season due to climate change. Mean annual rainfall is predicted to increase, with the most significant increase experienced in the wet season.⁵ ⁶ In contrast, water flows in the dry season are predicted to decrease. Changes in water

³ National Institute of Statistics, Ministry of Planning.

⁴ Ministry of Environment, 2006. National Adaptation Programme of Action to Climate Change.

⁵ Mekong River Commission 2009. Adaptation to climate change in the countries of the Lower Mekong Basin: a regional synthesis Report MRC Technical Paper No. 24.

flows and seasonality could have adverse impacts on sensitive and economically productive wetlands such as Tonle Sap.

7. **Agriculture and fisheries sectors are highly vulnerable to climate change.** With only limited land under irrigation and low level of infrastructure for water management, the agriculture sector is particularly vulnerable to changes in rainfall patterns. The low capacity for food processing and the high proportion of crop yields for subsistence underlines the high potential for severe impacts on food security and poverty. In the Tonle Sap basin, the Mekong River and its tributaries, and the rice fields and floodplains – fisheries productivity is largely determined by the hydrological flow regimes, the timing, duration and extent of flooding and the quality of habitats that are inundated. Climate change is also expected to increase the incidence of infectious, water-borne and vector-borne diseases, heat stress and mortality, with significant impact on public health costs.

8. **Access to reliable early warning data is constrained and basic hydro-metrological data for planning is insufficient.** Accurate and reliable local forecasts of extreme climate events are non-existent in Cambodia. Villagers in downstream areas essentially rely on word of mouth from upstream areas to ready themselves for floods. The Department of Meteorology (DOM) in MOWRAM has 21 manual and nine automatic weather stations throughout Cambodia. Most of the automatic stations have been inactive for the last few years. Basic rehabilitation work is underway although upgrading digitization systems and communications would improve utilization and effectiveness of monitoring especially during severe weather events. The geographical coverage of these stations for basic weather monitoring is insufficient for early warning purposes with no coverage in the North East or hilly regions of the North West, and only one station on the coast. Weather data from the DOM stations is not easily accessible. There are also at least ten additional automatic weather stations planned for installation independently by various projects. The number and type of hydrological monitoring sites of MOWRAM and MPWT are insufficient for effective early warning and expansion and upgrading will be required for any form of downscaled application (e.g. basin or sub-basin planning).

ii. Participatory process followed to prepare the proposal

9. **First Joint Mission.** The preparation of Phase 1 commenced with the first joint mission from October 12 to 22, 2009 led by the Ministry of Economy and Finance (MEF) and comprising the ADB, IFC and the World Bank with participation by UNDP and DFID. The mission held separate consultation meetings with government agencies, the private sector, civil society, and development partners. The purpose was to provide stakeholders with an update on the PPCR; discuss climate risks and vulnerabilities as well as the climate resilience activities being undertaken in the country; and begin discussions on sectoral and other priorities that could be

⁶ Eastham et al. 2008. Mekong River Basin Water Resources Assessment: Impacts of Climate Change. CSIRO: Water for a Healthy Country National Research Flagship.

addressed by the PPCR. At the provincial level, the mission held discussions with local leaders as well as staff of key line agencies. At a commune level, consultations were held with a Commune Council. These various consultations confirmed that the priority vulnerable sectors or themes for Cambodia that could be addressed by the PPCR are agriculture, water resources, and rural infrastructure. The Aide Memoire for the First Joint Mission (excluding some Annexes) is attached as Annex 1.

10. **Government Process.** Following the First Joint Mission, the MEF and Ministry of Environment (MoE), with the support of UNDP, requested key ministries (MEF, MoE, Ministry of Agriculture, Forestry and Fisheries [MAFF], Ministry of Water Resources and Meteorology [MOWRAM], Ministry of Planning [MoP], Ministry of Interior [MoI], Ministry of Rural Development [MRD], Ministry of Public Works and Transport [MPWT]) to nominate climate change focal points. This focal point network facilitated the formation of Ministerial teams structured along functional lines and including technical staff, gender focal points, communications and outreach officers, policy makers, project and programme staff, advisors and senior management. UNDP, with participation of World Bank and ADB representatives, facilitated a series of eight working sessions – one with each Ministerial team. The sessions provided an overview of climate change and its potential impacts; outlined some principles of climate change adaptation; generated an update on climate change adaptation initiatives; and included a structured brainstorming session to examine key issues of relevance to each Ministry. The details of this engagement are summarized in Annex 2.
11. **Private Sector Engagement.** In parallel with the Government process, IFC and UNDP, with participation by the World Bank and ADB, undertook a series of consultations with key private sector representatives including companies working in agriculture, manufacturing, irrigation, rural electricity and financial services. The meetings assessed overall awareness, on-going investment activities in climate adaptation, future opportunities and obstacles that need to be addressed to unblock such investment opportunities. Annex 2 includes summaries of the engagement process conducted by IFC, including identified opportunities.
12. **Civil Society Consultations.** Following from the large group consultation undertaken during the First Joint Mission in October 2009, the World Bank and UNDP, with participation of ADB, undertook small group and one-on-one meetings with representatives from key local and international Civil Society Organisations (CSO) engaged in climate change related activities in Cambodia. During the initial consultation, it was clear that despite limited awareness and capacity to address climate change issues in CSO programs, coordination mechanisms on climate change were emerging - notably with the establishment of an NGO Climate Change Network. The follow-on consultations were designed to elucidate the mechanism and approach for CSO engagement and inform the design of a CSO support facility. The details of this consultation process and outcomes are given in Annex 2.

iii. Climate Change Issues in Cambodia

Climate Diagnostics

- 13. Vulnerability baselines and participatory assessments for climate change impacts on key selected sectors are nearing completion.** The Second National Communication Team has completed a climate analysis covering: (i) trend analysis to assess the presence of significant trend in historical climate data, (ii) the development of climate change scenarios, and (iii) the development of a model for generating daily climate data from monthly ones. The impacts of climate change on **agriculture** were examined with a focus on rice production using the following parameters: change of yields, rice consumption by province, projected rice consumption per capita (scenario development), planting index by province, rice cultivated areas by province in wet season (WS) and dry season (DS), yield of WS and DS, percentage growth of cultivated areas of WS and DS and percentage yield growth in WS and DS. Initial results show that the onset of the rainy season may be delayed and that rice production in the wet season would be seriously affected. Further analysis on the impact of climate change on **water balance** in a number of watersheds has been done based on data from a KOICA project and other parameters, such as household water consumption per capita and agricultural water consumption per hectare. For the **health sector**, the SNC Team has used the results of a study conducted by the World Health Organisation (WHO) with the Ministry of Health as part of WHO's project entitled Regional Framework for Action to Protect Human Health from Effects of Climate Change in the Asia-Pacific Region. The SNC Team has assessed the impact of climate change on soil water regime or dryness and its potential influence on **forest** productivity or forest fire risk. For the **coastal** zone, the analysis included not only the impact of sea level rise but also the impact of high tide or extreme wave on coastal infrastructure. Micro-economic analysis of the impact of extreme weather events (floods and droughts) on crops, households, water supply, fisheries, manufacturing and gender considerations has been carried out for Prey Veng (the most vulnerable rice growing province), Battambang (the second most vulnerable rice growing province) and Kampot (coastal zone). Reports detailing the above analytical outputs are expected to be finalized during 2010.
- 14. Climate Change Strategy and Action Plan (CCSAP)** The National Adaptation Programme of Action (NAPA) was completed in 2006 and included 20 high priority adaptation projects with a combined budget of USD 130 million. The SNC's revised vulnerability analysis, and revised adaptation plan are being used to update the NAPA. The Royal Government of Cambodia (RGC) will shortly commence the preparation of the CCSAP to provide a strategic framework for CC adaptation and mitigation in Cambodia.
- 15. Knowledge, Attitudes and Practices (KAP) survey on climate change - a baseline.** Responding to the need for data, the CCD with the support of UNDP and Oxfam America has commissioned a nationwide KAP survey to establish what different groups of society know, understand and already do to address climate change. This study will establish a baseline for

future education and awareness initiatives targeting a wide range of groups upon which CCA initiatives can build. The study will also assess media consumption patterns and identify the most effective communication channels for different urban and rural populations with regards to CCA.

Strategic Context and Institutional Arrangements

- 16. Most current national strategies, policies and planning and budgetary processes do not yet adequately reflect climate change considerations.** The *Rectangular Strategy for Growth, Employment, Equity and Efficiency in Cambodia* provides the broad overarching policy framework, outlining the RGC's long-term vision for growth, employment, equity, and efficiency. The Phase II Rectangular Strategy announced in September 2008 does not address climate change directly, however, although there is some indirect reference in the contexts of potential global food market pressures and forest management. The Strategy also places emphasis on flood and sea protection levies and other measures to boost agricultural production and reports on past success in rescuing and providing support to 'victims of natural disasters'. The Update of the National Strategic Development Plan (NSDP) for the period 2009-2013, which is almost finalized for consideration for approval by the National Assembly in April 2010, is closely aligned with the Rectangular Strategy, translating the Strategy into concrete goals, targets, and strategies and has to some extent mainstreamed climate change adaptation and disaster risk reduction. However, it is also unclear to what extent the local and regional impacts of climate change have been factored into national infrastructure planning, in particular in relation to proposed large hydropower developments. Likewise, the impacts of climate change on economic performance and the achievement of long-term socio-economic objectives have not been adequately articulated. A greater focus on climate change by key Ministries with cross-sectoral mandate, including MEF and the Ministry of Planning (MoP), is crucial in moving forward.
- 17. Opportunity and entry points for mainstreaming climate change into national and sectoral strategies and investment programs do exist.** Although climate change concerns have been included in the updated NSDP it will be important to ensure that this guidance is implemented and that mainstreaming is supported at other levels of policy and planning. Several other entry points for mainstreaming climate change exist in sector plans, policies and operational activities. Enhanced capacity and tools are required to translate these entry points into concrete projects and programs in the three-year rolling Public Investment Program (PIP) and to ensure that climate change concerns are explicitly considered in the identification, prioritization and design of all development projects in the PIP.
- 18. Synergies between climate change adaptation and disaster risk reduction can be promoted.** In March 2009 the RGC launched a new *Strategic National Action Plan for Disaster Risk Reduction, 2008-2013 (SNAP)*, firmly embracing principles of risk reduction. The SNAP covers a number of themes relevant to climate change adaptation, including mainstreaming

disaster risk reduction into national, sector and local development policies and plans; national and local risk assessments; improved flood forecasting and early warning capabilities; education and awareness raising; and the promotion of structural and non-structural measures to enhance resilience.

19. The main **institutional responsibility for climate change coordination rests with the National Climate Change Committee (NCCC)**. Established in 2006, it is chaired by the Senior Minister of Environment (the Prime Minister is the honorary chair) and comprises high-level representatives from 19 line ministries, including the MEF. Its Secretariat, the Cambodian Climate Change Office in MoE, has been functioning since 1999 as a project unit although limited staff, financial resources and mandate has limited its ability to effectively implement its mandate. In 2009 the office was elevated to Climate Change Department (CCD). The NCCC is responsible *inter alia* for (a) coordinating the implementation of climate change activities in Cambodia; (b) developing climate change policies, strategies, legal instruments, plans and programs as well as awareness programs; and (c) integrating climate change concerns into relevant policies, strategies and legal instruments. The NCCC organizational set up is presented in Annex 3.

20. **Line Ministries also have defined responsibilities for addressing climate change adaptation and disaster risk reduction.** For example, the Ministry of Agriculture, Forestry and Fisheries examines the impacts of extreme climate events on agricultural production while the Department of Meteorology (DoM) in the Ministry of Water Resources and Meteorology (MoWRAM) serves as the government focal point for weather and climate information. Another relevant organization is the National Committee for Disaster Management (NCDM), established in 1995 and chaired by the Prime Minister and comprising five ministries (including the armed forces). The NCDM is the national inter-ministerial body responsible for the provision of emergency relief and disaster risk management, including in relation to climate hazards. NCDM's linkages with the NCCC and other national committees are diffuse and coordination between the entities could be improved.

21. **Working towards the Climate Change Strategy and Action Plan.** As noted earlier, the Second National Communications to the UNFCCC – including the GHG inventory, Vulnerability Assessment, Adaptation and Mitigation Plans, Technology Transfer Analysis, and other products – is due for completion in 2010. Building on its findings and those of the NAPA, the NCCC will commence the preparation of a national Climate Change Strategy and Action Plan (CCSAP). It is intended that the CCSAP will provide the strategic framework leading to the establishment of a National Climate Change Programme (NCCP).

22. **Dialogue and Coordination Mechanisms for Climate Change can be improved further.** The NCCC is intended to have a designated inter-ministerial Climate Change Technical Team (CCTT) to support sector technical and policy coordination, but this team has not yet been established. The principal coordination mechanisms for particular sectors and thematic areas are the joint

Government-Donor Technical Working Groups (TWGs), aimed at strengthening cooperation between the RGC and development partners and facilitating technical level dialogue for strategy development, coordination, and programming. Whilst there is no specific TWG responsible for Climate Change, the TWGs for Agriculture and Water and for Forests and Environment would be expected to play a sector specific coordination role, although their linkages with NCCC are so far limited. Once established the CCTT is expected to provide the overall technical support on climate change. The Government-Donor Coordination Committee (GDCC) coordinates the work of the TWGs and was established as a high-level body and forum to review progress on a quarterly basis. Development Partner cooperation on climate change takes place principally through a monthly informal meeting chaired by UNDP with ad-hoc meetings between Development Partners and the NCCC. A draft proposal has recently been circulated for the Development Partners to commit to a Statement of Cooperation to “provide a framework of shared objectives and both guiding and operational principles for Development Partners in relation to Climate Change.” The proposal also commits Development Partners to establish a Partnership Agreement with RGC on Climate Change.

iv. Cooperation arrangements with other development partners

23. Several development partners have begun to address climate change in Cambodia (see Annex 1). Key donors include Australia, Denmark, European Community, France, and Japan. The World Bank Group, ADB, UNDP, UNEP and others are involved in several projects with implications for climate change adaptation and disaster risk reduction. However, most support to date has been on an ad hoc basis and relates to project-specific interventions though there is now a trend towards more programmatic approaches.
24. The Cambodia Climate Change Alliance (CCCA), funded by EU, UNDP, SIDA and Danida, is a major new initiative addressing climate resilience in Cambodia using a programme-based approach. CCCA was launched in February 2010 and it includes a multi-donor trust fund (initial contributions of approximately USD9 million) for the Climate Change Support Program and a demand driven grant facility for access by sector ministries and civil society. It is designed to (a) strengthen capacity of NCCC to coordinate national policymaking, capacity development, and outreach/advocacy efforts, and to monitor the implementation of national climate change strategy; (b) establish and operate a platform to provide updated data, knowledge and learning opportunities on Climate Change; and (c) enhance access to financial and technical resources by key line ministries, agencies and civil society organisations to design, implement and monitor Climate Change adaptation interventions.
25. **Other initiatives are also likely to draw early lessons upon which the PPCR can build.** The RGC and UNDP are presently commencing implementation of a four-year GEF-funded NAPA project on climate resilient water management and agricultural practices. UNEP is preparing a project on community-based adaptation in coastal areas. These two NAPA projects are opportunities for early CCA lessons for PPCR Phase II. The Government of Japan recently

announced its "Green Mekong Initiative", which is expected to address climate resilience in key sectors.

26. Other relevant initiatives include a Regional Climate Change Adaptation Knowledge Platform for Asia being implemented by UNEP and the Stockholm Environment Institute with funding support from Sida. This platform covers 13 countries, including Cambodia. The Australian Government is implementing an initiative through the Australian Centre for International Agricultural Research on vulnerability assessments in a number of countries, including Cambodia. The Australian Government has also committed support to the Mekong River Commission's new Climate Change and Adaptation Initiative for its member countries, including Cambodia. A wide range of adaptation activities are being implemented or planned by other stakeholders including MRC, IFAD, AFD, SEA-START, IUCN Asia, FAO, WWF, Wetland Alliance, Oxfam, CARE, Australian National University, IWMI/WorldFish and the Global Water Partnership.
27. Since a number of the proposed outcomes of PPCR are similar to these recent initiatives, particularly in the areas of education, awareness and outreach, promotion of synergies will be crucial. Coordination would take place through the existing monthly meeting of the Development Partners on Climate Change Group, chaired by UNDP, as well as through individual meetings. Development Partners would be invited to participate in supervision missions. UNDP could be asked to provide oversight to specific Phase 1 activities, such as gender mainstreaming, given its present engagement in this activity.

II. PPCR Linkages to National Processes

- 28. National Strategic Development Plan (NSDP) and Strategic National Action Plan (SNAP) for Disaster Risk Reduction offer good entry points for mainstreaming of climate change risks and adaptation strategies at national level.** As noted earlier, the update of NSDP includes some consideration of climate change adaptation. Therefore, the PPCR could develop a guide on implementing these mainstreaming objectives into all key sectors. The SNAP already has identified many links to climate change adaptation. The PPCR can provide additional resources to strengthen such links and promote synergies.
- 29. Mainstreaming Climate Change into sub-national financing and investment planning mechanisms.** Recent reforms involving a new policy on decentralization and de-concentration (D&D) mean that the sub-national governance structure will be redefined. The objective of the National Program for Sub-National Democratic Development (NP-SNDD) as motivated by the Organic Law⁷ is the development of the democratic institutions of local governance, both

⁷ Law on Administrative Management of the Capital, Provinces, Municipalities, Districts, and Khans. Ministry of Interior, February 2009

political and administrative, whereby good local governance is seen as a necessary for the further objective of good local development. The reform process intends to promote autonomy of sub-national councils and administrations so as to enable them to 1) develop and implement their own local policies, programmes and projects and 2) adjust to local realities the national programmes that they are called to implement. The 10-year NP-SNDD recognizes Climate Change as a crosscutting issue and Climate Change considerations have been included in the NP-SNDD results framework. Furthermore, since adaptation to climate change is often site-specific, the mainstreaming of climate change and capacity development to promote climate resilience at the sub-national level is therefore a critical element in strengthening the national adaptation system. Similarly, institutionalization of community-based risk management in government policy at the sub-national level is also critical. Engagement with the preparation and implementation of the 3-year implementation plan for NP-SNDD could be an important entry point for the PPCR.

30. **Gender Mainstreaming Strategic Action Plan (GMAP).** In 2009, MoWA and UNDP assisted MoE to develop its GMAP for the environment sector that includes climate change. So far 11 ministries have either completed or are in the process of developing GMAPs. The implementation of the GMAPs has so far been constrained by difficulty in mobilizing resources from Government and donors for its implementation. PPCR could support the GMAP strategy to ensure that both gender and climate risk management are mainstreamed into sectoral planning simultaneously.

III. Strengthening National Level Climate Resilience and Enhancing PPCR Implementation

31. Four overarching themes are considered useful for driving PPCR design and implementation in Cambodia. These include (a) Enhancing institutional capacity for mainstreaming climate resilience in planning and budgeting processes of key national ministries; (b) Identifying key entry points for mainstreaming in sub-national planning and budgeting processes; (c) Strengthening civil society and the private sector engagement and gender considerations in climate change adaptation (d) Enhancing the flow of policy-relevant climate change information consistent with local capacities and capabilities. Analysis of each overarching theme will identify elements which can contribute to the twin goals of PPCR: scaling up and transformative impact.

IV. Outline of Key Action Areas for Strategic Program for Climate Resilience (SPCR)

32. The objective of the Strategic Program for Climate Resilience (SPCR) for Cambodia will be to mainstream climate resilience into national and sub-national development policies, plans and projects supported by scaled up financing of adaptation activities in the key development sectors and underpinned by (i) strengthened participation and coordination among stakeholders, (ii) science-based adaptation planning, and (iii) enhanced links between adaptation and disaster risk reduction measures. This would contribute to achievement of the PPCR's catalytic replication outcomes in institutional, physical, economic and social themes.
33. The Pilot Programme for Climate Resilience (PPCR) will be implemented in two phases:
Phase 1 – Assessment and strengthening of institutional readiness for the PPCR and Preparation of the SPCR
Phase 2 – Implementation of the SPCR while strengthening the enabling environment
The PPCR Phase 1 will be aligned with the CCSAP being developed by the NCCC (see para. 21 above), and the SPCR would be articulated in the context of the NCCP. Phase 1 will entail five components, the first four organized around the four overarching themes identified in para 31 and the fifth covering the preparation of an investment plan for Phase 2. Work under some of these components, particularly Components 3 and 4, will continue through Phase 2.
34. The following five (5) priority Components for Phase 1 are proposed:

Component 1: National level mainstreaming of climate resilience in key ministries
(strengthening institutional readiness to mainstream climate risks)

35. **Immediate Outcome 1:** Improved consideration of climate resilience in the planning, budgeting and investment appraisal processes of the Ministries of Finance, Planning, Environment, Agriculture, Forestry and Fisheries, Water Resources and Meteorology, Rural Development and Public Works and Transport and of the National Committee for Disaster Management.
36. The main focus of this component would be to support key ministries and agencies in mainstreaming climate resilience into national government sectoral plans and budgeting and into public and private investment project design. Given the similarities in risks and responses between climate change adaptation and disaster risk reduction, synergies between the two disciplines would be promoted as part of the mainstreaming agenda. The work would be coordinated by the MoE. The PPCR would support a small TA team, which would provide the necessary technical support and capacity building of staff in the relevant Ministries, training and workshops for staff of the participating ministries.

37. Primary Outputs:

1. Mainstreaming of disaster risk reduction and climate resilience into legislation and strategic planning documents of key ministries and agencies (MEF, MOP, MOE, MOI,

MAFF, MOWRAM, MRD, MPWT and NCDM), including development of a discussion paper on implementing climate adaptation objectives and activities in the updated NSDP.

2. Capacity-building of key ministries through training on climate change and its potential impacts on key sectors and on mainstreaming climate change concerns into budgetary systems, financial allocation decisions and reporting procedures (including into the financial structuring of infrastructure projects to encourage private investment in climate change adaptation).
3. Development and integration of a climate screening tool within the environmental assessment process for public and private projects, obliging investors to address climate adaptation concerns (see also Component 2, Output 2; Component 4, Output 3; and Component 5, Output 1).⁸

Component 2: Sub-national mainstreaming of climate resilience

38. Immediate Outcome 2: Improved consideration of climate resilience in the budgeting, planning and financing mechanisms of sub-national government and service delivery.

39. The main focus of this component would be to ensure that climate change is mainstreamed across the three investment “windows” of the NP-SNDD: local governance, local development, and natural resources management. This enabling action opens the way for the financing of climate resilient investment and climate change adaptation actions at sub-national level. This approach would also establish mechanisms to promote eco-system based planning and financing by enabling bundling of investment finance. Mainstreaming climate resilience at sub-national level would be coordinated with on-going disaster risk reduction strategies to ensure synergies and avoid duplication. This component would be implemented by the Ministry of Interior in close cooperation with the MoE. The PPCR would finance technical assistance, training, workshops and incremental operating costs.

40. Primary Outputs:

1. Inputs into 3-year Implementation Plan for NP-SNDD on inclusion of climate change adaptation considerations in relevant investment windows.
2. Development and testing of climate risk screening tools and guidelines on climate proofing of the NP-SNDD (see also Component 1, Output 3; Component 4, Output 3; and Component 5, Output 1).
3. Financial flows and investment needs to address climate resilience in selected, highly vulnerable provinces (to be determined).

⁸ These activities would be closely coordinated by the Climate Change Technical Team mentioned in paragraph 56 below, together with the MDBs.

Component 3: Strengthening civil society and private sector engagement and gender considerations in climate change adaptation

41. **Immediate Outcome 3:** Strengthened engagement of civil society (including women, youth, senior citizens, indigenous groups, NGOs, the media and academia) and the private sector in the climate change adaptation agenda, while considering and addressing gender disparities thereby broadening awareness of climate risks and increasing participation of a broad group of stakeholders.
42. Civil society are key stakeholders supporting climate change adaptation through practical actions. This component would help establish a Civil Society Organization support platform, which would aim to build civil society capacity and awareness of the importance of integrating climate resilience in planning and programs of advocacy and service delivery. The component would also support the development of approaches for the effective involvement of civil society in the PPCR. In addition, the component seeks to establish a platform for the support of gender mainstreaming in the PPCR via capacity development and by alignment with, and support of, existing initiatives, notably the GMAPs.
43. The private sector is also a key avenue for CCA investment. The component would therefore examine potential opportunities for private sector engagement in climate change and undertake related assessments and feasibility studies on specific areas of investment. These areas of investment would be determined in consultation with the private sector but could include irrigation and water management infrastructure, agricultural insurance products and water services. The component could also support analysis to improve the capacity of financial intermediaries to assess climate risks and factor them into investment and loan activities.
44. These enabling actions would define support platforms and financing instruments for use in enabling Phase 2 of the PPCR to address climate change through CSOs and the Private Sector. The work under this component would be coordinated by MoE who would actively involve partners from Civil Society and the private sector. The PPCR would fund technical assistance and workshop costs.
45. **Primary Outputs:**
 1. Capacity-needs assessment and design of a CSO support platform and development of approaches for effective involvement of civil society in the PPCR.
 2. Development of approaches for integrating gender concerns in climate change adaptation (through 3 pilot projects, to be determined).
 3. Demonstration of opportunities for private sector engagement in climate change adaptation (e.g., crop insurance, irrigation, water concession models, financial services and local capital markets to finance DRR measures, incorporating flexible repayment schedules into micro-finance schemes).

Component 4: Science-based adaptation planning

46. **Immediate Outcome 4:** Improved integration and accuracy of climate and weather forecasting with hydrological features relevant across sectors for Government, private sector and local communities
47. This component would seek to ensure that scientific information for climate risk management is readily accessible to the application level in an efficient and consistent manner. Improved data networks would enable Phase 2 of the PPCR to focus on improving early warning systems and forecasting, which will also be important for the disaster risk reduction agenda, and the systematisation of vulnerability and impact analysis. The component would be implemented jointly by MOWRAM (responsible for Output 1) and by MoE (responsible for Outputs 2 and 3). The PPCR would fund technical assistance, training and workshops.

48. **Primary Outputs:**

- a. Report on needs assessment and design of expanded and upgraded agrometeorological and hydrological monitoring stations and mechanisms for dissemination of climate and weather forecasts. The assessment will cover functional roles and capacities, data and analysis needs, and the mechanisms for integration of data into knowledge management systems of relevant sector ministries and sub-national entities. This includes (a) further analysis on multi-model downscaled climate scenarios for Cambodia, building on the outcomes of the second national communication, and (b) improved quality of climate information from policymaking perspective.
- b. Vulnerability and adaptation assessments in the key sectors of the four provinces (including economic analysis of adaptation options). Assessments will be targeted on provinces where there is significant planned MDB investment in agriculture, water, livelihoods and rural infrastructure. The assessments will provide enhanced understanding of sectoral impacts and economics of climate change adaptation measures in those provinces. Lessons from other similar studies in the Greater Mekong Subregion will be extensively drawn to supplement these studies,
- c. Identification of currently available climate resilience decision support tools (cost-benefit analysis, multi-criteria analysis, adaptation decision matrix, risk-screening tools) of relevance to Cambodia.

Component 5: Outreach and preparation of Phase 2 of the PPCR (SPCR)

49. **Immediate Outcome 5:** Improved understanding of Government (at all levels), civil society and the private sector to address climate resilience through a programme based approach.

50. Component 5 would involve a significant outreach element and the design of the SPCR. The outreach element would entail the development of a specific web-based information hub for improved access to climate and relevant sector data and analysis to be managed by the NCCC (linked to Google Adaptation layer, WeAdapt, and UNDP Adaptation Learning Mechanism). It would also include the production of quarterly policy briefs on selected themes and provincial and national learning events, linked to activities undertaken under Components 1-4 of the PPCR.

51. The design and preparation of the SPCR would reflect the ongoing initiative of the NCCC to move to a programmatic approach - the NCCP - for implementation of the CCSAP, being developed under the CCCA project. The NCCP will also define multi-donor funding mechanisms for aligning donor and RGC systems in a way that ensures fiduciary risk management. The SPCR would be fully aligned with the NCCP and programmed to ensure synergies with other CCA programmes and institutional and financing arrangements of the key national reforms. Given the cross-sectoral nature of the SPCR its preparation would be the responsibility of the Technical Team described in paragraph 56 below, under the guidance of MEF and MoE. The PPCR would fund technical assistance to support the work of the technical team as well as workshops to promote the outreach activities.

52. Primary Outputs:

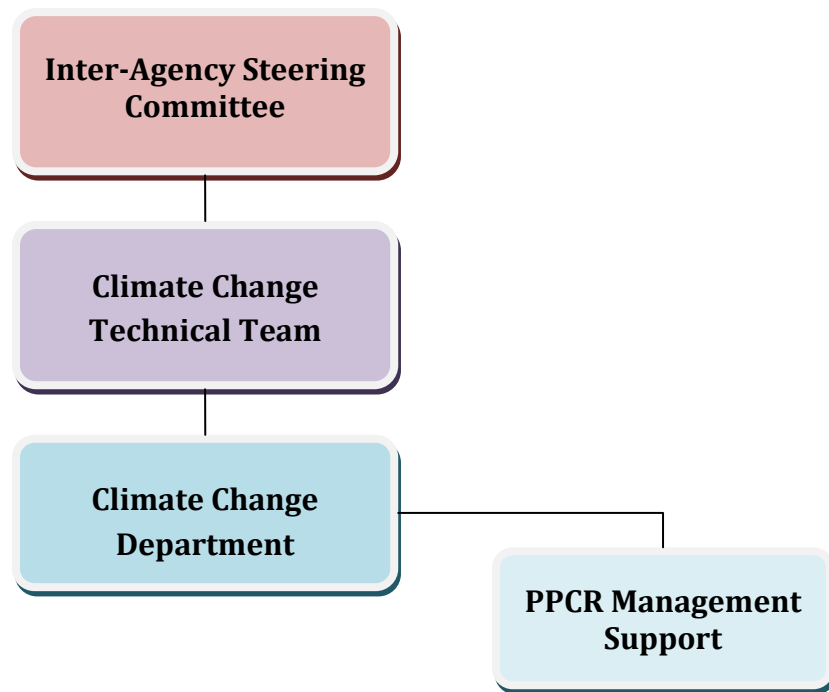
- a. Development of a web-based platform for improved access to climate and relevant data and analysis, quarterly policy briefs on selected themes and provincial and national learning events. This would become the data archive for all climate related data and information (see Component 1, Output 3; Component 2, Output 2; and Component 4, Output 3).
 - b. The Strategic Program for Climate Resilience will be a major output of Phase 1 to be prepared based on the climate risk analyses, policy and institutional assessments, consultation processes and awareness raising described in Components 1 to 4 above. It would outline an underlying public and private investment program in the three priority sectors identified by the First Joint Mission (agriculture, water resources, and rural infrastructure) and refined during Phase 1, and the design of actions to be supported by the CSO support platform. Phase 2 will focus on implementing the SPCR through actions such as support to policy reform, institutional strengthening and scaling-up investments in the key sectors.
 - c. A Strategic Environmental and Social Assessment with terms of reference acceptable to IBRD/IDA, ADB and the PPCR Development partners would be prepared which would systematically screen and scope out the proposed policies, programs and projects and review their environmental and social sustainability.
53. The SPCR could potentially include the following (this list is indicative only and subject to the findings of Phase 1):

- a. Supporting selected institutions to mainstream climate resilience (continued from phase 1), for example through policy-based approaches.
- b. Identification of priority project areas for climate resilient investments at provincial and district levels (priority areas may be identified using criteria such as high vulnerability, high probability of success, transformative impact, potential for scaling up, high local commitment, complementary role of other development efforts, and others). This would build on the outcome of Component 2 above where climate risks would be mainstreamed across the three investment windows of the NP-SNDD: local governance, local development and natural resources management. The specific investment needs for climate resilience in these areas could be supported under Phase 2. Eco-system and community-based planning approaches to climate change adaptation and disaster risk management and implementation of on-the-ground actions would also build on the work to be undertaken in Phase 1, which would identify appropriate entry points.
- c. Integration of climate resilience into MDB programs in water, agriculture and rural infrastructure sectors. Specific details and investment needs about the MDB programs and projects likely to be included for scaled up investments and associated activities will be determined during implementation of Phase 1 and incorporated in the SPCR under the Proposed Investment Program in accordance with the Guidance provided in the 16 July 2009 CIF Guidelines.

V. Work Program, Timetable, Funding Requirements (For Phase 1 ONLY)

54. The MEF will provide overall oversight and monitoring of the PPCR in close partnership with the NCCC. The CCD of the MoE will implement Phase 1. The existing RGC structures will be used and modified as necessary. The management structure will include an Inter-agency Steering Committee and a Climate Change Technical Team (Figure 1). Day-to-day management will be the responsibility of the CCD of MoE, led by a Program Coordinator, a Program Director and a Program Manager (all appointed by MOE). This team will be supported by a Technical Advisor, Administrative Assistant, an Accountant and a Driver provided under the PPCR Grant. The implementation arrangements for Phase 1 will be different from those of Phase 2.

Figure 1: Management Structure for PPCR Phase 1



55. **Inter-Agency Steering Committee.** The Inter-Agency Steering Committee will be chaired by MEF with MoE as Vice Chair and with representation from the participating Ministries who would be nominated members of the NCCC. The Committee would also ensure coordination with the CCCA and other relevant climate change initiatives.
56. **Climate Change Technical Team.** Technical advice would be provided by the Climate Change Technical Team (CCTT) of the NCCC which has been approved by the RGC and is expected to be operational shortly. If the CCTT is not operational by the time of Grant Effectiveness, the RGC will appoint an Interim Technical Team. The CCTT will advise the Inter-Agency Steering Committee on technical and program issues, and ensuring access to the views of the broader society. The CCTT would also be a dissemination channel for awareness raising and knowledge sharing. It will include representatives from technical units of key ministries, technical advisors, academia, civil society, private sector and non-Government organizations.
57. **Programme Manager.** In order to maximize Government ownership of the PPCR, and build on existing management arrangements within Government, it is proposed that the Programme Manager (PM) be a senior officer in the CCD. The PM will have overall responsibility for the implementation of activities according to the programme document.

58. **MDB Responsibilities:** The ADB and the World Bank would provide technical support and guidance to Phase 1 through regular supervision missions which will serve to monitor the progress of implementation and through the review of relevant procurement decisions. Administratively, the funds for Phase 1 would flow through the World Bank to MEF as a recipient-executed grant governed by the legal agreements. Each agency also has more specialized experience in some of the specific activities to be implemented during Phase 1, for example due to similar on-going work in other countries, and would take the lead in providing support to the PPCR in those areas (See Budget and Assignment of Responsibilities below). As the Executing Agency for the grant, the World Bank would be involved in all procurement decisions while ADB and IFC would provide technical inputs into the selection and monitoring of consultants for specific tasks in which they will take the lead responsibility.
59. The Ministry of Environment will be guided by the Standard Operating Procedures, Standard Procurement Manual and Standard Financial Manual, which have been all agreed with the Multilateral Development Banks. These documents provide guidance on procurement and financial management. The World Bank is about to undertake procurement and financial management assessments of the Ministry of Environment.
60. **Monitoring and Evaluation:** A results framework for Phase 1 activities would be developed to provide the PPCR management with regular information on the progress of information and to tracking the achievement of key outcomes. Overall responsibility for monitoring and evaluation would be the responsibility of MoE.
61. The proposed budget and schedule of implementation for Phase I of the PPCR are presented below.

PPCR Phase 1 Budget and Assignment of Responsibilities

Component/outputs	Budget (US\$)	Lead responsibility	
		MDB ¹	Government Ministry
Component 1: National level mainstreaming of climate resilience in key ministries			MEF/MOE
Outputs:			
1 Mainstreaming of disaster risk reduction and climate resilience into legislation and strategic planning documents of key ministries and agencies	100,000	ADB, WB	
2 Capacity-building of key ministries in mainstreaming climate resilience in budgetary systems, financial allocation decisions and reporting procedures	80,000	ADB, WB	
3 Development and integration of climate screening tool within the environmental assessment process for public and private sector projects	100,000	ADB, WB	
<i>Sub-total</i>	<i>280,000</i>		
Component 2: Sub-national mainstreaming of climate resilience			MOI
Outputs:			
1 Inputs into 3-year Implementation Plan for NP-SNDD on inclusion of climate change adaptation considerations in relevant investment windows	65,000	WB	
2 Development and testing of climate risk screening tools and guidelines for climate proofing of NP-SNDD	60,000	WB	
3 Financial flows and investment needs to address climate resilience in selected provinces	50,000	ADB, WB	
<i>Sub-total</i>	<i>175,000</i>		
Component 3: Strengthening civil society and private sector engagement and gender considerations in climate change adaptation			MOE
Outputs:			
1 Capacity-needs assessment and design of a CSO support platform and development of approaches for effective involvement of civil society in the PPCR	60,000	WB	
2 Development of approaches for integrating gender concerns in climate change adaptation (through 3 pilot projects)	60,000	UNDP	
3 Demonstration of opportunities for private sector engagement in climate change adaptation (e.g., crop insurance, irrigation, water concession models)	130,000	IFC	
<i>Sub-total</i>	<i>250,000</i>		
Component 4: Science-based adaptation planning			MOE/MOWRAM
Outputs:			
1 Report on needs and capacity assessment and design of expanded and upgraded agro-meteorological and hydrological monitoring systems and mechanisms for dissemination	100,000	WB	
2 Vulnerability and adaptation assessments in 4 provinces	140,000	ADB	
3 Identification of currently available climate resilience decision support tools of relevance to Cambodia	60,000	ADB	
<i>Sub-total</i>	<i>300,000</i>		
Component 5: Outreach and preparation of Phase 2 of the PPCR (SPCR)			MOE
Outputs:			
1 Web-based platform, policy briefs and learning events	130,000	ADB, IFC, WB	
2 Design of public and private investment actions for SPCR in the 3 priority sectors	150,000	ADB, IFC, WB	
<i>Sub-total</i>	<i>280,000</i>		
Total PPCR Phase 1 cost			
Components 1 - 5	1,285,000		
Project management	100,000		
Equipment (1 vehicle, computers, printers)	40,000		
Contingency (5% of total)	75,000		
GRAND TOTAL	1,500,000		

¹ UNDP would be asked to provide leadership on gender mainstreaming in the PPCR, as it is already implementing related activities. UNDP would also be asked to facilitate the information flow between the PPCR and CCCA.

Schedule for implementation of Phase 1 of the PPCR

	Month											
	1	2	3	4	5	6	7	8	9	10	11	12
Component 1: National level mainstreaming of climate risk in key ministries												
Outputs:												
1 Mainstreaming of disaster risk reduction and climate resilience into legislation and strategic planning documents of key ministries and agencies												
2 Capacity-building of key ministries in mainstreaming climate change concerns in budgetary systems, financial allocation decisions and reporting procedures												
3 Development and integration of climate screening tool within the environmental assessment process for public and private sector projects												
Component 2: Sub-national mainstreaming of climate risk												
Outputs:												
1 Inputs into 3-year Implementation Plan for NP-SNDD on inclusion of climate change adaptation considerations in relevant investment windows												
2 Development and testing of climate risk screening tools and guidelines for climate proofing of NP-SNDD												
3 Financial flows and investment needs to address climate resilience in selected provinces												
Component 3: Strengthening civil society and private sector engagement and gender considerations in climate change adaptation												
Outputs:												
1 Capacity-needs assessment and design of a CSO support platform and development of approaches for effective involvement of civil society in the PPCR												
2 Development of approaches for integrating gender concerns in climate change adaptation (through 3 pilot projects)												
3 Demonstration of opportunities for private sector engagement in climate change adaptation (e.g., crop insurance, irrigation, water concession models)												
Component 4: Science-based adaptation planning												
Outputs:												
1 Report on needs and capacity assessment and design of expanded and upgraded agro-meteorological and hydrological monitoring systems and mechanisms for dissemination												
2 Vulnerability and adaptation assessments in 4 provinces												
3 Identification of currently available climate resilience decision support tools of relevance to Cambodia												
Component 5: Outreach and preparation of Phase 2 of the PPCR (SPCR)												
Outputs:												
1 Web-based platform, policy briefs and learning events												
2 Design of public and private investment actions for SPCR in the 3 priority sectors												

Annex 1: Aide Memoire – First Joint Mission Oct 12-22 2009

Aide Memoire

Cambodia:

Joint Mission for the Pilot Program on Climate Resilience (PPCR)

October 12 to 22, 2009

Introduction

1. The Pilot Program on Climate Resilience (PPCR) is designed to pilot and demonstrate ways to integrate climate risk and resilience into developing countries' core development policies and planning. Cambodia is one of nine countries worldwide and two regional groups selected for participation in the program. The PPCR in Cambodia is to be jointly implemented by the World Bank Group and the Asian Development Bank (ADB), with participation from the International Finance Corporation (IFC), the United Nations Development Programme (UNDP) and other development partners.

2. Following Cambodia's acceptance of the offer to participate in the program in May 2009, an informal scoping mission was fielded by the two MDBs from June 1 – 5, 2009 to consult with government and key stakeholders on the status of climate risk management in Cambodia and to prepare for the first Joint Mission which would begin preparation of the Program. Accordingly, a mission⁹ jointly led by the Ministry of Economy and Finance (MEF) of the Royal Government of Cambodia (RGC), the ADB, IFC and World Bank with participation from UNDP and DFID, was fielded in Cambodia from October 12 to 22, 2009.

3. The PPCR is structured in two phases. Phase 1 will involve putting in place the appropriate enabling framework to manage climate risks. Phase 2 will continue this process and also support on-the-ground adaptation activities. Following PPCR guidelines, the main objective of the joint mission was to assist Cambodia in the preparation for Phase 1. The specific objectives of the mission were the following:

- a. review progress in addressing climate risks;
- b. review policies, plans, and strategies and other relevant documents to assess the extent to which they take account of climate risks; and

⁹ Messrs/Mmes. Tauch Chan Kresna (co-team leader and Chief of WB Division, MEF); Samuel Wedderburn (co-team leader and Senior Natural Resources Management Specialist, World Bank); Ancha Srinivasan (co-team leader and Senior Climate Change Specialist, ADB); Julia Brickell (co-team leader, Resident Representative, IFC); RGC: Houl Bonnaro, Deputy Chief of WB WBD, DIC; Chhann Sopheap, DIC Official; Bin Bun Buheng, Project Officer, ADB Division; Non Sathia, Project Officer, WB Division (MEF); Sam Chamroeun, Planning and Legal Affairs (MoE); World Bank: Ian Noble (Lead Climate Change Specialist); Janelle Plummer (Senior Social Governance Specialist); Bunlong Leng (Environment Specialist); Munichan Kung (Operations Officer); Mudita Chamroeun, (Senior Operations Officer); Charlotte Benson (Consultant); Brett Ballard (Agricultural Specialist, AusAid); ADB: David Salter (Water Resources Development Specialist); Michael O'Connell (Infrastructure Specialist); Chanthou Hem (Project Implementation Specialist); IFC: Eleonore Richardson (Environment and Social Sustainability Project Manager); Thy Hourn (Access to Finance Project Manager); UNDP: Andrew Mears (Climate Change Advisor); DFID: Anna Nileswhar (Regional Advisor Environment and Livelihoods); and Michael Scott (DFID Seconded in DANIDA)

- c. provide a platform for joint work of the development agencies, the private sector and NGOs to support government in the formulation of an agreed strategic approach and investment program for integrating climate resilience into core national and sub-national development and key sector strategies and actions.

4. The mission held discussions with a range of national and provincial Government entities, civil society organizations, the private sector, and community groups (see paragraph 16 below for a description of the consultation process and Annex D for a list of organizations met) and made a field visit to Siem Reap province. The team wishes to thank H.E. Keat Chhon, Deputy Prime Minister for his support, his staff in the Ministry of Economy and Finance (MEF), and those in the Ministry of Environment (MOE) for their diligence and assistance to the mission.

5. The findings and recommendations of this draft aide memoire were discussed at a wrap-up meeting chaired by H.E. Vongsey Visoth, PPCR Government Focal Point, Deputy Secretary General, MEF on October 22, 2009.

Context for Climate Risk Management (CRM) in Cambodia

6. **Climate risks and vulnerabilities.** Cambodia is already one of the more disaster-prone countries in the region, subject to flood and drought on a seasonal basis. Various models predict that rising temperatures are likely to increase the variability of rainfall patterns and intensity of weather events.¹⁰ In the longer term, rising sea levels could pose a significant threat to marine coastal areas, which are already experiencing storm surges, high tide, beach erosion and salt-water intrusion. Aberrant rainfall patterns over the past few years and the recent destruction caused by Typhoon Ketsana in late September 2009 have captured the attention of key decision makers and line ministries, as well as the general public.

7. Cambodia does not have the highest exposure to natural hazards in the region but its vulnerability is heightened by a number of socio-economic factors. The country has a relatively narrow economic base with 80 percent of the population dependent on small scale agriculture. The vast majority of the population lives in the rural areas where there are few opportunities outside of agriculture. In 2004, 35 percent of the population was below the poverty line, with a larger percentage in rural areas. The National Adaptation Program of Action (NAPA) was prepared in 2006. It identified the most vulnerable sectors as agriculture, forestry, water, health and coastal zones. The First National Communication to the UNFCCC reported that over a five year period production losses for the major crop, rice, were mainly accounted for by floods (70 percent) and drought (20 percent). Cambodia also suffers periodic damage to physical infrastructure as a consequence of floods and droughts; and temperature increases could make vector-borne diseases more widespread. Cambodia already has the highest rate of fatalities from malaria in Asia (NAPA).

8. **Institutional arrangements for CRM.** The main national institutional responsibility for climate change coordination rests with the National Climate Change Committee (NCCC), based in the Ministry of Environment (MOE). Established in 2006, it is chaired by the Senior Minister of Environment and comprises high level representatives from 19 line ministries, including the MEF. Its Secretariat, the Climate Change Office (CCO), has been functioning since 1999 as a project unit although limited staff, financial resources and mandate has restricted its effectiveness. The mission was informed that the CCO has recently been elevated to Department level. The NCCC is responsible

¹⁰ Down-scaled modeling is being done as part of the work under the Second National Communications to the UNFCCC, which is scheduled for completion in March 2010.

inter alia for (a) coordinating the implementation of climate change activities in Cambodia; (b) developing climate change policies, strategies, legal instruments, plans and programs; and (c) the integration of climate change concerns into relevant policies, strategies and legal instruments. It has been partly effective in carrying out its mandate but has only recently begun to meet regularly to address climate change issues.

9. Line Ministries also have some responsibility for addressing climate change, for example, the Ministry of Agriculture, Forestry and Fisheries's Forest Administration Division and the Department of Meteorology (DoM) in the Ministry of Water Resources and Meteorology (MoWRAM), which is the government focal point for weather and climate information. The DoM maintains an observation network of 21 manual and 9 automatic stations, many of which are not operating. Another relevant organization is the National Committee for Disaster Management (NCDM), established in 1995 and chaired by the Prime Minister, it comprises 5 ministries (including the armed forces). The NCDM is the national inter-ministerial body responsible for providing emergency relief and disaster risk management, including relating to climate hazards. Linkages with the NCCC and other national committees are diffuse and there is limited coordination between the entities.

10. **Decentralization and Deconcentration.** At sub-national level in association with Provincial Rural Development Committees, the Provincial Departments of Planning (PDoP) coordinate the formulation of 5-year provincial development plans (PDP), 3-year rolling investment plans with participation of provincial line departments and sub-provincial authorities. The annual process includes preparation of commune investment plans which are integrated into district and then revalidation of provincial level plans for funding via relevant line ministries. Recent reforms involving a new policy on decentralization and deconcentration (D&D) mean that the provincial governance structure will be redefined, but there is expected to be increased planning and budgeting autonomy for sub-national entities, which promises to create a potential channel for mainstreaming climate change resilience measures at sub-national and local levels.

11. **Development Partners Cooperation Arrangements for Climate Change.** The principal donor coordination mechanisms are the joint Government-Donor Technical Working Groups (TWGs) for particular sectors and thematic areas, some of which include NGOs, aimed at strengthening cooperation between the RGC and external partners and facilitating technical level dialogue for strategy development, coordination, and programming. The Government-Donor Coordination Committee (GDCC) coordinates the work of the TWGs and was established as a high-level body and forum to review progress on a quarterly basis. Development Partner cooperation on climate change takes place through a monthly informal meeting chaired by UNDP with ad-hoc meetings between Development Partners and the NCCC. A draft proposal has recently been circulated for the Development Partners to commit to a Statement of Cooperation which would "provide a framework of shared objectives and both guiding and operational principles for Development Partners in relation to Climate Change." The proposal also aims to strengthen the coordination, harmonization and alignment of climate change activities and interventions to be developed through future bilateral and multilateral agreements and where possible through ongoing agreements. The proposal also commits Development Partners to establish a Partnership Agreement with RGC on Climate Change. The PPCR could help to integrate CRM into the work of the TWGs and would be aligned with the final agreed cooperation framework.

Main Mission Findings

Potential Synergies with Existing Initiatives

12. **Cambodia Climate Change Alliance (CCCA).** The European Commission (EC) and RGC are currently preparing, with the assistance of UNDP and UNEP, a program of cooperation through the Global Climate Change Alliance (GCCA) initiative to support the RGC in implementing the National Climate Change Strategy and Action Plan (CCSAP). The proposal includes the establishment of a multi-donor trust fund to be managed by UNDP with initial pledges¹¹ of approximately USD9 million over 3 years. Component 1 of the program builds on the activities of UNDP and DANIDA and will focus on capacity building and institutional strengthening of the NCCC and CCO in order for them to support Government, academia, and civil society in mainstreaming climate change considerations into policies, strategies, plans and programs. This also includes the establishment of a Knowledge Management and Learning Platform and a grant facility to support mainstreaming in line ministries and agencies, and civil society. Component 2 will take the form of a demonstration project, focusing on increased resilience of coastal communities and ecosystems. This demonstration project is prepared by UNEP and addresses coastal zones, being one of the priority areas identified in the NAPA.

13. A number of the proposed expected outcomes, especially under component 1, are similar to those of the PPCR, which means that development of the two programs has to be closely aligned in order to ensure synergies and avoid duplication. As the CCCA is still in preparation and support is being provided by many of the donors who also support the PPCR, the PPCR Team is requesting guidance from the PPCR sub-committee on which activities should be supported by each program.

14. **UNDP and GEF.** The UNDP with support from the Global Environment Facility (GEF) has undertaken a series of climate change-related projects in Cambodia in support of the preparation of the First and Second National Communication in response to the UNFCCC, the National Adaptation Programme of Action (NAPA) and the National Capacity for Self-Assessment (NCSA). The NAPA was completed in 2006 and includes 20 high priority adaptation projects with a combined budget of USD 130 million. The Second National Communication (SNC) is scheduled for completion in March 2010. The UNDP has recently committed additional support to expand the scope of the SNC to include, amongst other things, the preparation of the CCSAP by June 2010. The RGC and UNDP are presently commencing implementation of a 4 year GEF-funded NAPA project in the water and agriculture sectors. The PPCR would build on the NAPA, the SNC and the CCSAP. It could consider the priorities already identified by the NAPA and, where required, further expand the spatial and temporal coverage of the V&A assessments carried out under the SNC and in support of the implementation of the CCSAP.

15. **Synergies with disaster risk reduction.** The DRR community has made relatively limited progress to date in Cambodia. However, in March 2009 the RGC launched a new Strategic National Action Plan for Disaster Risk Reduction, 2008-2013 (SNAP), firmly embracing principles of risk reduction. The SNAP covers a number of themes that are also on the CCA agenda, including mainstreaming DRR into national, sectoral and local development policies and plans; national and local risk assessments; improved flood forecasting and early warning capabilities; education and awareness raising; and the promotion of structural and non-structural measures to enhance resilience. Close dialogue should be maintained with the National Committee for Disaster

¹¹ Financial support, in addition to the EC commitment, has been pledged by Sida, UNDP and DANIDA

Management (NCDM) and its development partners during the preparation and implementation of the PPCR to avoid duplication of effort and to help ensure maximum impact of resources. The PPCR should also actively promote the development of synergies and lesson learning mechanisms between the DRR and CCA communities more broadly.

Potential Opportunities for the PPCR in Cambodia

16. **Consultation and participation processes.** The mission held separate workshops/consultations with government agencies, the private sector, civil society and donor partners. The purpose of the workshops was to provide stakeholders with an update on the PPCR; discuss climate risks and vulnerabilities as well as the climate resilience activities being undertaken in the country; and begin discussions on the sectoral and other priorities that could be addressed by the PPCR. The findings from the informal workshop held during the June scoping mission were the starting point for the discussions. These workshops were followed by meetings with individual organizations for more in-depth discussions. At provincial level the mission held discussions with local leaders as well as staff of the line agencies, and at commune level consultations were held with commune councils. These various consultations confirmed that the priority vulnerable sectors or themes for Cambodia that could be addressed by the PPCR are agriculture, water resources, and rural infrastructure.

17. **Overall Framework for the PPCR in Cambodia.**

There are cases where stand alone adaptation measures are needed, but on the whole adaptation initiatives will need to be implemented as part of a broader set of actions within Cambodia's existing development processes, decision cycles and institutional arrangements. It is recommended that a "whole of government approach" be adopted, which means integration should occur at all levels of governance. The process would begin with an assessment of the climate risks to the plans, policies and strategies at each level potentially preventing them from achieving their outcomes. Notice should also be taken of the interactions between the various levels, such as the budgetary decision-making from MEF to the line Ministries. For CRM to be mainstreamed, capacity building would be needed at all levels. At the sectoral level, the process could begin with the designated priority sectors/themes: agriculture; water resources; and rural infrastructure. Once climate risks have been mainstreamed, specific adaptation measures could be identified and applied. A summary of the levels and instruments is presented below:

- a. National Level Policies, Plans and Strategies (covering the whole country and cutting across sectors): Rectangular Strategy; National Sustainable Development Plan (NSDP); forthcoming National Program for Sub-national Democratic Development; Public Investment Plan; budgetary frameworks
- b. Sectoral Level (policy and planning functions within a specific sector): sector development plans; sector investment programs, master plans.
- c. Project level (implementation responsibilities): project cycle; design and selection mechanisms
- d. Sub-national Level: provincial, district and commune development plans

18. In implementing the above approach and as mentioned previously, the PPCR has to be closely coordinated with the EC -CCCA. In the following sections, the status of climate risk management at these different levels is assessed, together with the decision making architecture, and examples of entry points for integrating climate risk management are proposed.

19. **CRM in national and sector policy, planning and budgetary processes.** There has been limited attention to climate risk concerns in national and sector policy, planning and budgetary processes or in the design of individual projects to date in Cambodia. For example, the National Strategic Development Plan (NSDP) 2006-2010 is Cambodia's medium-term-development plan which links the vision of the Government's Rectangular Strategy for growth, employment, equity, and efficiency to concrete goals, targets, and strategies. It contains a statement about the impacts of climate change and it acknowledges that natural hazards could affect progress, but there is no systematic assessment of the climate risks to achieving its goals, strategies and targets. The NSDP is presently under revision for extension for the period from 2009 to 2013.¹²

20. Few line agencies appear to have explored what climate change could imply for their respective sectors or opportunities for strengthening resilience. The impacts of climate change on wider economic performance and the achievement of socio-economic objectives have also been poorly articulated and climate change is not at the forefront of thinking within either MEF or MoP.

21. The PPCR could consider providing support in the following areas:

- Mainstreaming climate risk concerns into national and sectoral policies and in developing related monitoring and evaluation indicators. Various Development Partners are also planning CCA initiatives with mainstreaming components. Close dialogue should therefore be maintained with these other initiatives, including under GCCA, UNDP-GEF, UNEP-GEF and Danida programs, and in the related field of disaster risk reduction, to ensure that PPCR activities complement and build on these undertakings.
- Awareness raising efforts to strengthen MEF and MoP commitment and attention to CCA.
- Building on lessons learned from the on-going RGC-World Bank Public Expenditure Review, mainstreaming climate change concerns into budgetary systems, allocation and reporting/tracking processes, following the guiding principles below:-
 - The additional costs of CCA are transparent. Levels of public expenditure on CCA across different sectors are sufficient relative to the levels and nature of risk faced, economic and social returns to CCA and the reasonable responsibilities and obligations of government (and the wider international community).
 - Budgetary mechanisms can support joint, interministerial climate change initiatives where appropriate.
 - There are adequate financial arrangements in place to manage the residual risk faced by government – that is, to access, manage and allocate adequate disaster relief and reconstruction resources, including via international assistance.
- Incorporating climate risk concerns into the project preparation and prioritization process, including relevant appraisal tools such as environmental impact assessment, and into related criteria for prioritizing projects for inclusion in the Public Investment Program (PIP).

22. **CRM in sub-national policy, planning and budgetary processes.** CRM is yet to be integrated into provincial policy, planning and budgeting processes. There is limited budget to meet even current priority development needs, let alone the cost of adaptation, limited understanding of climate risks and lack of technical capacity to integrate CRM into provincial planning processes. There has been no evidence of any training organized at provincial and commune levels to provide this capacity.

¹² The NCCC was asked to provide a note on climate change adaptation for the NSDP revision.

23. Not surprisingly, the approach has been to focus on disaster preparedness and post recovery. For example, the mission was informed that the Provincial Department of Public Works makes a limited budget provision as part of its planning process (3-year rolling plan and 5-year provincial development plan) for disaster preparedness, provision of temporary shelters, and health campaigns. However, it is difficult to assess if such budget provision also reflects the severity of climate risks in different provinces. When disasters such as floods and droughts occur, the Provincial Committee for Disaster Management (PCDM) closely cooperates with the National Committee for Disaster Management (NCDM). Budget allocation is usually done via two channels: 1) The government sector budget is allocated through the line ministries down to their respective provincial line department based on the budget proposal; and 2) The Development Partners fund (under D&D structure) is allocated by the National Committee for Democratic Development at Sub-National level (NCDD) down to Provincial Rural Development Committee (PRDC), who will reallocate it to various key sectors based on proposal and a set of criteria. The Provincial Departments of Agriculture, Rural Development, and Water Resources Management may allocate small budgets indirectly to cope with disasters but it remains unknown if such budget allocation is arbitrary or based on a systematic risk assessment. When disasters occur, the Provincial Department of Rural Development again assesses immediate damage and requests the appropriate budget, which may or may not be approved.¹³

24. At the commune level, a commune investment program is prepared annually and commune development plans are prepared every 5 years. The commune planning and budgeting committee (CPBC) expectedly conducts stakeholder consultations in villages, prioritizes activities under leadership of the commune councils and submits a prioritized list to PRDC. These priorities are integrated with the provincial line department and NGO investment plan via the annual District Integration Workshop, where the commune representatives present the commune priorities and get the technical feedback and support commitment from the NGOs and relevant line departments.

25. As mentioned previously, the National Program for Sub-National Democratic Development (NP-SNDD) is expected to enhance opportunities of the sub-national governments to integrate climate resilience in their actual local development activities. The NCDD, PRDC\ExCom, and provincial department staff expressed interest in PPCR support to enhance technical and institutional capacity to mainstream climate risks in planning and budgetary processes.

26. The PPCR could consider providing support in the following areas:

- Support for the integration of climate resilience in the National Program for Sub National Democratic Development (NP-SNDD)
- Support to strengthen technical and human capacity of provincial, district and commune levels and communities for climate resilience.
- Climate risk assessment, especially in the most vulnerable provinces and in provinces that contribute most to national GDP
- Institutional and technical capacity strengthening at provincial and commune levels to integrate climate risk and resilience in policy, planning (annual, 3-year and 5-year plans) and budgetary processes

¹³ In the case of a major disaster event – such as Typhoon Ketsana in late September 2009 – the Council of Ministers requests supplementary budget support from the RGC for immediate humanitarian relief and repair purposes, on behalf of NCDM, following the collation of damage assessment of information from affected line agencies. Prime Ministerial approval is required to access this funding. It is held in a reserve budget within the annual current (recurrent) budget under the Office of the Council of Ministers (OCM) and can be drawn upon for a range of unforeseen circumstances, including floods and droughts.

- Assessment of reform options for strengthening sub-national institutional structures (e.g., aligning NGO activities with provincial plans, prospects for establishment of provincial disaster preparedness centers) to integrate climate risk management
- Integrating community-based indigenous knowledge in provincial and commune level adaptation and disaster risk reduction plans
- Strengthening institutional coordination for CRM at the provincial level, especially among provincial rural development and disaster management councils and committees
- Piloting vulnerability and adaptation assessments, and investment interventions on an ecosystem-basis (e.g. Tonle Sap)

27. **Agriculture Sector.** Although the agriculture sector is considered the most vulnerable in Cambodia, public sector capacity to plan and implement climate adaptation strategies in the sector is weak. It is constrained by (a) inadequate institutional arrangements and a lack of policy guidance; and (b) insufficient human and financial resources. While there are scattered references to climate change and sustainable agriculture development in key policy and planning documents, such as the NSDP, there is not yet a coherent and comprehensive policy framework in place to guide action in the agriculture sector. For example, the Strategy for Agriculture and Water (SAW) (2006-2010), which is currently finalized, includes no mention of climate change adaptation. The Master Plan for Agricultural Research (2006) contains no reference to climate change, nor does the Development Scenario for Agriculture Sector in Cambodia (2007), a planning document supported by JICA. Awareness and knowledge about climate change and climate resilience is generally minimal across departments at MAFF (and MOWRAM and MRD), and even less at sub-national province and district levels.

28. There are a number of priority issues that could be addressed by the PPCR:

- In the short-term, capacity building and awareness-raising across all departments at MAFF (coordinated with similar efforts in MOWRAM and MRD), and at all levels, national and sub-national, is a top priority.
- A second short-term priority is to mainstream CRM into policy planning. This process can be used as one of many capacity building vehicles.
- There is an urgent need to strengthen data collection (e.g., agriculture productivity, land use, soil type) methodology and analysis within MAFF for both planning and research purposes.
- In the medium term, research and extension on CRM concerning productivity and diversification factors (e.g., soil and land use management, water resource use, rice and vegetable seed varieties) that will be affected by climate change are primarily issues for MAFF.

29. **Water Sector.** Even though the NAPA identified water resources as one of the most vulnerable sectors to climate change, there is no evidence of integration of climate change/resilience concerns into national water strategies, policies, plans and programs. As noted earlier, the Strategy for Agriculture and Water (2006-2010) does not refer to climate change adaptation. Climate change is projected to increase rainfall variability (timing, frequency, and intensity) and bring about major changes in basin hydrology. Several models predict changes to the future flood pulse in the Tonle Sap; floodplains are likely to be wetter with higher water levels and more extensive flooded area as well as longer flood duration, thereby altering both surface and groundwater characteristics. While people in Cambodia are well adapted to remarkable seasonal variation in water levels, their adaptive capacity towards unusual water regimes – such as extraordinary high floods or sudden storms – is extremely limited. Further, the capacity of

MOWRAM, Ministry of Rural Development (MRD) and other water related agencies to effectively manage water basins and irrigation systems has been low due to institutional, technical and financial barriers.

30. Two major areas of vulnerability in Cambodia's water resources relate to potable water supply, and flood protection and irrigation. While the general situation of potable water in the urban areas is improving, up to 7 million people in rural areas do not have adequate safe water supply. In 2004, only 29 percent of the rural population had access to improved water supply and only 8 percent to improved sanitation, against 34 percent and 16 percent of the total population, respectively. Climate change is likely to exacerbate this challenge. As climate change impacts such as unusually heavy flooding cause significant damage to infrastructure, rehabilitation and climate proofing of flood control and irrigation infrastructure is crucial.

31. A number of priority issues in both areas could be addressed by PPCR:

Potable water supply:

- Institutional and technical capacity building of MoWRAM, MRD and sub-national agencies to integrate climate change concerns in potable water supply strategies and policies
- Assessment of options to enable rural households to diversify their water sources and to increase the storage capacity to survive periods of drought
- Investments in protection and diversification of existing water sources, and redesign of existing and planned infrastructure to increase water storage capacity

Irrigation and flood protection:

- Policy reforms necessary to integrate climate risks in irrigation and flood protection
- Integrated water resources management
- Assessment of on-going pilots of climate risk management and addressing options for scaling up
- Rehabilitation and/or establishment of hydro-meteorological data networks
- Rehabilitation of existing flood protection infrastructure to address climate change risks
- Integration of climate resilience in design of new infrastructure for irrigation and flood control
- Bioengineering-based options (such as vegetative planting) for protection of embankments and irrigation infrastructure (such options are highly labor-intensive and will have the benefit of providing income to the rural people needed to enable them to invest in other adaptive measures at the household level)
- Expansion of the construction of small-scale systems that divert supplemental water to the fields and large scale investment in storage reservoirs at strategic locations

32. **Infrastructure sector:** Functionality of infrastructure such as road networks is a prerequisite to virtually all forms of poverty reduction, economic development and disaster relief. Even though impacts of climate change such as floods seriously damage infrastructure in Cambodia, climate risk and resilience were not integrated into infrastructure development plans at both national and sub-national plans. For example, the strategy and policy documents of the Ministry of Public Works and Transport (MPWT), Ministry of Rural Development (MRD), and Ministry of Industry, Mines and Energy (MIME) do not address climate change and resilience. In many cases, energy infrastructure including hydro electric power plants, and other planned generation facilities are at risk to flood, drought and local inundation. Integration of climate resilience concerns in infrastructure planning and investments thus requires interventions at multiple levels.

33. The PPCR may support a number of priority interventions listed below.

- Update of policies and strategies of MPWT, MRD and MIME to address the issues of climate resilience and provide scope for interventions
- Institutional and technical capacity strengthening in relevant ministries to integrate climate risk and resilience in infrastructure design and development
- Preparation of a climate resilience check list for infrastructure projects to include both inland flooding and flooding caused by a rise in sea level for the southern coastal area (for example, guidelines can be prepared to ensure that all road infrastructure projects are assessed for compliance with climate resilience standards in a similar fashion to the current guidelines for environmental assessments)
- Review and revision of technical specifications and standards to support climate resilient road design
- Improved road inventories to record road sections at risk from flooding and other hazards to delineate and prioritize parts of the network at greater risk than others
- Review and revision of road design guidelines to provide knowledge and emphasis on the use of climate resilient road designs in terms of road levels and capacity of structures and the use of water resistant road making materials, including stabilization and recycling of existing road materials and the use of bio-engineering to reduce erosion in a cost-effective manner.
- A revision of the generally accepted approach of least cost road designs to recognize and select the most appropriate design (in recognition that a small increase in construction cost by selecting more resilient materials will provide climate resilient infrastructure)
- Support to review and redesign planned and completed infrastructure projects as necessary.

34. **Private Sector.** The mission has identified three priority areas where the private sector can and must play a key role in adapting to climate change: agriculture, hydro-power and insurance.

35. As mentioned previously, agriculture is not only the most vulnerable sector but it supports the most vulnerable groups who comprise the majority of the population. Rural farmers are an important contributor to private sector and economic development collectively as they are an important part of the agriculture supply chain. Current farming methods are heavily reliant on seasonal irrigation, with droughts and floods having devastating effects on harvests and livelihoods of rural Cambodian people and their contribution to the economy. The lack of crop diversification and limited knowledge of animal husbandry compound these challenges as no alternative sources of income are available when the main crop or livestock is affected.

36. Coordination, knowledge and access to information (including crop pricing) amongst agricultural communities at a rural, provincial and national level is limited. Interventions to raise awareness regarding climate risks and to provide better market information could strengthen resilience.

37. The development of climate-resilient irrigation systems for the entire country is a significant task. While much of this work will be undertaken by the public sector, the mission notes that there remains scope for the private sector to play a role here in delivering, operating and maintaining irrigation systems.

38. Hydro-power is central to the Government's efforts to increase stable access to electricity and reduce high electricity tariffs to support private sector growth and diversification. As Government moves forward with its proposed plan to expand hydro-power supply in Cambodia,

the PPCR could support the inclusion of climate resilience in an analysis of the effects of large scale hydro power development on the climate risks of priority sectors.

39. Insurance can help meet the climate resilience objective of the agricultural sector through supporting diversification and expansion of crops. There is interest among existing insurance companies to look into developing agriculture-focused insurance products. A weather index insurance feasibility study commissioned by IFC concluded that weather index insurance was not currently a viable option for Cambodia due to the lack of available data. In light of this, the PPCR could focus its efforts on improving data availability while further exploring alternative risk management options for small land-holders.

40. **Social Development.** Climate change impacts the poorest and the most vulnerable members of society first. Therefore, sector responses to climate change need to include a better understanding of the livelihoods of the poorest households and communities and the structural blockages that keep them in poverty. Elite capture, conflicts arising from asset depletion, and existing social structures are some of the problems determining the winners and losers. Efforts to focus responses at the *local* level are key to the meaningful engagement of households and communities, but face significant constraints. In Cambodia, “*adapting local institutions*” is problematic: the structures and processes of decentralization are in their infancy; citizen engagement is limited and dampened by patronage systems; voice and knowledge of rights is limited; and transparency, access to information and complaint mechanisms are not an integral part of the established modus operandi of commune governance. The transformation envisaged in the PPCR will require better knowledge on the ingredients of both social and institutional change.

41. Civil society (CSOs, the media and academia) are key stakeholders already engaged with communities and are helping in the response to climate change through practical actions. Many service delivery and advocacy NGOs are leaders in CC adaptation at the local level, but many need support to adapt planning and programs, and many will need support to engage in new functions such as conflict resolution. Enhancing partnerships between civil society and the government at national and sub-national levels are a vital but challenging aspect of the integration of climate resilience in planning and programming.

42. The PPCR offers the opportunity to address these and other social aspects of climate change:

- to address household and community vulnerabilities and risks in the context of sector responses
- to enhance existing commune level engagement of citizens in planning, reporting, monitoring and feedback in the selected sectors; and to improve transparency and access to information by all vulnerable groups
- to closely engage civil society (NGOs, the media, academia) and build partnerships in advocacy and service delivery functions
- to develop risk assessments and recognition of the inherently political nature of asset loss and the allocation of new resources
- to improve understanding of gender impacts in selected sectors: and to develop, with the MOWA, a strategy to addressing impacts on women
- to better understand how underlying structures and accountability systems will impact on the objectives of PPCR and other CC initiatives; and
- to develop strategic partnerships between state and non-state actors.

43. Proposals are presented below to undertake capacity building, awareness raising and analytical work during Phase 1 to better understand the above processes and to begin putting in place mechanisms to enhance partnerships with civil society.

44. **Implementation Arrangements.** The challenging role of MoE in guiding sector policy and planning or in shaping of financial flows to sectors and sub-national levels is one of the main difficulties facing coordination of climate change from within the CCO or NCCC. However, the NCCC is the designated entity for this purpose; the Government is committed to work with existing structures and likewise, the PPCR. Similarly, the central roles played by MEF and MoP in budgeting and planning requires close coordination with NCCC if an integrated approach to climate change adaptation is to be exercised. The historical and reforming role of the Ministry of Interior (MoI) in the flow of inter-governmental finances is also a key entry point for building sub-national climate change resilience. However, inadequate working relations between MEF, MoP and MoI underline the potential challenges faced by the NCCC.

45. The mission recommends the following arrangements be adopted for the PPCR. The MEF will provide overall program oversight and monitoring. The NCCC (via CCO) would be responsible for overall coordination with implementation of activities undertaken in relevant line ministries. This approach would require substantial capacity development of the NCCC and CCO, but would build on the existing mandated structures. The involvement of MEF would leave open to NCCC the potential to leverage influence to other ministries. This approach will also leave the way open for PPCR to engage fully in the fiscal and planning mechanisms of all levels of government whilst directly supporting the technical agencies via their NCCC focal points. It will also enhance the effectiveness of coordination and potential harmonization with the proposed EC-CCCA and ongoing UNDP actions based in the CCO. The MOI will have an important role to play at the sub-national level and further consultation will be required during Phase 1 to properly define this role. A partnership mechanism should also be put in place to ensure that non-state actors such as civil society and the private sector participate in decision-making for the program.

46. **MDB Management Arrangements for Phase 1.** The MDBs would continue to engage cooperatively with the RGC and other partners through joint missions and virtual meetings. It is proposed that the PPCR grant be recipient executed with the World Bank as implementing agency.¹⁴ These arrangements would be specified in the Phase 1 proposal document.

Potential Phase 1 Activities¹⁵

47. The purpose of Phase 1 is to help Cambodia put in place an appropriate institutional, policy and planning framework where CRM is mainstreamed and appropriate adaptation measures could be identified for implementation. This list of activities is preliminary and somewhat lengthy but it must be coordinated with those planned for implementation under the EC-CCCA program and other Development Partner activities. The emphasis would be on supporting integration at the national

¹⁴ However, the RGC may designate a specific agency for execution of specialized Phase 1 activities; for example, the IFC could be designated as the executing agency to carry out private sector related activities. PPCR guidelines allow for the implementation of Phase 2 to be divided among the MDBs (World Bank, ADB, IFC) with each acting as an individual Implementing Agency.

¹⁵ Separate TORs have been prepared to guide the design of Phase 1. The mission identified many other activities not listed here which are more suitable for the detailed preparation work to be done at the beginning of Phase 2. These and other rich information gathered by the mission will be placed in the program files to be eventually available on-line.

level first in MEF, MoP and MoE, then moving to the sector ministries and sub-national level. Phase 1 activities could also include support to a few “no-regrets” actions, e.g. development activities which address underlying vulnerability and could help to buffer vulnerable groups against climate trends or shocks; or immediate improvement of, for example, meteorological and agricultural data collection to improve planning and future implementation of projects.

Analysis of Climate Risks

- Rapid vulnerability assessments in selected provinces and in the agricultural and water sectors, identified based on NAPA and the Second National Communication.

Institutional Analysis

- Review of selected provincial and commune level development plans and identification of suitable entry points for creation and/or modification of provincial policies and regulations focusing on harnessing synergies between climate change adaptation and disaster risk reduction at commune and provincial levels (e.g. community-based disaster risk reduction schemes).

Capacity Building

- Technical support and training to MEF in mainstreaming climate change concerns into budgetary systems, including allocation and reporting/tracking processes.
- Technical support and training to MoP and selected line ministries in mainstreaming climate risk concerns into national and sectoral policies and plans (e.g., Strategy for Agriculture and Water) and the identification and technical design of individual projects and in developing related monitoring and evaluation indicators.
- Establish a platform which aims to build civil society capacity and awareness of the importance of integrating climate resilience in planning and programs of advocacy and service delivery.

Knowledge and Awareness Raising

- Awareness-raising within MEF, MoP, and the private sector, around the potential consequences of climate change for socio-economic development and long-term sustainable growth.
- Awareness-raising within the private sector regarding adaptation measures relevant to agriculture, hydro-power and insurance, and related project design activities.
- Pilot citizen engagement in selected sectors in order to hear the poor voice their experiences of climate change (e.g. the climate hearings).

Knowledge, information and data

- Meteorological and agricultural data collection to improve planning and future implementation of projects and strengthening information/data systems (e.g. early warning systems) at provincial and commune levels, including
- Feasibility study on alternative risk management options for small farmers.
- Improving the gender disaggregation of data and defining the nature of gender targeting for PPCR.

PPCR Alignment with MDB and other Development Partner Investments

- Identification of opportunities with programming by the World Bank (e.g., Community-based Agriculture Program, now being planned), ADB (e.g., Water Sector Development

Program, MOU signed with MOWRAM), and other development partners (e.g., AusAID's CAVAC program).

48. Next Steps. Listed below are the time-bound next steps following the mission:

- MEF consults with other agencies and provides comments on the aide memoire by November 15, 2009;
- Finalization of aide memoire by November 22, 2009;
- PPCR sub-committee guidance on alignment with EC-CCCA by end November, 2009;
- Phase 1 design: UNDP to assist MEF/MoE on design of Phase 1. Begin early December, 2009;
- First Draft Phase 1 Program (small mission to discuss with RGC and others) by end-January, 2010;
- Phase 1 program proposal submitted to CIF Admin Unit by end February, 2010
- Program coordination arrangements established by end January, 2010.

Annexes

Annex A: Stocktaking of past and ongoing CCA activities and main lessons learned

Annex B: CRM in national and sector policy, planning and budgetary processes

Annex C: Synergies with disaster risk management

Annex D: Summary of Consultative Meeting with Government Agencies

Annex E: Summary of Consultative Meeting with Civil Societies

Annex F: List of Persons Met

Annex G: Final PPCR Mission Schedule

NB Only Annexes A, B and C are included below. Annex A has been updated marginally to reflect additional activities.

Aide Memoire – First Joint Mission Oct 12-22 2009

Annex A: Stocktaking of Climate Change and Disaster Risk Management Activities

1 Climate change adaptation activities

Agence Française de Développement/International Fund for Agricultural Development/United Nations Development Programme AFD, IFAD and UNDP are undertaking a joint US\$3.1 million project on Promoting Climate Resilient Water Management and Agricultural Practices in Rural Cambodia over the period 2010-2013, focusing on two provinces (Preah Vihear and Kratie). The project seeks to pilot climate change mainstreaming into commune and provincial development plans in the target areas; develop and pilot appropriate technologies for improving access to water for household use and agriculture in a changing climate; develop and pilot appropriate climate resilient farming methods; bridge the gap between gender, agriculture and climate change at the sub-national level; enhance public awareness on climate change and adaptation in relation to water resources management and agricultural practices; and document case studies and lessons learned and revise the contribution to Global knowledge sharing on the UNDP Adaptation Learning Mechanism accordingly.

Danida A two-year climate change project entitled "Climate Change Capacity Strengthening and Awareness Raising Programme" was launched by MoE in January 2009, with financial support from Danish International Development Assistance (Danida). The project aims to strengthen national technical and institutional capacity to mitigate and adapt to climate change, as well as to contribute to the mainstreaming of climate change issues into national development efforts. The proposed project activities focus on climate change education and awareness raising, climate change capacity building and institutional strengthening, and the development of a national position for the 15th Conference of the Parties (CoP-15) of the United Nations Framework Convention on Climate Change (UNFCCC).¹⁶

European Commission/Global Climate Change Alliance The European Commission (EC) and RGC are currently preparing a program of cooperation through the Global Climate Change Alliance (GCCA) initiative to support the RGC in implementing the Cambodian Climate Change Strategy and Action Plan. The three-year program will run over the period 2010-2012 and will be financed through a multi-donor trust fund. Current pledges total US\$8.9m, with contributions from the EC, Denmark, Sweden and UNDP. Component 1 of the program will focus on capacity building and institutional strengthening of the National Climate Change Committee and Climate Change Office in order for them to support Government, academia, and civil society in mainstreaming climate change considerations into policies, strategy, plans and programs. Component 2 will take the form of a demonstration project, focusing on increased resilience of coastal communities and ecosystems to climate change through adaptation planning, demonstrated targeted local interventions and provision of practical learning experience. This demonstration project is one of the projects identified in Cambodia's NAPA. The program is expected to result in:

¹⁶ <http://www.phnompenh.um.dk/NR/rdonlyres/0FAE2120-4479-440D-95C3-5578E8557565/0/PressreleaseCCCSARP12Jan09.doc>

- *Enhanced national capacity to drive the climate change agenda and implement the forthcoming Climate Change Strategy and Action Plan*
- The incorporation of climate change considerations in national policies, strategies, plans and programs
- The establishment of a Knowledge and Information Management facility to act as a centre of excellence for collection and dissemination of knowledge, best practices and experiences to the climate change community of professionals and practitioners
- The establishment of a multi-donor financial facility for funding climate change adaptation related projects and programs funding eligible projects (eventually to be substituted by country systems)
- The establishment of institutional mechanisms to fully engage civil society, including academia, non-government organizations and the private sector, in the national framework to address climate change challenges
- Pilot testing in the field of methodologies and tools for vulnerability mapping, identification of climate change hot spots, and engagement with local communities in community-based climate change adaptations practices and their acceptance for wider use, resulting in reduced vulnerability to climate change.
- The development and implementation of a plan to address the climate change needs of the most vulnerable locations and communities, contributing to increased resilience and reduced poverty.¹⁷

Mekong River Commission The Mekong River Commission (MRC) is preparing a new Climate Change and Adaptation Initiative for its member countries, including Cambodia. The precise scope of this initiative is currently being finalized but the following activities were prioritized at stakeholder consultations in January 2009:

- Implementation of NAPA priority activities
- Climate change awareness raising campaigns
- Mainstreaming of climate change adaptation into development
- Institutionalization of an inter-organizational climate change coordination mechanism
- Integration of climate change adaptation into the national budgetary process
- Formulation of climate change adaptation and climate change proofing legislation/policies
- Strengthening of climate change research
- Riparian country cooperation to address trans-boundary issues related to adaptation activities.¹⁸

The MRC also has an on-going Flood Management and Mitigation Programme (see below).

Sida Sida is working to integrate measures to adapt to the effects of climate change into its operations in Cambodia.

¹⁷ EC, 2009. 'Action Fiche for Cambodia: Cambodia Climate Change Alliance (CCCA)'. DCI-ENV/2009/021-476. Phnom Penh: Delegation of the *European Commission* to Cambodia, October.

¹⁸ Chea Chan Thou, 2009. 'Mainstreaming Climate Change Adaptations into Developmental Planning - Country Paper: Cambodia'. Presentation at Regional Workshop on Strategies and Options for Mainstreaming Climate Change Adaptation into Developmental Planning, ADBI, Tokyo, 14 - 17 April 2009.

UNDP-GEF The United Nations Development Programme and Global Environment Facility (UNDP-GEF) have undertaken a series of climate change-related projects in Cambodia in support of the preparation of the First National Communication in response to the UNFCCC, the National Adaptation Programme of Action to Climate Change (NAPA) and the National Capacity Self-Assessment (NCSA).

UNDP-GEF is currently implementing a project on “Enabling Activities for the Preparation of the Kingdom of Cambodia’s Second National Communication to the UNFCCC”, with some financial support from DANIDA. This project began in 2006 and has been extended into 2010. The project is intended to help strengthen the country's technical and institutional capacity to implement the Convention by focusing on issues identified by the RGC as environmental and developmental priorities. It is expected that the project will help improve national capacities for participation in the UNFCCC process. The project reports that it has made substantial progress with the completion of the update to the Inventory of GHGs, and the data collection and analysis for assessment of vulnerability. The preparation of programs containing measures to facilitate adequate adaptation to climate change and the mitigation of climate change are ongoing. Activities are also being undertaken to assist Cambodia in achieving the objectives required by the Convention and to identify constraints and gaps and related financial, technical and capacity needs. The scope of the project is currently being expanded to include:

- Expanded scope of analysis of the economic impacts of climate change.
- Cost-benefit analysis of adaptation and mitigation plan options.
- Recommendations for policy and mainstreaming in sectors.
- Preparation of a National Climate Change Strategy and Action Plan

UNDP-GEF has a further on-going three-year project ‘Promoting Climate-Resilient Water Management and Agricultural Practices in Rural Cambodia’, based on priority interventions outlined in the NAPA and begun in January 2009. This project seeks to address limited existing institutional and individual capacity in both government agencies and community organizations to understand potential climate change impacts and to internalize a perspective of longer-term resilience into sectoral policy and development planning processes. Part of the LDCF funding will be used to increase the adaptive capacity of key national and sub-national institutions, especially provincial and district departments of agriculture and water resources and meteorology, commune councils, and farmer water-use committees, and ensure that they are able to efficiently design, monitor and manage climate-resilient water resources and rural development projects. The project will develop expertise of district agricultural extension teams in the management of climate risks with respect to water management, and train Commune Councils and Planning and Budgeting Committees (PBCs) in two target districts in climate risk management techniques. In addition, key stakeholders at the community level (including religious leaders and indigenous elders) in both districts will be trained to support community-based adaptation planning processes. The project will also demonstrate various community-based adaptation options, including climate-resilient rainwater harvesting techniques, farming methods and design and management of reservoirs, irrigation channels, ponds and dams. The lessons learned will facilitate replication in other high risk areas, both within and outside Cambodia.¹⁹

In addition, under the GEF Small Grants Programme, UNDP-GEF is implementing a five-year program on ‘Mekong and Asia Pacific Community-Based Adaptation’ in 18 countries, including

¹⁹ UNDP-GEF, 2008. ‘Promoting Climate-Resilient Water Management and Agricultural Practices in Rural Cambodia’. PIMS no. 3867. UNDP Project Document. United Nations Development Programme, December

Cambodia, over the period 2009 to 2013, with Aus\$6 million funding from AusAID. The program will implement community-based projects to enhance the resilience of communities to climate change. Lessons learned will be leveraged to promote replication of successful community practice and integrated into relevant national and sub-national policies and development programs that reduce vulnerability to climate change impacts, from the community level to the national level. Planned outcomes of the program include strengthened technical and leadership capacities of key financial and planning institutions at the national, sub-national and local levels to secure, expand and/or re-align funds to support climate change adaptation. The program includes Aus\$960,000 for Country Programme grants in support of individual local level community based adaptation projects in Cambodia, Sri Lanka, Vietnam, and Laos.²⁰

UNDP's 2010 National Human Development Report for Cambodia will also focus on the theme of climate change. This report, which will draw on the findings of the SNC, is currently under preparation.

UNEP-GEF The United Nations Environment Programme and Global Environment Facility (UNEP-GEF) is planning a US\$ 4.62m four-year 'Vulnerability Assessment and Adaptation Programme for Climate Change in the Coastal Zone of Cambodia considering Livelihood Improvement and Ecosystems' to begin in 2010. The program will have four components, focusing on:

- Strengthening national policy, regulatory and institutional coordination for managing climate change adaptation programs, including via awareness and capacity building for the NCCC and CCO. This strengthening is intended to ensure that climate change measures will be incorporated into the next national development plan via provision of a methodology for designing and implementing adaptation measures.
- Vulnerability assessment and adaptation planning for coastal zone adaptation, strengthening capacity for carrying out vulnerability and risk assessments, producing detailing vulnerability maps for climate change planning purposes in the coastal provinces and providing climate change scenario forecasts for identified hotspots. The climate change impact scenarios will also be integrated into land use/coastal development plans.
- Demonstration projects to enhance existing flood control measures to take account of sea level rise and climatological changes and to adapt coastal agricultural practices to the changing climate.
- Demonstration projects on coastal ecosystem based resilience measures, working with local communities to maintain and rehabilitate mangroves, to establish a secondary forest line as an additional ecological buffer against storms and to derive sustainable livelihoods from these resources.²¹

WHO The UN World Health Organisation has undertaken a health vulnerability assessment, as part of the on-going program of work to prepare Cambodia's SNC. WHO is also supporting the country in integrating climate proofing into the university curriculum for water quality and water supply.

²⁰ UNDP-GEF, 2009. 'Mekong and Asia Pacific Community-Based Adaptation Programme (MAP-CBA). GEF Small Grants Programme - Project document. Environment and Energy Group, Bureau for Development Policy, United Nations Development Programme.

²¹ UNEP-GEF, 2009. 'Vulnerability Assessment and Adaptation Programme for Climate Change in the Coastal Zone of Cambodia considering Livelihood Improvement and Ecosystems'. Project Identification Form. GEFSEC Project ID 3890. April

NGOs A number of NGOs are supporting local communities in enhancing their resilience to climatic variability in the agricultural sector, including the International Development Enterprise and the Center for Study and Development of Cambodian Agriculture (CEDAC). Some NGOs are also engaged in climate change awareness building and education, including the Groupe Energies Renouvelables, Environnement et Solidarités (GERES). GERES is currently preparing an inventory of local and international NGO activities in the area of climate change, which will provide an extremely useful reference source.

There are a number of further development partner projects not listed above that have an indirect impact in enhancing climate resilience.

2 Lessons learned in climate change adaptation in Cambodia²²

For effective mainstreaming of climate resilience, the PPCR can greatly benefit from key lessons learned from the past and ongoing initiatives on climate change in Cambodia. They include the following:

- (a) Focus on strengthening and reform of existing institutions rather than aiming to create new institutions for adaptation.
- (b) Strengthen national climate data collection and information dissemination systems, including monitoring and forecasting systems, and early warning systems for floods and droughts (e.g. installing a rain gauge in a school or community-owned establishment).
- (c) Enhance country and community ownership through close consultations with key stakeholders at all stages of project development.
- (d) Get the adaptation challenges and targets recognized by multiple agencies while pushing for the cause at the highest levels of decision making and influence.
- (e) Create an enabling environment for climate risk management by focusing on inter-sectoral and institutional coordination.
- (f) Build on indigenous knowledge and local strategies to cope with climate variability in developing commune-level, provincial and national adaptation plans. (Rural Cambodians have highly evolved livelihood strategies to cope with environmental changes.)
- (g) Ensure that communities recognize the benefits of adaptation and see the value of investing their own resources in adaptive strategies.
- (h) Promote synergies between climate change adaptation and disaster risk reduction (e.g. make use of the Cambodian disaster risk reduction forum by NGOs).
- (i) Strengthen organizational and individual capacities to interpret and address climate change vulnerabilities prior to recommending adaptation options.
- (j) Develop capacity building modules that use up-to-date information and are appropriate to local context and circumstances.
- (k) Utilize "learning by doing" approaches for effective implementation of tools and methods.
- (l) Increase resources available for community-based adaptation and disaster risk reduction (as communities are the first to face the climate change impacts at the local level).
- (m) Recognize that a holistic approach to adaptation is crucial, as the main determinants of successful adaptation to climate change often lie outside a specific sector.

²² These lessons learned are drawn from the collective experience of the Southeast Asia START Secretariat, Helsinki University of Technology, AusAID, World Fish Center and other donors working in Cambodia and from a civil society consultation that was held over the course of the October 2009 PPCR Joint Mission in Phnom Penh.

- (n) Create mechanisms for scaling up of successful adaptation experiences (e.g. focus on decentralized small scale interventions instead of only large scale irrigation).
- (o) Identify champions for adaptation who can influence the way we adapt, by recognizing that climate change is only an additional factor that exacerbates vulnerability.

3 Disaster risk reduction activities

Several DPs and civil society organizations are involved in the related field of disaster risk reduction.

ADB/ADPC The Asian Disaster Preparedness Center (ADPC) in partnership with MoWRAM completed an advisory technical assistance project in Cambodia on *Community Self-Reliance and Flood Risk Reduction* in 2007. The TA was funded through the Asian Development Bank's Poverty Reduction Cooperation Fund (TA 4574-CAM). The TA sought to enhance community participation in disaster risk reduction through a series of pilot projects in rural communities in Kandal, Prey Veng, Svay Rieng, and Takeo provinces; and to provide strategic guidance to MoWRAM, NDCM and other stakeholders on improving participatory community flood and drought risk management.²³

Chinese Government MoWRAM, with US\$30m financial support from the Chinese Government, is implementing a flood protection project in Kampong Trabek, Prey Veng over the period 2010 to 2012.

DIPECHO and partner agencies The Disaster Preparedness Programme of the European Commission Humanitarian Aid Department (DIPECHO) has been providing support to Cambodia for disaster risk reduction and preparedness since 1998. Between 1998 and 2009, it has supported some 40 actions, together totaling €7.5 million, including the establishment of flood and drought early warning systems, promotion of small scale mitigation measures such as dykes and ponds, the establishment and training of village disaster management committees, the development of local disaster management plans and their integration at commune and district levels. All projects have been implemented through DIPECHO partner agencies in Cambodia, including Action Aid, the Danish Red Cross, DanChurchAid and ZOA and regional partners such as IFRC, UNDP, WHO and MRC.²⁴

The Asian Disaster Preparedness Center (ADPC) and UNDP have also undertaken a regional program with financial support from DIPECHO to develop a disaster risk reduction module for incorporation into the secondary school curriculum and integrate disaster risk reduction concerns into the design of school buildings in three south-east Asian countries, including Cambodia. This project was completed in 2008.²⁵

DIPECHO/UNISDR/ADPC The United Nations International Strategy for Disaster Reduction (UNISDR) and DIPECHO²⁶ have funded the development of a Strategic National Action Plan for

²³ ADB, 2007. *Kingdom of Cambodia: Community Self-Reliance and Flood Risk Reduction (Financed by the Poverty Reduction Cooperation Fund)*. Technical Assistance Consultant's Report. Project Number: 37290 Report prepared by Asian Disaster Preparedness Center, Bangkok, Thailand for Ministry of Water Resources and Meteorology. Manila: Asian Development Bank, September 2007.

²⁴ ECHO, 2009. *Humanitarian Aid in Cambodia*. Brussels: European Community Humanitarian Aid, September.

²⁵ ADPC. 2008. *Mainstreaming of Disaster Risk Reduction in the Education Sector in Cambodia*. Bangkok: Asian Disaster Preparedness Centre, April.

²⁶ Using funding available under its regional program.

Disaster Risk Reduction 2008 – 2013 (SNAP) for the RGC. The SNAP was prepared with technical assistance from ADPC. NCDM and the MoP established an inter-institutional task force to spearhead the preparation of the plan. The SNAP covers a number of themes that overlap with the CCA agenda, including mainstreaming of disaster risk reduction into national, sectoral and local development policies and plans; national and local risk assessments; improved flood forecasting and early warning capabilities; education and awareness raising; and the promotion of structural and non-structural measures to enhance resilience.²⁷

JICA The Municipality of Phnom Penh, with US\$20.23 m financial support from JICA, is undertaking a flood protection and drainage improvement project in Phnom Penh over the period 2006 to 2010.

Korean Government MoWRAM, with US\$1.45m financial support from Korea, is undertaking a project to rehabilitate a flood protection dam in Bathay, Kampong Cham, over the period 2008 to 2009.

Mekong River Commission/ADPC/GTZ The MRC has an on-going Flood Management and Mitigation Program which was begun in 2005 and is funded to a total value of around US\$20m (see below). The program has included the establishment of a Regional Flood Management and Mitigation Centre in Phnom Penh, providing technical and coordination services to the four countries in the Lower Mekong Basin. Other components of the program comprise structural measures and flood protection, mediation of transboundary flood issues, flood emergency management strengthening and land management. Forecasts, flood data, technical standards and training packages are key outputs of the program.²⁸

The flood emergency management strengthening component is being undertaken with technical support from ADPC and financial support from GTZ. It has included a flood risk awareness campaign and an initiative to integrate flood risk reduction measures into formal local government development plans in two of the most flood-prone provinces in Cambodia, Prey Veng and Kandal.²⁹

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USAID-OFDA The Office of US Foreign Disaster Assistance of the United States Agency for International Development (USAID-OFDA) is funding a US\$2.6m Asia Flood Network (AFN) which covers Mekong River Basin countries, including Cambodia, and countries in the Ganges-Brahmaputra-Megna basin.³¹ It also has a US\$1.2m project on Drought Preparedness in Southeast Asia, covering Cambodia, East Timor and Vietnam. USAID-OFDA previously funded a Community-Based Flood Mitigation and Preparedness Project in Cambodia over the period 1995-2004, under ADPC's Asian Urban Disaster Mitigation Program.

²⁷ NCDM and MoP, 2008. Strategic National Action Plan for Disaster Risk Reduction, 2008-2013. Phnom Penh: National Committee for Disaster Management and Ministry of Planning.

²⁸ <http://www.mrcmekong.org/>

²⁹ ADPC and MRC, 2007. *Sustaining the Flood Preparedness and Emergency Management System in Cambodia: Creating the momentum for mainstreaming*. Safer Communities - Case Study 4. Bangkok and Vientiane: Asian Disaster Preparedness Center and Mekong River Commission, December.

³⁰ ADPC and MRC, 2007. *Reaching out to the Public: Raising Community Awareness to Flood Risk Reduction in Cambodia*. Safer Communities - Case Study 3. Bangkok and Vientiane: Asian Disaster Preparedness Center and Mekong River Commission, December.

³¹ GFDRR, 2009. *Disaster Risk Management Programs for Priority Countries: Summary 200*. Washington, DC: Global Facility for Disaster Risk Reduction and Recovery.

WFP The UN World Food Programme (WFP) supports the RGC in the overlapping field of food security. Flood and drought maps produced as an output of a 2003 NCDM and WFP exercise to identify flood and drought prone communes in the country are widely cited in both the disaster risk reduction and CCA literature for Cambodia. WFP has also supported NCDM in the preparation of post-disaster damage and needs assessment (PDNA) guidelines.

World Bank GFDRR The Global Facility for Disaster Reduction and Recovery has an indicative budget of US\$5.35m for Cambodia over the period 2009-2011. This program of technical assistance has yet to be finalized but is anticipated to include support for the better coordination and implementation of the SNAP, the integration of disaster risk reduction into national development planning, implementation of the national Community-Based Disaster Risk Reduction strategy, the development of guidelines for the integration of disaster risk concerns into local development plans, initiation of the mainstreaming of disaster risk reduction into policies and programs of two line ministries, the development of provincial multi-hazard disaster risk reduction plans and the implementation of partnerships in at least two new provinces.³²

A completed World Bank Flood Emergency Rehabilitation Project which was implemented in response to the 2000 floods also included technical assistance to help build capacity to manage and mitigate future water disasters in Cambodia more effectively.

NGOs A number of NGOs have been engaged in disaster risk reduction activities in Cambodia, including those listed above via DIPECHO funding. NGOs of particular relevance to the PPCR include the Church World Service, which is currently supporting communities in mainstreaming disaster risk reduction into commune investment plans; and Oxfam-America, which is supporting the NCDM in its submission to the RGC to ingrate disaster risk reduction and climate change adaptation concerns into the updated NSDP. Other NGOs involved in various aspects of disaster risk reduction in the country include Action Contra la Faim (ACF), Cambodian Red Cross, CARE International, Lutheran World Federation, Oxfam Australia, Oxfam GB and World Vision.

³² GFDRR, 2009. Op cit.

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Annex B: CRM in national and sector policy, planning and budgetary processes

1. Status and ongoing processes

There has been limited explicit attention to climate risk concerns in national and sector policy, planning and budgetary processes to date in Cambodia, or in the design of individual development projects. It is widely appreciated that agricultural performance is closely tied to the timing and intensity of rainfall, reflecting heavy dependence on rainfed production, and that the country suffers periodic damage to physical infrastructure as a consequence of floods. For instance, in reviewing agricultural performance over the period 1993-2005, the *National Strategic Development Plan (NSDP) 2006-2010* (p14) reported that ‘actual year-to-year growth rates in the sector were quite unsteady and uneven, marked by peaks and troughs, reflecting the high reliance on natural factors and susceptibility to climatic factors like drought, floods, etc’. Moreover, aberrant rainfall patterns over the past few years and the recent destruction caused by Typhoon Ketsana in late September 2009 have captured the attention of key decision makers and line ministries, as well as the general public. This unusual weather behavior is being widely attributed by non-scientific observers to climate change, reinforcing the awareness-raising efforts around climate change underway in the lead up to COP-15 and as part of the preparation of Cambodia’s Second National Communication. The Ministry of Economy and Finance (MEF), for instance, reports that climate change risk has come up in recent budget discussions. However, levels of understanding of climate change are mixed and few line agencies appear to have gone a few steps further to explore what climate change could imply for their individual sectors or to identify concrete opportunities for strengthening resilience, either in their broad strategies and programs of work or individual projects.^{33 34}

National strategies and policies The impact of climate change on wider economic performance and the achievement of the Royal Government of Cambodia’s (RGC’s) socio-economic objectives have been poorly articulated and climate change is not at the forefront of thinking within either MEF or the Ministry of Planning (MoP). The *Rectangular Strategy for Growth, Employment, Equity and Efficiency in Cambodia* provides the broad overarching policy framework, outlining the RGC’s vision for growth, employment, equity, and efficiency . The original Rectangular Strategy was launched in 2004 and an updated Phase II Rectangular Strategy announced in September 2008. The Phase I strategy included no direct mention of climate change but referred to climate risk reduction benefits in the context of the development of irrigation facilities and improved water resource and sustainable forest management. It also included enhanced emergency assistance to ‘victims of natural disasters and calamities’ in the context of social safety nets. In contrast, the Phase II

³³ Individual sectoral plans in some of the sectors most vulnerable to climate change are discussed in the agriculture, water and infrastructure annexes to this Aide Memoire.

³⁴ The Water Department within MPWT reports that the Mekong River Commission (MRC) has run some hydrometeorological models to explore that impact of temperature change on downstream river flows. This study has revealed the need for the strengthening of river banks, bridges and port and other infrastructure in Cambodia but the Water Department has no budgetary resources to undertake such work. It has not estimated the full amount of funding required.

Rectangular Strategy does mention climate change but only as a factor contributing to global economic slowdown and inflationary pressure on the Cambodian economy, most likely a reference to the contribution of climatological extreme events to the world food crisis of 2007-08. Although the Strategy seeks to address rising food prices by increasing agricultural productivity, there is no further reference to climate change except in the context of forest management. The Strategy also places emphasis on flood and sea protection levies and other measures to boost agricultural production and reports on past success in rescuing and providing support to 'victims of natural disasters'.

The NSDP is closely aligned with the Rectangular Strategy, translating the Strategy into concrete goals, targets, and strategies. The current NSDP 2006-2010 only explicitly addresses climate change in the context of the NAPA, stating that 'to adequately respond to the urgent needs of climate change, in particular droughts and floods, a draft National Adaptation Programme of Action to Climate Change has been prepared, containing priority actions needed to adapt to climate change in regard to agriculture, water resource management, coastal zone management and human health' (p16). It notes that successful implementation of the National Program of Action to Climate Change will depend on adequate resources. There is no attempt to integrate climate change considerations into other sectors.

Droughts and floods, more specifically, are mentioned several times in the NSDP but disaster risk reduction concerns are far from mainstreamed across the Plan. References to floods and droughts are made in the context of:

- The need to tackle 'drought, flood and pest affectation' as part of efforts to enhance the agricultural sector, which in turn is considered the key to poverty reduction. No specific measures for reducing climate risk are mentioned, however, within the specific context of agriculture.
- The need to better manage water resources, which support the needs of many sectors of the economy, to address cyclical patterns of water shortages in the dry season and excessive water during the rainy season. The Plan seeks to tackle this issue by adopting an integrated approach to water resources management and development, placing emphasis on measures (a) to ensure that water in sufficient quantities, and of appropriate quality, is available to meet year-round demands of all sectors while sustaining aquatic ecosystems; (b) to manage flood flows and enhance the capacities of communities to cope; (c) to control water for agricultural purposes, by means of storage, drainage or irrigation as appropriate; and (d) to keep water resources free of contaminants to support the ecological system, particularly fisheries.
- The importance of sustainable forest management policy, in part to provide protection against droughts and floods.
- The role of the new Integrated Rural Accessibility Planning (IRAP) mechanism in prioritizing underserved rural areas, including to help protect them against floods and droughts by enhancing their disaster preparedness and risk reduction capabilities.
- Continued assistance to 'victims of natural disasters'.
- Possible risk factors that could hinder NSDP progress. (The NDSP continues on to state that 'RGC is confident that it could withstand such challenges and adjust NSDP to accommodate realities as they emerge' (p xiv)).

The RGC is currently at a relatively late stage in finalizing the Updated NSDP 2009-2013 and the Plan is scheduled for consideration and approval by the National Assembly in April 2010. It is

intended that the Updated Plan will pay greater attention to both climate change adaptation and disaster risk reduction. The NSDP is based on submissions from individual line ministries outlining their projects and programs. These are then reconciled with macroeconomic analysis to ensure that the level of investment detailed in the Plan will be sufficient to achieve the desired rate of growth. The National *Climate* Change Committee (NCCC) is currently drafting a section on climate change for inclusion in the Updated Plan. The National Committee for Disaster Management (NCDM) is also planning to submit a section on disaster risk reduction and the Ministry of Agriculture, Forestry and Fisheries (MAFF) reports that it considered climate change in its submission as well. However, a circular distributed to government agencies laying the RGC's main objectives and policies over the Plan period, with which sectoral submissions were required to be aligned, and related technical guidelines on the preparation of line agency submissions, did not touch on climate change or disaster risk concerns and the issue of climate risk reduction will not be integrated across the NSDP, within the goals, objectives and strategies of all relevant sectors.

Despite this, there is general agreement within RGC that climate change needs to be tackled by integrating efforts to enhance resilience into existing institutional structures, national and sectoral strategies and budgetary systems, rather than by creating separate systems. This mainstreaming approach is consistent with widely regarded best practice internationally.³⁵ The approach is particularly essential in countries such as Cambodia, which are set to be severely affected by climate change by virtue of their high existing vulnerability, rather than current or future exposure, to climatological hazards. This vulnerability needs to be tackled as a core element of development policy.

Sectoral plans, policies and operational activities are required to be in line with the NSDP and reflect the central objectives of government. However, despite its silo-ed treatment in the Updated NSDP, there is still scope for interpretation in incorporating climate change adaptation concerns across all relevant sectors. For instance, climate change adaptation goals can be readily linked to sustainable development objectives. Similarly, sectoral strategies already in place may contain obvious entry points to address climate change. For instance the Ministry of Rural Development's (MRD's) draft strategy already covers changes in hydrology, although climate change is not explicitly mentioned. Such entry points then need to be translated into both concrete projects and programs in the three-year rolling Public Investment Programme (PIP) and into broader efforts to ensure that climate risk concerns are explicitly considered in the identification, prioritization and design of all development projects in the PIP (see below).

The PIP provides the vehicle for achieving the goals and targets of the NSDP, detailing specific programs and projects that will be implemented to achieve these goals and targets and related funding requirements.³⁶ It includes all RGC capital expenditure projects and projects supported by external development partners (including technical assistance) and provides the basis for assisting the Cambodia Rehabilitation and Development Board (CRDB)/Council for the Development of Cambodia (CDC) and all line ministries and agencies in attracting and directing external assistance to RGC-identified priority programs and projects. In practice, most of the projects in the PIP are funded through external assistance. The Ministry of Planning prepares the PIP every year on the basis of submissions from line Ministries and a related screening process.

³⁵ For instance, see OECD, 2009, *Integrating Climate Change Adaptation into Development Co-operation*. ISBN-978-92-64-05476-9. Paris: Organisation of Economic Co-operation and Development.

³⁶ The most recent PIP notes that more work needs to be done to ensure that such linkages between the NSDP, PIPs, the medium-term expenditure framework and annual budgets and their mutual coherence and synergy are achieved in practice.

Project identification, appraisal and design At the project level, current project identification and appraisal processes also pay little explicit regard to climate risk. For instance, the environmental assessment process³⁷ focuses only on the impact of a proposed project on the environment rather than of the environment – in this case in the form of a hazard event – on the project as well.³⁸ Moreover, the process does not necessarily explore the full impact of proposed investments on resilience to climatological extremes, whether within the immediate project locality or in the wider economy and society. Technical designs for certain types of infrastructure – for instance, roads – are better in as much as they do take account of flood risk. However, selected design parameters are based on historical climatological hazard records, not on expected changes in frequency and intensity in hazard events over the life of the investments.

Some changes in procedures for project identification, appraisal and design in Cambodia are required to incorporate a climate lens, as required to help ensure optimal use of investment resources. The introduction of a new, lengthy climate risk screening tool is probably unnecessary. A simpler, low-cost mechanism, starting with just a few lines in the project scoping document outlining the relevance of climate risk to the project outputs and objectives and how, if relevant, climate risk will be addressed, may be sufficient. In the case of projects that are more vulnerable to the consequences of climate change – or that themselves could affect resilience to climate change in the project locality or wider economy and society – further investigation could then be required, as relevant, during more detailed project appraisal (e.g., via a full environmental impact assessment, with related changes to environmental legislation to require this) and technical design, including examination of project design alternatives. It should be noted, however, that at present the environmental assessment process is apparently only loosely applied in Cambodia, particularly at the sub-national level, and resulting recommendations are not necessarily implemented.

In addition, design parameters and related technical manuals need to be reviewed to reflect the potential impacts of climate change on the frequency and intensity of floods and droughts and related return periods of hazards of particular intensities. There is also scope for support on alternative low-cost techniques for enhancing hazard resilience across a range of sectors (e.g., via geo-engineering). However, in areas such as roads, there are significant challenges in climate proofing infrastructure because of considerable sub-national investment, including small-scale community construction. Extensive programs of capacity-building would be required, including of engineers, builders, agricultural extension workers and others working on the ground.

Monitoring and evaluation Technical support around the monitoring and evaluation of climate change adaptation activities is required. The NSDP contains 43 indicators, including 28 Cambodian Millennium Development Goals, but none of these touch on climate risk resilience. The monitoring

³⁷ In common with many other countries, RGC environmental screening criteria determining the extent of environmental assessment required are primarily based on scale thresholds (e.g., roads in excess of 100km³⁷; water supply systems for 10,000 users or more; irrigation systems covering in excess of 5,000 hectares) although certain categories of projects, particularly those likely to involve emission of pollutants, require full EIAs regardless of scale of operation. Full EIAs are also required for projects planned in natural protected areas, including natural parks, wildlife sanctuaries, protected landscape areas and multiple-use management areas. Agricultural operations in flooded and coastal forests similarly require a full EIA. All other projects in the agriculture, industry, infrastructure and tourism sectors are required to have Initial Environmental Impact Assessments (IEIAs).

³⁸ For instance, the construction of schools may have little impact on the environment but hazard-related safety concerns are paramount in building schools in hazard-prone areas.

and evaluation of climate change adaptation is, moreover, particularly challenging. In the words of a recent OECD report:

“Evaluating the success of an adaptation is not a straightforward task and may take a long time because the benefits of some adaptation measures may not be realised until the climate changes significantly. For adaptation measures that were designed to reduce vulnerability to infrequent extreme events, their evaluation can only be carried out if and after those extreme events occur. If such events do not occur, it may be difficult to evaluate the success of the adaptation strategy. For adaptation measures that have benefits if climate does not change (i.e. no regrets measures), their evaluation is facilitated as the benefits should be seen in the near term.”³⁹

However, such problems are not insurmountable. For instance, lead or process indicators can be selected that will at least provide some sign of progress towards the achievement of project objectives (e.g., the number of schools constructed to withstand a flood of a specified depth). Leading or process indicators are also required in situations where the full benefits of a project will only become apparent after its completion (e.g., by measuring the progress of a mangrove planting scheme intended to provide protection against sea surges in terms of rates of growth and survival of the trees).⁴⁰ Clear guidance and support is required to support the RGC in developing and implementing appropriate climate change adaptation monitoring and evaluation indicators, both for broad climate change adaptation objectives, as contained in national policies and strategies, and for individual project objectives.

Data and analysis constraints Limited attention even to existing climatic risk in national and sectoral plans in Cambodia partly reflects weak baseline data on the historical impact of disasters. The NCDM is primarily concerned with humanitarian impacts and related relief needs. Line ministries receive some information on damage to infrastructure but only, apparently, on an informal ad hoc basis for their own purposes. Moreover, even the data that do exist are not collated into a single, central database.⁴¹ Meanwhile there is apparently no data available at all on private sector losses (other than to domestic assets) in the public domain; and losses associated with small-scale localized events also often go entirely unrecorded.

There has been little analysis of the wider impacts of disasters on macroeconomic or budgetary performance or on their wider socio-economic consequences, including on progress in poverty reduction. The situation is not helped by the fact that there is no mention of either natural hazards or climate change in either the generic MDGs or the Cambodia-specific ones.

³⁹ OECD, 2009. Integrating climate change adaptation into development co-operation. Paris: Organisation of Economic Co-operation and Development, July, p56.

⁴⁰ Benson, C, 2007. 'Logical and Results Based Frameworks'. In *Tools for Mainstreaming Disaster Risk Reduction: Guidance Notes for Development Organisations - Guidance Note 6*. Geneva: ProVention Consortium. Available at: <http://www.proventionconsortium.org/?pageid=37&publicationid=132#132>.

⁴¹ Documents that recite figures on disaster-related losses in Cambodia typically rely on those available in an international database, the Emergency Events Database (EM-DAT). EM-DAT is maintained by the Centre for Research on the Epidemiology of Disasters (CRED) of the University of Louvain, Belgium and covers disasters that cause at least 10 deaths, affect at least 100 people, result in the declaration of a state of emergency and/or result in an international appeal for assistance. The EM-DAT database is based on information collated from various sources including UN agencies, NGOs, insurance companies, research institutes and press agencies.

These various deficiencies make it difficult to make a case for the urgency of climate change adaptation in Cambodia on the basis of an increasing likelihood of floods and droughts as the socio-economic impact of current hazard threats is not widely understood. Instead, natural hazards are somewhat discounted as an issue of major concern, particularly in the face of more immediately pressing demands on public resources to tackle significant basic development needs.

Budgetary processes and systems Understanding of the budgetary implications of climate change and related arrangements for encouraging and monitoring climate change adaptation activities, securing international assistance to meet adaptation needs and ensuring that there are adequate arrangements in place for post-disaster response are key elements in mainstreaming climate change concerns into national systems. At the heart of this, a tracking system is required to provide transparency on levels of spending, highlight any funding gaps (both for climate risk reduction and post-disaster response), facilitate a comparison of ex ante risk reduction and ex post response expenditure and shed light on the implications of potential post-disaster reallocations of budgetary resources for the achievement of key government objectives.

Currently, neither the MEF, MoE nor NCDM maintain data on national expenditure on climate change adaptation or on disaster risk reduction and preparedness more narrowly defined. The NCDM, which falls under the Council of Ministers, receives a small annual budgetary allocation via the Council for operational purposes, including to support post-disaster damage assessments.⁴² The allocation is currently set at 1,000 m riel (approximately US\$240,000). However, as in most developing countries, there are no specific lines anywhere across the budget for climate change adaptation or disaster risk reduction. Some explicit climate change adaptation and disaster risk reduction projects can be identified in the PIP.⁴³ However it is only possible to identify those projects that explicitly mention climate change or natural hazards in some shape or form in the project title. Projects which include a climate change adaptation component as part of a larger project – or even simply indirectly strengthen climate resilience (e.g., an irrigation project) - cannot be counted.

As regards post-disaster response, individual line agencies draw on their own budgets, most commonly their routine maintenance budgets, to meet ‘small-scale’ disaster-related infrastructure rehabilitation costs in ‘normal’ years. In the case of the Department of Roads of the Ministry of Public Works and Transport (MPWT), which is responsible for national and provincial roads, 40% of the maintenance budget is specifically earmarked for periodic maintenance, including flood-related repair but minor damage is covered from the routine maintenance budget instead. Up to 8% of the Department’s maintenance budget does not have to be allocated at the start of the budget year, providing some flexibility to respond to disaster events without disrupting planned periodic and routine maintenance work. Meanwhile MAFF has a small budget for the maintenance of a 2,000-3,000 tonne revolving seed bank for distribution in the event of floods and droughts, with seed positioned at various points around the country. It also provides livestock and fisheries post-

⁴² This annual allocation was apparently established following the severe 2000 floods and related lesson learning exercises, which highlighted the need to strengthen the NCDM and the country’s disaster management system.

⁴³ For instance, the 2010-2012 PIP listed projects on the Second report of UN framework on climate change (US\$405,000 GEF/UNDP funding for the period 2006-2009); Strengthening capacity and knowledge improvement on climate change (US\$380,000 Danida funding for the period 2009-2010); Flood protection in Kampong Trabek, Prey Veng (US\$30m funding from China for the period 2010-2012); Rehabilitation of flood protection dam in Bathay, Kampong Cham (US\$1.45 Korean funding for the period 2008-2009); and Flood protection and drainage improvement in Phnom Penh (US\$20.23m Japanese funding for the period 2006-2010).

disaster on a limited, revolving basis. However, little, if any, data on levels of such expenditure is readily available.

In the case of a major disaster event – such as Typhoon Ketsana in late September 2009 – the Council of Ministers requests supplementary budget support from the RGC for immediate humanitarian relief and repair purposes, on behalf of NCDM, following the collation of damage assessment of information from affected line agencies. Prime Ministerial approval is required to access this funding. It is held in a reserve budget within the annual current (recurrent) budget under the Office of the Council of Ministers (OCM) and can be drawn upon for a range of unforeseen circumstances, including floods and droughts. Funds remaining in this reserve budget at the end of the fiscal year (December) revert to the budget surplus. Longer-term reconstruction needs may also be projected on the investment budget in subsequent years.

However, individual line agencies do not maintain separate figures on post-disaster response expenditure from their regular annual budget allocations whilst data on the annual size of the OCM's reserve budget and its actual use are confidential, according to MEF. There are also certain difficulties in separating out the cost of disaster-related reconstruction requirements and pre-existing repair and rehabilitation needs.

There are similar issues in identifying climate change and disaster related expenditure inflows of foreign assistance, both off and on-budget. External assistance is recorded by CDC using OECD's ODA classification system. Since 1995 this has included a category on emergency aid (including in response to complex emergencies but excluding aid to refugees in donor countries). OECD latterly relabeled this humanitarian aid and, since 2004, has separated out short-term reconstruction relief & rehabilitation from 'emergency and distress' relief. In 2005 it went a step further and introduced a new sub-title on disaster prevention and preparedness. However, these classifications have not yet been applied in Cambodia and there is no category for climate change adaptation. Moreover, some NGO activities are not included in the CDC database.

Finally, it should be noted that the MEF currently has no mechanisms in place for tracking expenditure on other cross-cutting issues (e.g., poverty reduction, gender) and thus no experience in this area. In the case of poverty reduction, for instance, the RGC simply seeks to ensure that all physical capital investment decisions are made with benefits to the poor in mind. Some interviewees during the October 2009 Joint Mission expressed the view that climate risk expenditure tracking would require considerable capacity strengthening and be extremely time-consuming and costly. They were not convinced of its net merit. More positively, the RGC is currently piloting a system of program budgeting, enabling it to cost individual programs. This could be explored as a possible mechanism for tracking climate risk-related expenditure (and other cross-cutting issues).

2. Opportunities for PPCR support

There are four potential opportunities for PPCR support within the context of national level mainstreaming that emerged as particularly beneficial during stakeholder discussions over the course of the mission:

- The PPCR could provide technical support to MoP and line agencies in mainstreaming climate risk concerns into national and sectoral policies and in developing related monitoring and evaluation indicators. Phase 1 of the PPCR will commence too late to

support the preparation of the Updated NSDP 2009-2013, but could help identify entry points in the NSDP to which CCA endeavors could be tied and, latterly, monitored. The PPCR could also provide sector-specific support on mainstreaming to individual line agencies, including in sectoral policies and plans and in the identification and technical design of individual projects. Close dialogue should be maintained with other planned DP initiatives with mainstreaming objectives, including under GCCA, UNDP-GEF, Danida and, in the related field of disaster risk reduction, World Bank Global Facility for Disaster Risk Reduction and Recovery (GFDRR) programs of support, ensuring that any PPCR activities complement and build on these undertakings. In undertaking this task, it would also be useful to examine lessons learned from past experience in mainstreaming cross-cutting issues into national development planning in Cambodia (e.g., gender).

- The PPCR could make an important contribution in strengthening commitment and attention to CCA on the part of MEF and MoP, via awareness raising around the potential consequences of climate change for socio-economic development, including poverty reduction, long-term sustainable growth, macroeconomic performance and economic returns to individual development projects. As the lead agency for CCA, MoE should also be covered by this activity, strengthening its ability to articulate the linkages between climate change, macroeconomic performance and socio-economic objectives in discussions with MEF and MoP and to make the case for the incorporation of CCA concerns into national and sectoral planning and budgetary processes. Some economic analysis is planned under the on-going UNDP-GEF project but is expected to take a different focus. In the longer-term, this awareness raising initiative could be extended to line ministries as well. Line ministries have some scope for influencing their budgetary allocations by making the case for particular budgetary requests and thus it is important that they, too, can justify requests for financial resources to support climate change adaptation costs in the language of MEF and MoF. Similarly, in liaising with DPs, they may find it beneficial to talk in terms of links of CCA to sustainable development, poverty reduction and economic growth.
- Building on lessons learned from the on-going RGC-World Bank Public Expenditure Review, which is examining climate change adaptation as a cross cutting theme, the PPCR could provide technical support to MEF in mainstreaming climate change concerns into budgetary systems, allocation and reporting/tracking processes, in accordance with the following guiding principles:
 - The additional costs of CCA are transparent. Ideally, one should aim to track the additional costs of climate change adaptation down to the commune level (e.g., the additional cost of constructing a road to withstand a 1-in-50 year flood under climate change scenarios, rather than prevailing climatological conditions). Such information is potentially very valuable in attracting international climate change adaptation funds. However, in practice, this may be unrealistic and it may be better to focus on national level projects and investments, at least at the outset.
 - Levels of public expenditure on CCA across different sectors are sufficient relative to the levels and nature of risk faced, economic and social returns to CCA and the reasonable responsibilities and obligations of government (and the wider international community).
 - Budgetary mechanisms can support joint, interministerial climate change initiatives where appropriate.

- There are adequate financial arrangements in place to manage the residual risk faced by government – that is, to access, manage and allocate adequate disaster relief and reconstruction resources, including via international assistance.
- The PPCR could provide technical support to MoP and other concerned government agencies in identifying and utilizing windows of opportunity to build climate risk concerns into the project preparation process, including relevant appraisal tools such as environmental impact assessment, and into related criteria for prioritizing projects for inclusion in the Public Investment Program (PIP).

3. Phase 1 activities

It is proposed that Phase 1 should focus on the following activities with regard to national and sector policy, planning and budgetary processes:-

- A. Technical support to MoP and line agencies in mainstreaming climate risk concerns into national policies and individual project design and in developing related monitoring and evaluation indicators (subject to developments under the GCCA, UNDP-GEF, Danida and World Bank-GFDRR initiatives). Phase 1 could also include a component on the mainstreaming of climate risk management into the sectoral policies and plans of a single line ministry, initiating a body of work on sectoral mainstreaming work which should continue under Phase 2 of the PPCR.
 - Awareness raising within MEF, MoP and MoE around the potential consequences of climate change for socio-economic development, including poverty reduction and long-term sustainable growth.
 - Technical support and training to MEF in mainstreaming climate change concerns into budgetary systems, allocation and reporting/tracking processes.
 - Technical support to MoP and other concerned government agencies in identifying and utilizing windows of opportunity to build climate risk concerns into the project preparation process and related criteria for prioritizing projects for inclusion in the PIP.

Aide Memoire – First Joint Mission Oct 12-22 2009

Annex C: Synergies with Disaster Risk Management

The disaster risk reduction community has made relatively limited progress to date in Cambodia. RGC policies, legislation and operational activities have focused primarily on post-disaster response and reconstruction whilst development partner activities have been limited, largely focusing on some limited large-scale flood control investments and a number of small scale risk reduction initiatives at the sub-national, typically on a pilot basis and implemented through NGOs. Although there has been some effort to secure a greater emphasis on disaster risk reduction, one recent report noted that the field ‘remains saturated with reports containing good recommendations that wait to be implemented; and interventions that are yet to make sustainable impact’.⁴⁴

However, a shift in emphasis is hopefully finally underway, following the RGC’s launch in March 2009 of a new Strategic National Action Plan for Disaster Risk Reduction, 2008-2013 (SNAP), firmly embracing principles of risk reduction and its mainstreaming into broader development, and on-going preparation of related legislation. The World Bank GFDRR is planning a program of technical assistance to support implementation of the SNAP. The UN International Strategy for Disaster Reduction (UNISDR) and Disaster Preparedness Programme of the European Commission Humanitarian Aid Department (DIPECHO) are also closely involved in the SNAP process and further development partner funding will hopefully follow. On the government side, the National Committee for Disaster Management (NCDM) is responsible for coordinating disaster risk management issues in Cambodia. Other government agencies, including MoP, also contributed to the development of the SNAP.

The SNAP covers a number of themes that are also on the CCA agenda, including mainstreaming of disaster risk reduction into national, sectoral and local development policies and plans; national and local risk assessments; improved flood forecasting and early warning capabilities; education and awareness raising; and the promotion of structural and non-structural measures to enhance resilience. In view of the considerable overlap in objectives and agendas between the two communities, it is essential that their respective policies, strategies and programs of action, including under the PPCR, are carefully coordinated to avoid duplication, ensure maximum impact and cost-effective use of resources and that the two communities learn from each other’s experiences.

For instance, with regard to lesson-learning, NGOs working at the grassroots level have already accumulated a body of experience on disaster risk reduction but much of this work has been done on a pilot basis. There may be considerable benefit in reviewing this work and identifying opportunities for scaling up. DIPECHO has already undertaken an evaluation of its disaster risk reduction work in Cambodia over the period 1998 to 2007 (all implemented through NGOs – see Annex A), providing a useful start to such a review.

More fundamentally, it is essential that decision-making around disaster risk reduction, at both a policy level and in the design of individual disaster risk reduction interventions, is placed within

⁴⁴ GFDRR, 2009. *Disaster Risk Management Programs for Priority Countries: Summary 200*. Washington, DC: Global Facility for Disaster Risk Reduction and Recovery.

this broader climate change framework and takes account of the likely consequences of climate change for the frequency and intensity of climatological hazards. This is crucial in ensuring that development resources are spent cost-effectively and their returns maximized.

During the preparation and implementation of the PPCR, close dialogue should be maintained with NCDM and its partner agencies implementing relevant components of the SNAP. The PPCR should also actively promote the development of synergies between the disaster risk reduction and CCA communities more broadly. To some extent, the SNAP already seeks to do this, acknowledging the overlap, stating that it fully supports the NAPA and including the integration of disaster risk reduction into the climate change adaptation program as one of its priority programs. The SNAP also proposes a joint MoE-NCDM committee to identify and support common activities. However, considerable effort is required to ensure that such intentions are translated into the development of strong linkages between the DRR and CCA worlds and joint programs of action, particularly in sectors that are highly vulnerable to climatological hazards. Moreover, it should be recognized that the NCDM has no existing capacity for disaster risk reduction and is not an operational agency. Currently, it does not even monitor disaster risk reduction activities across different line agencies or at the sub-national level and so, as it stands, may not provide a particularly strong partner for collaboration with NCCO, CCO and the new climate change department within MoE.

Annex 2: Summary of follow-up and support after First Joint Mission

1. The first joint PPCR mission was held from October 12 to 22 2009, with participation of the Ministry of Economy and Finance (MEF), ADB, IFC, World Bank, UNDP and DFID. The joint mission identified the MEF and MoE as lead RGC counterparts. The scope of the PPCR was also refined and the priority vulnerable sectors for PPCR in Cambodia were selected as agriculture, water resources, and rural infrastructure. UNDP was subsequently requested by RGC and World Bank to provide a lead support role to MEF and MoE for the preparation of PPCR Phase 1 work plan. UNDP also collaborated with IFC and World Bank to undertake further consultation with private sector and civil society organizations respectively.
2. Parallel engagement processes were undertaken for Government, Civil Society and Private Sector.

i) Government Process

Objectives

3. **Establish Dialogue Platform.** A key priority in designing the engagement process for Ministries relevant to the sector priorities selected during the 2009 joint mission was the establishment of a formalized inter-Ministerial dialogue platform on climate change adaptation issues to support mandated NCCC leadership. As the mandated climate change coordination entity for the RGC, the NCCC is supported by a Secretariat, being located in the Ministry of Environment's Climate Change Department. While the NCCC is intended to have a designated inter-ministerial Technical Team to support sector-level coordination, this has not been established. UNDP's support to MEF and MoE for the establishment of the inter-Ministerial has therefore been designed and implemented with the view of supporting the established institutional framework of overall NCCC leadership.
4. **Raise Awareness on Climate Change.** The engagement process was designed to raise awareness within targeted Ministries on climate change resilience in the global, regional, national and sub-national contexts.
5. **Explore Key Climate Change Adaptation Issues relevant to each Ministry.** The process aimed to explore key climate change issues relevant to each selected Ministry, based on the PPCR Cambodia Aide Memoire and TORs, in order to identify priority climate change adaptation needs.

Methodology & Approach.

6. **Establishment of Focal Point Network & Ministry Teams.** MEF and MoE requested each of the eight selected Ministries to nominate a Focal Point to facilitate the development of PPCR Phase 1. Draft Focal Point TORs were developed to define the scope of input required, including the establishment of Ministry Teams composed of a range of functional capacities including

technical, planning, gender, communication and decision making representatives. The nominated focal points and team compositions are included in Table 1.

7. **Focal Point Workshop.** The focal point workshop set the scene for climate change adaptation in Cambodia. Focal Points from the 8 selected Ministries finalised their TORs and the work plan.
8. **Work Plan Development.** An indicative PPCR Phase 1 work plan was jointly developed, including an introductory workshop for nominated Focal Points, individual Ministry working sessions for Ministry Teams, a wrap up session, and a consultative PPCR Phase 1 drafting process. The final schedule as realized is presented in Table 2.
9. **Sector Working Sessions.** Eight separate Ministry working sessions and one meeting with the Secretariat of the National Committee for Democratic Development (NCDDS) were designed and facilitated by UNDP, ranging from full- to half-day depending on the scope of engagement in climate change. In the majority of sessions MEF and MoE Focal Points, and World Bank and ADB representatives participated. UNDP Private Sector and Governance teams and UNDP Communications Unit provided additional expertise. A sample agenda for the working sessions is included in Table 3.
10. **Wrap Up Session.** A wrap-up session was held with focal points to present the main outputs of the sector Ministry working sessions and agree on the drafting process details.
11. **Drafting Process.** Following the wrap-up session, UNDP supported MEF and MoE in the PPCR Phase 1 drafting process with multiple reviews and Ministry feedback, culminating with submission of a final draft PPCR Phase 1 proposal for World Bank Group and ADB consideration.

Discussion of Findings

12. Building on the findings of the First Joint Mission, each sector Ministry working session explored key climate change adaptation issues relevant to the respective Ministry, identification of relevant functional units within/partnered to Ministries, climate change adaptation needs, and main entry points for climate change adaptation interventions. The analysis and discussion informed the development of the proposed Climate Change Programme Framework. The main purpose of the activity was awareness raising and facilitation of self-exploration of key issues. Some findings were drawn from these semi-structured discussions as follows:

Awareness

13. Limited overall awareness on climate change was recognized as a key challenge by Ministry Teams, with all levels (national, sector, sub-national) and actors (Government, civil society, private sector) requiring awareness building both on general climate change issues and on adaptation issues relating to specific areas of interest/responsibility.
 - Needs/Functional Units
 - Targeted awareness building on climate change adaptation to National-level coordinating bodies such as the NCCC and the NCDDS was identified as a

priority need. The CCD was recognized as the mandated unit to coordinate and implement awareness-building at the National-level.

- In-house Ministry level awareness building on climate change adaptation was recognized as a priority need. The establishment of climate change functional units within Ministries was seen as the most effective mechanism to ensure that awareness was integrated across relevant Ministry-level functions.
- Awareness building at the sub-National level was uniformly recognized as a priority. The role of existing agricultural and other extension programs was highlighted as a mechanism for transmitting information from the Ministry level down to Provincial, District and Commune levels. Additionally, civil society and the private sector were seen as key players in spreading awareness at the sub-National level and their engagement and integration into awareness building was seen as an effective means of achieving this goal.
- Entry points
 - Other than the establishment of Ministry-level climate change functional units, entry points at the National and sector levels were challenging to identify. This is likely due to a) the limited level of coordination and information sharing between Ministries, b) limited outreach capacity of the CCD, and c) limited prior experience of cross-cutting issue awareness building with the notable exception of gender.
 - The sub-National reform process via the National Programme for Sub-National Democratic Development (NP-SNDD) was identified as a key entry point for awareness building at the Provincial, District and Commune levels. Existing outreach programs on environment, agriculture and water management were identified as key entry points for climate change awareness building Sub-National level. Commune Council NRM functions, and the role of Pagodas in building awareness on environmental and other issues at the Commune level were highlighted as key entry points.

Mainstreaming Policy/Planning/Project

14. A common theme among Ministries was the need to translate climate change awareness into “climate proofed” policies, plans and projects. This issue of linking general knowledge and understanding into concrete, practical mainstreaming steps was recognized as a key challenge, given the scale of transformative impact required, and the relative paucity of successful examples to draw on at all levels. The close linkage between awareness and mainstreaming capacity was highlighted.

- Needs/Functional Units

- Mainstreaming capacity development linked to awareness on climate change adaptation was identified as a key need across all Ministries. Policy, planning and project development functional units within Ministries were prioritized for capacity development.
- For those Ministries responsible for infrastructure development/maintenance such as MRD and MPWT, the development of “climate proofed” guidelines/standards was seen as a priority, and the development of capacity within the functional units responsible for overseeing the guidelines/standards was likewise prioritized.
- Entry Points
 - Policies/plans and projects that are currently under development or in the pipeline were identified as key climate change mainstreaming entry points. It was recognized that retroactively climate screening major policies/plans already developed and under implementation would be a valuable entry point from the standpoint of developing lessons learnt and building the knowledge base for pipeline policies/plans.
 - The role of Technical Working Groups was highlighted as a useful entry point for best practice dissemination of climate change mainstreaming at the sector level.
 - The Sub-National reform process was again identified as a key entry point for building capacity at the Provincial, District and Commune levels in climate change mainstreaming.

Mainstreaming Budget

15. Strengthening understanding of the costs related to climate change adaptation, including how to measure, factor into budgeting and accurately account for such adaptation costs was identified as a priority need for climate change mainstreaming at the budget level.
 - Needs/Functional Units
 - The need to develop a “master plan” for climate change was highlighted in relation to developing a long-term costing strategy, integrating adaptation costs into current budgetary mechanisms, and implementing an associated capacity development plan on adaptation costing. MEF’s Departments of Budget, Investment and cooperation, and Economic and Public Finance Policy were identified as the core functional units responsible for providing leadership on climate change adaptation costing.
 - Entry Points
 - The development of a climate change “master plan” was seen as a key entry point for mainstreaming adaptation costs into budget processes.

- Existing budgetary processes for DRR were put forward as relevant entry points, both in terms of linking adaptation costing mechanisms with these processes and also as examples to draw on.
- The Sub-National reform process was again identified as a key entry point for building capacity at the Provincial, District and Commune levels in climate change adaptation cost mainstreaming.

Data and Information Needs

16. Current low levels of available climate data and information were identified as contributing to low predictive capacity. Data hoarding hampers awareness building and mainstreaming across all levels and sectors of Government, and needs to be urgently addressed.

○ Needs/Functional Units

- Increasing the number of meteorological and hydrological monitoring stations was identified as a clear priority. Gaining a better understanding of land use, forest cover, and facilitating the collection of gender disaggregated climate change-related data was also highlighted. MOWRAM's Departments of Meteorology and Hydrology are the primary actors involved in climate monitoring, while MAFF, MoE, MOP, MPWT, MEF, MOI and MRD are all involved to varying extents in the collection of climate change-related data.
- Increasing the availability of meteorological and hydrological data between Ministries was highlighted as a key need. Making data accessible at the sub-National level and to civil society and private sector was recognized as a priority. The role of Technical Working Groups in disseminating data/information (e.g. REDD) was noted.

○ Entry Points

- Planned socio-economic, land-use, flooded-forest, and threatened species mapping studies were seen as key entry points for increasing understanding of climate change adaptation needs/vulnerabilities. The integration of gender into planned studies was recognized as a valuable contribution to better understanding gender/climate change linkages.
- Using the sub-National reform process and emergent governance mechanisms was identified as a key entry point for data/information dissemination.

Participation and Coordination

17. Enhancing coordination within and between Ministries on climate change issues was identified as a priority. From the development of a formalized inter-Ministerial focal point network to developing an agreement on data sharing – across the board improvements were identified as

being required. Strengthened engagement of civil society and the private sector was also promoted.

- Needs/Functional Units
 - The establishment of Climate Change Functional Units within Ministries was assessed as a priority method of promoting strengthened coordination within Ministries.
 - The establishment of a formalized Inter-Ministerial Focal Point Network post PPCR development was seen as the most appropriate way to ensure inter-Ministerial climate change dialogue and information/data sharing.
 - Promoting the strengthened engagement of civil society and the private sector through the establishment of relevant facilities was also noted.
- Entry Points
 - The establishment of a Climate Change Technical Taskforce (CCTT) to support the NCCC was identified as a key entry point to facilitate the formation of a formalized inter-Ministerial Focal Point Network. This Network should be closely linked to existing DRM structures, and where possible integrate existing climate change functional units.

18. In the context of the proposed programme framework potential actions were identified during the Government engagement process in order to respond to identified needs and entry points. These have been outlined in Table 4.

Table 1: Ministry focal points and team compositions

Ministry	Focal Point	Team Composition
Economy and Finance (MEF)	Dr. Tauch Chan Kresna - chankresna.tauch@mef.gov.kh	Lun Mareth – Procurement Officer MEF Suon Len – Training Coordinator – EFI H.E. Vong Sondap – Deputy Secretary General Meas Sam An – Project Monitoring Officer Houl Bonnaroth – WBD Soan Sereivathanak – Representative LAD Chhan Somethea – Deputy Director Hav Ratanak – Budget Department Ros Borrom – Department DIC
Environment (MoE)	Mr. Meas Sophal - bpamp.moe@gmail.com	Sem Sundara – Director International Cooperation Department, Chhun Sophal – Office Chief, EIA Department, Pum Vicheth – MoE,

<p>Agriculture, Forestry and Fisheries (MAFF)</p>	<p>Mr. Vanna Samreth - samrethv@yahoo.com</p>	<p>Long Kheng – Wetlands and Coastal Zone Department, Ney Chanthy – Office Chief GDANCP, Sokha Sophorn – Deputy Director GDANCP, H.E. Son Sovouth – Director Department of Education, Sum Thy – Director CCD, Thach Trin – Assistant to Focal Point MoE Preap Visarto – Acting Director PPSPS/GDA, Pheav Sovuthy – Acting Director DALRM/GDA, Ouk Vibol – Acting Director Dept Conservation FIA, Pich Sereywath – Deputy Director FIA, Hoot Sothea – Officer FA, Thuch Phalla – Officer FA, Chea Nareth – Officer FA, Dr. Keo Omaliss – Deputy Director DWB FA</p>
<p>Rural Development (MRD)</p>	<p>Mr. Stong Kia, Assistant of H.E. Dr. Seng Lymeng, Under Secretary of State - kiastong@yahoo.com</p>	<p>Sao Chivoan – MRD H.E. Dr. Seng Lymeng Under Secretary of State Sek Muny - Deputy of Training Department Lach Samon - Gender Deputy Sum Bunnary - Deputy of Financial Department Kao Bour – Officer Srin Pouthy - Deputy Director of Rural Water Supplies Department Hy Say - Deputy Director of Road Department Ky Sophal - DD/DRHC</p>
<p>Water Resources and Meteorology (MoWRAM)</p>	<p>Mr. Oum Ryana - rynaoum@yahoo.com</p>	<p>Thach Sovanna – MOWRAM Tong Seng – MOWRAM Nuon Chamnap – MOWRAM Bin Chann Mony – MOWRAM Long Saravuth – MOWRAM Men Mech Bonn – MOWRAM Sarn Hengsong - MOWRAM</p>

Planning (MoP)	Mr. Sin SETHA - sin.setha@gmail.com	H.E. Nuth Chansokha - Under Secretary of State H.E. Hang Lina - Deputy Director General NIS Chou Putheany – Director of Social Planning Department Lun Kim Leang - Deputy Director General NIS Kong Mony Piseth – Vice Chief Office MOP Horn Den - Deputy Director MOP Sin Chestha - Deputy Director MOP
Interior (MoI)	Mr. Ny Kimsan - kimsandoc@hotmail.com	Sok Chamroeun – MOI Sok Sothy – MOI Loeung Vannak – MOI Long Viseth - MOI
Public Works and Transport (MPWT)	Mr. Bong Vuthy - vuthy.bong@yahoo.com	Chreang Phollak – PDD Hang Choeun – WD Duy Chan Dara – Land Transport Department Chao Sopheak Phibal – Road Department Mak Sideth – Merchant Marine Department

Table 2: Working schedule for Government engagement and preparation of Phase 1 work plan

Action	Sub Action	Detail	Responsibility	Deadline
Team ⁴⁵ Building	MEF letter to MoE, MoI, MRD, MOWRAM, MOP, MAFF, MPWT	Request engagement of key technical focal points	MEF	6 Jan
PPCR Phase 1 Pre-consultation meeting	Team meeting	Full day Introduction to PPCR, scope of work, relevance, key documents, consultation schedule, agree design development tasks	MEF/MoE	20 Jan

⁴⁵ The Team for design of phase 1 of PPCR consists of technical focal points from MEF, MoE, MoP, MoI, MRD, MAFF, MOWRAM, MPWT with support from UNDP, WB, ADB

²Phase 1 consultation timetable to be finalised by Team on 20th Jan during pre-consultation workshop

Phase 1 Component consultation	Ministry working Session	Team	MOE	29 Jan
	Ministry working Session	Team	MEF	5 Feb
	Ministry working Session	Team	MAFF	9 Feb
	Ministry working Session	Team	MOP	15 Feb
	Ministry working Session	Team	MOI	16 Feb
	Ministry working Session	Team	MPWT	17 Feb (am)
	Ministry working Session	Team	MOWRAM	17 Feb (pm)
	Ministry working Session	Team	MRD	22 Feb
	Ministry working Session	Team	NCDD-S	2 March
Wrap-Up	Consultation summary	Sectoral Focal Points, Private Sector Integration	MEF, MoE, MOWRAM, MAFF, MPWT, MOI, MOP, MRD, WB, IFC, ADB, UNDP	19 Feb
PPCR Phase 1 Proposal drafting	PPCR Phase 1 Initial Draft	Developed for sectoral feedback	MEF, MoE, UNDP, WB, ADB, IFC	5 March
	Feedback on Initial draft received		Focal Points & Ministry Teams	26 March
	PPCR Phase 1 Second draft	Developed for focal point feedback	MEF, MoE, UNDP, WB, ADB, IFC	Week of 29 march
	Feedback on Second draft	Feedback provided	Focal Points & Ministry Teams	20 April
PPCR Second Joint Mission	High level consultation	Obtain high level feedback on Phase 1 document	Focal Points, MEF, MoE, WB, ADB, IFC, and other DPs	20-23 April
	Finalise Phase 1 Document	Sign off on work plan	MEF, MoE, WB, ADB, IFC, UNDP	April 26

Table 3: Sample Agenda for Working Session with Ministry teams

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- 1) Welcome and Opening Remarks
 - 2) Presentation: Introduction to Climate Change (UNDP)
 - a) Science of Climate Change
 - b) Climate Change in Cambodia
 - i) Predicted Future Impact
 - ii) Threats and Opportunities
 - c) Principles of Adaptation
 - i) Vulnerability & Key terms
 - ii) Adaptation and sustainable development
 - iii) Gender
 - iv) Whole of Government approach
 - d) Adaptation Initiatives in Cambodia
 - i) Overview of PPCR and CCCA
 - ii) Linkages and coordination
 - 3) Presentation: PPCR development process and schedule
 - a) PPCR Phase 1 & 2 design process
 - b) Establishing Ministry teams
 - c) Schedule for Phase 1 work plan development
 - 4) Discussion: Elements relevant to Ministry (Ministry/UNDP)⁴⁶
 - a) Awareness Building
 - b) Mainstreaming Climate Risk
 - c) Planning
 - d) Sector Linkages
 - e) Projects
 - f) Adaptation costs
 - 5) Summary & Priority Actions for Ministry Phase 1 (Ministry/UNDP)
 - 6) Next steps
-

Table 4: Potential enabling actions (not prioritized) identified during Working Sessions.

Output Areas by Programme Component	Code	Description	Possible Executing Agency
1. Awareness & Communications			

⁴⁶ This section was tailored to address key issues relevant to each ministry within the general areas identified for Phase 1 in the First Joint Mission.

1.1 Policy,
Strategy and
Plans

1.1.1 Build awareness on the potential consequences of climate change for socio-economic development and long-term sustainable growth. MEF, MoP

1.3 Investment 1.3.1 Build awareness with private sector on the impact on business, and adaptation measured especially with regards infrastructure. IFC/UNDP

2. Climate Risk Management

2.1 Policy,
Strategy & Plans

2.1.1 Technical support and training to ensure central planning support to sectors capacity for support of CCA mainstreaming. MoP, MoE

2.2 Institutions &
Capacity

2.2.1 Technical support and training to mainstream CC concerns into budgetary systems, including allocation and reporting/tracking processes MEF

2.2.2 Technical support and training to mainstream CRM into planning processes at national and sub-national level MoP, NCCD

2.3 Investment

2.3.1 Support integration of Climate Change risk management into World Bank's Community-based Agriculture Programme, ADB's Water Sector Development Program, NCCD NP-SNDD and others. World Bank, ADB, NCDD

2.3.2 Technical assistance and training to support integration of CRM into project preparation processes and related criteria for formulation of PIP MoP, MEF
MoI, MRD, MPWT

2.4 Data &
Knowledge

2.4.1 Undertake vulnerability assessment in selected provinces not covered by SNC MoE, MOWRAM, MAFF, MRD

2.4.2 Upgrade and expansion of existing meteorological and hydrological monitoring systems MOWRAM, MPWT, MAFF, Provincial DoM, NGOs

2.4.3 Support inclusion of Climate Change related data in Agriculture survey. MoP, MAFF

	2.4.4	Technical Assistance and training to Agriculture and Infrastructure insurance providers on climate risk assessment	IFC
	2.4.5	Review existing experience and prepare feasibility study for early warning systems for farmers at province and commune level.	MOWRAM, MAFF, NGOs
3. Research & Learning			
3.4 Data & Knowledge			
	3.4.1	Undertake review of lessons-learnt and identify opportunities for scaling-up of community-based disaster risk reduction experience	SNAP, NGOs
	3.4.2	Develop and evaluate vulnerability and adaptation assessment tools required to pilot investments on an ecosystem basis	MoE, MAFF, MOWRAM and others
4. Coordination & Participation			
4.1 Policy, Strategy and Plans			
	4.1.1	Pilot Citizens' engagement in water and agriculture sector through a "climate hearings" action to promote awareness of the voice of the poor.	NGO (tbd)
4.2 Institutions & Capacity			
	4.2.1	Undertake a consultation process and feasibility study of a suitable platform of support for mainstreaming of CC in and through Civil Society Organisations	NGO (tbd)

ii) Private Sector Process

19. The IFC and UNDP Private Sector Integration team undertook several brainstorming sessions on the PPCR private sector components in December 2009 - February 2010. IFC then coordinated a series of consultations with key private sector stakeholders in January and February 2010 in Phnom Penh.

Objectives

20. The objective of this consultation was to enhance the private sector inputs in the design of the Phase 1 proposal for PPCR, and where possible to identify economic opportunities for the

Private Sector in the climate change adaptation arena that UNDP and IFC could support in PPCR or via other initiatives.

Methodology & Approach

21. In meetings with companies, the team undertook semi-structured interviews designed to gauge private sector's awareness and interest in activities that would address climate change adaptation.
22. The list of companies interviewed is included in Table 5

Discussion of Findings

23. In general, the climate change adaptation challenge, and the links between climate change, economic growth, human rights, and poverty alleviation, has not been high on the corporate agenda in Cambodia.
24. The potential economic impacts of climate change are unclear to private sector even though there is sufficient evidence to suggest that most economic activity will be affected with impact on production processes, core operations, supply chains, customer demand, or macroeconomic context. The idea that companies may need to consider the likely effects of climate change in their risk planning is not widely accepted.
25. A crosscutting issue for business, especially micro- and small- enterprises, is the difficulty in accessing finance. In the case of private sector infrastructure, this barrier is compounded by lack of capacity to assess climate risks and determine that associated adaptation costs. In general, private sector is reluctant to make up-front investments which would have beneficial climate implications for the following reasons:
 - a. limited access to finance for these purposes;
 - b. limited awareness and capacity to assess climate risks and factor into investment analysis;
 - c. adaptation investments are capital intensive and require a prohibitively long payback period; and
 - d. low potential for short-term economic returns from such investments.
26. It is evident that mainstreaming climate risk management into private sector investment decision-making would need to include substantial awareness building on climate change, adaptation options and potential financing mechanisms. It is likely that incentives will be required (i.e. concessionary funding) to promote early adopters and appropriate legal and regulatory mechanisms established which would obligate private sector to address climate change issues.
27. Private sector also has a low level of awareness of the emerging business opportunities presented by the climate change adaptation challenge. The potential role of private sector as climate change adaptation service providers either by providing services which directly contribute to the management of climate risk (e.g. crop insurance) or services that have taken climate change considerations into account and are incorporated into the cost structure (e.g.

climate proof infrastructure). It is evident that awareness building and technical assistance can support the private sector to take-up these opportunities. In particular, access to timely and accurate climate and sector data will be required.

28. During the interviews and subsequent team discussions a number of potential actions were identified and are presented in Table 6.

Table 5: List of companies consulted by IFC and UNDP

Organization	Sector	Contact/Position	Phone	Email	Comments
ANZ Royal Bank (Cambodia) Ltd.	Banking	Patrick Gourlay, Head of SME (Provinces)	063 969 728; Mobil e: 012 333 629	Patrick.Gourlay@anz.com	Planning a CC workshop (with some focus on mitigation activities).
ANZ Royal	Banking	John McGinley	023 999 000	john.mcginley@anz.com	
ACLEDA	Banking	In Siphon	023 998 777/430 999/ Mobil e:015 900 144		Assistant Mr. Visouth
AMK	Micro-insurance	Paul Luchtenburg, Chief Executive Officer	012 9770 51/0 23 224 763/023 993 062	paull@online.com.kh, paul.luchtenburg@amkcamodia.com	Assistant Ms. Srey Phal 012 600 865
Comin Khmere	Infrastructure	Richard VAILLANT	012 770	r.vaillant@comin.com.kh	Renewable energy Water and power supply &

		RE Division Manager	527		distribution
EMI	Investment Fund	Joshua MORRIS	012 614 146	joshua.morris@emergingmarkets.com.kh	
Forte Insurance	Insurance	Chris SAKETT	023 885 066		
GRET	Agriculture / Irrigation	Jean-Marie BRUN Project Manager	023 220 259/ 023 220 343	brun@gret.org	
Kosan Engineering	Infrastructure	Thierry DALIMIER Director	023 212 891/ 012 840 056	dali@online.com.kh	
Nagathom Fund	Agro-Business	Bevan Rakoia, General Manager	Mobil e: 012 901 268	bevan@thenagathomfund.com	Is an agro-business fund initially set up to supply vegetables to Siem Reap, but which is now focusing on rice farming along with tree planting. The group is highly aware of climate change issues
REF		Executive Director	023 997 600/ Mobil e: 012 940 379		Ms. Vanna- 012 30 44 48
Siem Reap Chamber of Commerce	Industry Association	Huy Pheav, Vice President Churany Meas,	063 969 169 Mobil e:	churany@angkorwatsrcc.org.kh	The Chamber expressed strong interest in building awareness of members through seminars, workshops and

Director	012	information dissemination.
General	838	
	342	

Table 6: Potential Actions (not prioritized) identified during consultations with Private Sector companies

Sector	Description	Benefits	Barriers	Possible PPCR Phase 1 action (not prioritised)
Agriculture	<p>1) Promoting private sector investment in climate proof dykes, polders and irrigation schemes.</p> <ul style="list-style-type: none"> • Kosan Engineering (French/ Belgian engineering company) has implemented 2 dykes north east of Phnom Penh, in sugar cane growing areas. Project cost of US\$400,000. • Kosan there are about 200 farming collectives who can afford to pay. • GRET has done similar work 	<ul style="list-style-type: none"> • Improve management of floods and drought risk to agricultural lands • Improve crop production. • Potential for low-head micro-hydro-turbine at reservoirs for electricity or water reticulation. 	<ul style="list-style-type: none"> • Lack of access to finance for farmers. • Limited capacity of farming collectives to coordinate and pay for the investment. • Limited access to long-term technical services to ensure dykes work properly. • Low awareness of climate change impacts and adaptation options 	<ul style="list-style-type: none"> • Feasibility study of private sector or PPP investments involving farming collectives as investors. The feasibility study would also evaluate the possibility of including co-generation option in the business model. • Awareness building for engineering, finance, construction service providers and their clients.
	<p>2) Crop Insurance / Weather Insurance</p> <ul style="list-style-type: none"> • ANZ, Aceda, Forte Insurance, AMK, Infinity indicate that some consider crop and weather 	<ul style="list-style-type: none"> • Insurance provides additional loss management options for farmers 	<ul style="list-style-type: none"> • Lack of quality data for developing such products. • Difficulties in distributing to farmers – need 	<ul style="list-style-type: none"> • Expand and improve weather and agricultural data monitoring networks

	<p>insurance products have potential in Cambodian market.</p> <p>3) Improved water management through micro-irrigation.</p> <ul style="list-style-type: none"> • IDE is currently marketing their product through AMK (a microfinance institution) who distributes the product and provides loans to farmers to be able to buy the product. • IDE then provides technical assistance to put the drip-irrigation system in place and maintain/operate it. 	<ul style="list-style-type: none"> • Improves access to water management options for farmers. • Improved resilience to drought. • Improved crop yields. 	<p>for non-traditional marketing/support networks.</p> <ul style="list-style-type: none"> • Difficult to market and distribute to farmers • up-front investment cost unaffordable for farmers. • Limited access to installation and technical support services. 	<ul style="list-style-type: none"> • Pilot crop and weather indices. • Assess the impact of drip irrigation systems currently being put in place by companies such as IDE. • Evaluate possibility of expanding IDE/or other similar drip-irrigation product around Cambodia. • Assess capacity of farmers to pay for system. • Assess co-benefits to farmers (other than water conservation) such as crop quality and yield. • Feasibility study of micro-finance, subsidy or other enabling financial options.
Water	<p>4) Promotion of private sector involvement in water services.</p> <ul style="list-style-type: none"> • There are a few (small) water concessions that 	<ul style="list-style-type: none"> • Mobilise private sector investment • Introduce performance based concessional 	<ul style="list-style-type: none"> • High cost and limited access to finance 	<ul style="list-style-type: none"> • Stock-take experience in Cambodia and identify good cases • Review opportunities

	<p>exist in Cambodia in semi-urban areas. The average investment sizes are US\$100,000.</p> <ul style="list-style-type: none"> • If there are maybe 20 such opportunities, a line of credit to a financial institution can be developed to on-lend to such concessions. 	<p>arrangements to improve service provision</p>	<p>of bundling, financing and scaling-up such water concessions and identifying potential investors.</p>	
Infrastructure	<p>5) Improve capacity of financial intermediaries to assess climate risk and factor into investment and loan activities</p> <p>6) Mainstream climate change into infrastructure investments.</p> <ul style="list-style-type: none"> • Assistance to RGC on structuring infrastructure projects and making climate part of the investor's obligations and providing subsidized funding for these. 	<ul style="list-style-type: none"> • Financial intermediaries able to assess climate risk • Greater awareness of need to factor climate change into investment decisions • Climate risk management considerations factored into infrastructure planning, contracting and financing 	<ul style="list-style-type: none"> • Lack of awareness and demonstrations. • Lack of access for private sector to financing for adaptation costs. • Limited scope of technical standards and regulations • Low level of awareness of the potential impacts of climate change on infrastructure investment • Limited data on adaptation options and costs 	<ul style="list-style-type: none"> • Provide training and technical assistance to financial intermediaries on climate risk management. • Provide training and technical assistance to RGC with regards the planning and structuring of infrastructure projects to ensure investors are obligated to address climate change considerations. • Feasibility study of private sector infrastructure financing options for adaptation.

iii) Civil Society Organisations Process

29. Following on from the consultation undertaken during the First Joint Mission in October 2009, the World Bank and UNDP undertook small group and one-on-one meetings with representatives from key local and international Civil Society Organisation (CSO) engaged in climate change related activities in Cambodia between November 2009 and January 2010. During the initial consultation it was clear that coordination mechanisms on Climate Change for CSOs were emerging - notably with the establishment of an NGO Climate Change Network and several joint initiatives. The low level of awareness and limited capacity to address climate change issues in NGO programmes was recognised.
30. It was therefore proposed that specific actions would be undertaken during Phase 1 of PPCR to enhance engagement with CSOs. This would then inform the participation of CSOs in PPCR implementation and design of a suitable support component for PPCR Phase 2. The follow-on consultations were subsequently designed to elucidate the mechanism and approach for CSO engagement.

Objectives

31. The objective of this consultation was to identify a suitable mechanism to engage CSOs and to identify associated actions required during Phase 1 to support CSO engagement in the strategic program.

Methodology & Approach

32. In meetings with CSOs, the team undertook brainstorming and semi-structured interviews.
33. The discussions were facilitated to address the following questions:
 - e. What type of support is currently available? In what types of activities are CSOs engaged?
 - f. What type of platform for engagement and support facility is needed for CSOs to engage in climate change?
 - g. How could CSOs participate strategically in the preparation of this PPCR engagement?
34. Based on these discussions and discussed with senior management from key CSOs engaged in climate change a Terms of Reference was prepared for a consultant to assist CSOs during Phase 1 to promote a CSO support facility. This TOR is included in

Discussion of Findings

35. In general, the CSO community in Cambodia is highly motivated to the challenge posed by climate change and several substantive initiatives are underway or in preparation. It is clear however that in many cases awareness and capacity is limited and funding options to support these initiatives are diffuse.

36. Key points arising from the discussions regarding the type of engagement and support facility needed are as follows (though it should be noted these are only preliminary conclusions and would be verified through the proposed consultancy):
- A CSO facility would likely cover (a) strategic engagement; (b) capacity building (c) grant making facility (d) lesson learning (e) innovation fund;
 - A CSO facility would be a useful and critical component of the PPCR, there is a need for CSOs to also integrate climate risk in planning and programming.
 - A preferred management model would appear to be one similar to the DFGG-facility with management agent/organisation disbursing grants to local NGOs.
 - There is a need to look at the synergies with the CCCA and it has been clearly articulated that there is value in participating in PPCR in and of itself. At the same time it may be possible to have one governance structure (steering committee, UNDP management etc) for decision-making of the funds envisaged.
 - A range of activities should be explored: policy engagement, advocacy, adaptation of planning and programming service delivery, in addition to a grant facility.
 - Linkages with government departments and levels of government will be critical, as will linkages across sectors (e.g. WRM with health)
 - Linkages to commune funding (e.g. the CSF) for climate change should be explored.
 - The focus on the "integration" aspect of the PPCR was welcomed, but there was concern with too narrow a sector focus (roads, irrigation, rural infrastructure) and a broader, more integrated sector approach would be preferred (allowing engagement in cross-country issues, and migration, urbanization and security for instance).
 - A need for enhanced engagement with the private sector, and possible implications on how the "non-state" aspect of the PPCR is framed
 - Direct grants (both large and small) might be appropriate but possibly separate components for small and large initiatives.
 - It was noted that 3 years is a short timeframe.
37. Key points arising with respect to how CSOs could participate strategically in the development of the PPCR engagement, a number of options were proposed:
- CSOs establishing an advisory team (probably from the Climate Change network)
 - Outsource the design to a consultant to immediately work with this team and the PPCR team (rather than the PPCR team alone with the odd consultation).
 - The CSO representatives approached appreciate the effort to put them in the driver's seat to better define approach, scope and content but struggle to know how to use that seat effectively due to issues of representativeness.
 - CSO members concurred on their view that the NGO Climate Change Network is an emerging structure that could benefit from PPCR support. The approach proposed in the short term might more focus on expert facilitation - an independent consultant work in a consultative manner to bring together the view of the CSOs on the scope, content and processes involved.

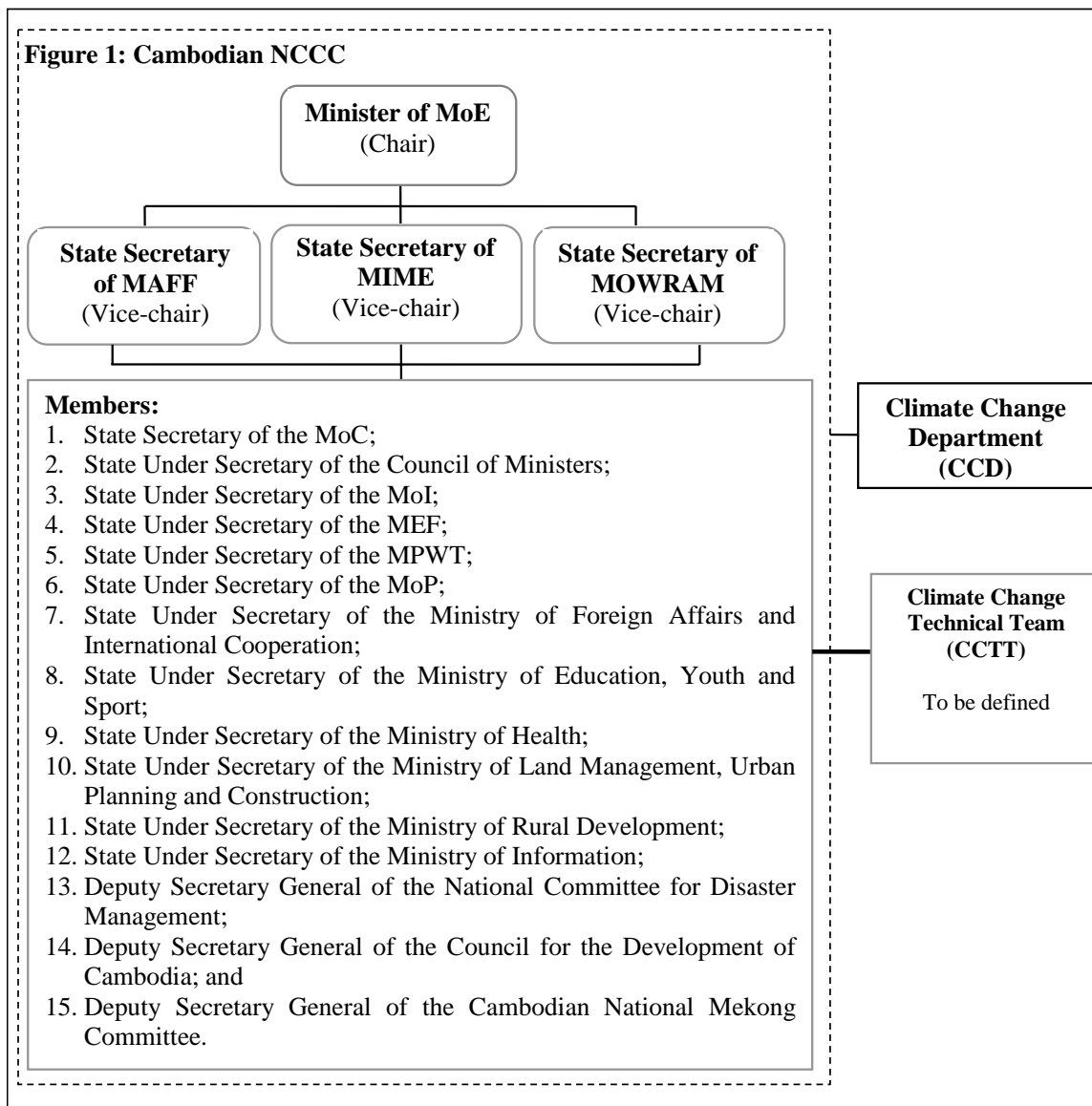
Annex 3: NCCC Organizational Set-up

The Kingdom of Cambodia ratified the UNFCCC on 18 November 1995 and it later entered into force on 17 March 1999. Cambodia commenced its Climate Change Enabling Project (CCEP) stage I as the first climate change related project in 1999, followed by CCEPII in 2002. Both projects helped to raise the government staff technical and institutional capacity and the public awareness on climate change issues as well as assisting Cambodia in the preparation of its Initial National Communication (INC) to the UNFCCC. Cambodia ratified the Kyoto Protocol on 4 July 2002 which came into force a month later on 22 August 2002. The Department of Planning and Legal Affairs (DPLA) under the Ministry of Environment (MoE)⁴⁷ was designated as the national UNFCCC focal point for Cambodia in 2002 and an interim Designated National Authority (iDNA) for CDM in accordance with the *Royal Cambodian Government's Declaration on the Appointment of the Ministry of Environment as the Interim Designated National Authority for the Clean Development Mechanisms dated 15 July 2003*. Besides, the MoE established a "Cambodian Climate Change Office (CCCO)" under the DPLA as per the *Minister of Environment's Declaration No. 195 dated 23 June 2003*. The CCCO has been promoted as the Climate Change Department (CCD) in 2009. The interim structure of the CCD is illustrated in Figure 2.

National Climate Change Committee (NCCC)

The NCCC is a national institutional body formed in April 2006 according to the Royal Government of Cambodia *Sub-decree No. 35 on the Establishment of the National Climate Change Committee* with its "mandate to prepare, coordinate and monitor the implementation of policies, strategies, legal instruments, plans and programmes of the Royal Government to address climate change issues within the country" (CCCO, 2008). The Committee is inter-ministerial, cross-sectoral and multi-disciplinary. It consists of 15 members and is chaired by the Environment Minister and co-chaired by three State Secretaries as shown in Figure 1 below (Article 2):

⁴⁷ Cambodian Ministry of Environment (MoE) comprises 6 departments namely: Department of Planning and Legal Affairs, Department of Natural Resources Assessment and Environment Data Management, Department of Nature Conservation and Protection, Department of Environmental Education and Communications, Department of Pollution Control, and Environmental Impact Assessment Review (MoE, 1999).



The Cambodian NCCC key functions with regards to climate change activities include but are not limited to (Article 3):

- Developing draft climate change policies, strategies, legal instrument, plans and programs, including national GHG mitigation and adaptation plan for submission to the Royal Government for consideration and approval;
- Promoting and encouraging the integration of climate change concerns into relevant policies, strategies, legal instruments, plans and programs;
- Considering the country's positions and strategies for participating in the international negotiations on climate change;
- Reviewing and approving the reports that are required to be prepared by the UNFCCC (NAPA, SNC);

- Coordinating activities concerning the implementation of the UNFCCC, its protocol and other climate change international agreements to which Cambodia is a party; and
- Managing and coordinating the CDM of the Kyoto Protocol in Cambodia.

Apart from these, NCCC is also responsible for the establishment of the Climate Change Technical Team (CCTT) which acts as a technical advisor on climate change issues to support the NCCC (Article 4 of the Sub-decree). Due to some delays in the establishment of the CCTT, CCCO, now CCD, also acts as an interim secretariat providing technical advice and input on climate change for the NCCC. Once developed, the CCTT will comprise of government ministries' and agencies' representatives and will be based at the MoE (CCCO, 2008).

Cambodian Climate Change Department (CCD)

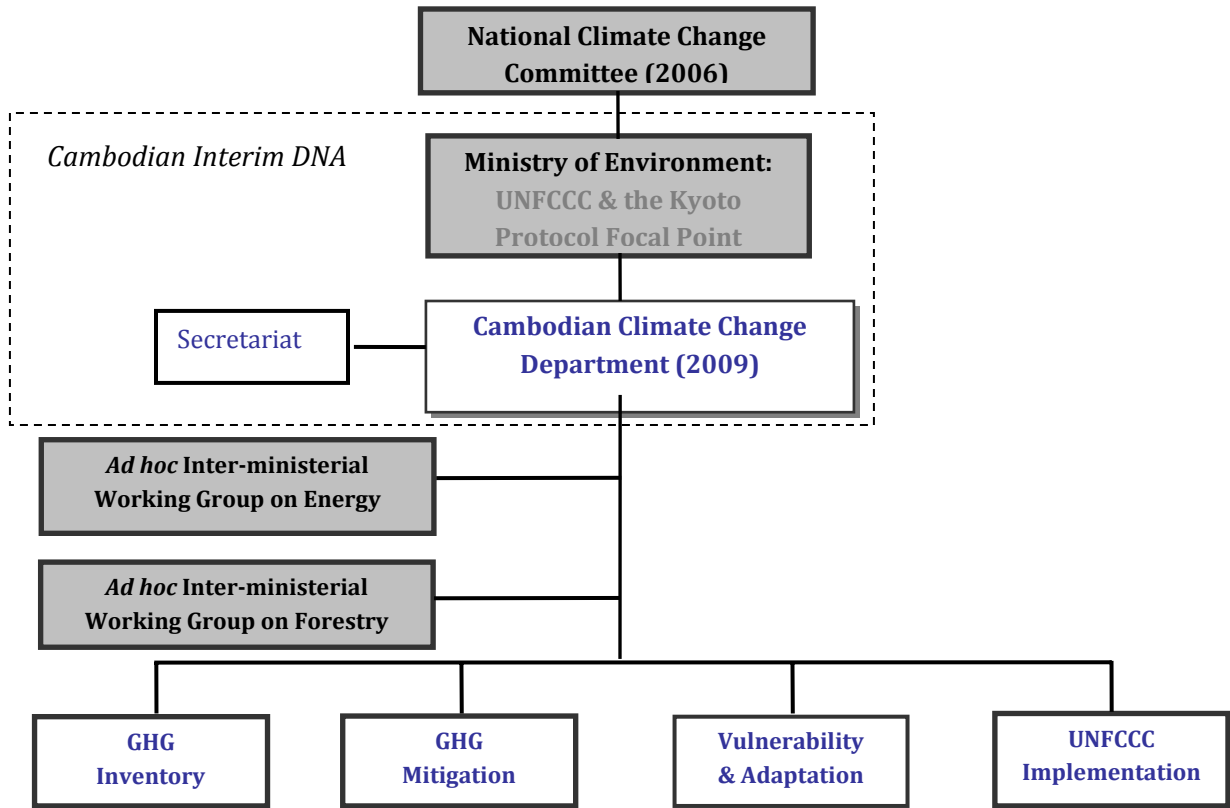
The CCD is an autonomous office which receives direct guidance from the Minister of Environment and the Cambodian National Climate Change Committee (NCCC). The Office comprises of 8 fulltime staff from the MoE and 7 part time staff from other key ministries or agencies concerned⁴⁸ working in four technical supporting units namely GHG Inventory, GHG Mitigation, Vulnerability and Adaptation, and UNFCCC Implementation.

A total of 3 out of 4 units (GHG Inventory, GHG Mitigation and, Vulnerability and Adaptation Units) were formed based on the National Communications project activities that the CCCO has been implementing under the UNFCCC. The general functioning of each unit is described below:

- **GHG Inventory Unit:** is responsible for carrying out the GHG inventory for Cambodia. It is also responsible for working with other research institution to identify the Cambodian specific GHG emission factors, maintaining and updating the GHG inventory database on a regular basis;
- **GHG Mitigation Unit:** is accountable for coordinating the conduct of GHG mitigation activities as part of the National Communications to the UNFCCC, assessing the CDM Project Design Document (PDD) with the Ad-hoc Technical Working Groups;
- **Vulnerability and Adaptation (V&A) Unit:** is primarily responsible for conducting the V&A activities as part of the National Communications and coordinating the V&A activities in Cambodia with other international stakeholders;
- **UNFCCC Implementation Unit:** is accountable for the coordination of climate change and CDM related activities in Cambodia including publication and distribution of the National Communications.

⁴⁸ i.e. 2 staff from the Ministry of Agriculture, Forestry and Fisheries (MAFF), 1 staff from the Ministry of Industries, Mines and Energy (MIME), 1 staff from the Ministry of Public Works and Transport (MPWT), 1 staff from the Ministry of Health (MoH), 1 staff from the URPP and 1 staff from the Ministry of Water Resources and Meteorology (MWRM). They are nominated by their concerned ministries when requested by the CCCO, now the CCD. They are based at the MoE or their own offices to work on specific projects' tasks. They are supported by the donors according to the donor's policies and framework.

Figure 2: Interim Cambodian Climate Change Department (CCD) Organisational Structure



Source: CCCO 2008 (online).

Despite the fact that the staff is divided into different units, many inter-linkages between these units exist and the staff often works together on different projects and tasks.

Due to greater interest in REDD the office was later transferred to the Department of Administration for Nature Conservation and Protection within MoE in June 2008. However, its initial roles and responsibilities within the MoE have not been changed. The Ministry of Agriculture, Forestry and Fisheries (MAFF) is the focal point for REDD in Cambodia.

According to the Minister of Environment’s Declaration, the CCCO or now the CCD has a number of key roles and responsibilities as described below (CCCO, 2008):

- Carry out all technical activities with regard to the implementation of the UNFCCC that Cambodia is a party to and other relevant climate change activities assigned by the Ministry of Environment (Article 2.1);

- Provide information and recommendations to the RGC for the preparation of the government's position and negotiations in the annual UNFCCC COP and/or MOP as well as the formulation of government policies, legal framework and plans that are relevant to climate change (Article 2.2);
- Identify and assess new technologies that are suitable for the climate change adaptation and GHG mitigation in Cambodia (Article 2.3);
- Promote climate change education, awareness raising, training and information dissemination for the general public (Article 2.9).
- Act as the secretariat of the UNFCCC, the Kyoto Protocol and the CDM Focal Points for Cambodia (Article 2.11).

The CCCO reports directly to the Director General of the Department of Administration for Nature Conservation and Protection. However, the CCCO will also report and seek approval from the Minister and the Secretary of State depending on the type of issues. For example, the CCCO can make their own decision on day to day issues but will need to report and seek approval from the Minister for site visits and workshops and from the Secretary of State for climate change issues that have national significance.

In terms of funding sources, the CCCO receives some government's supports for office space, utility costs, staff salary and other fixed costs. The rest of funding needs for such as capacity building and public awareness activities are obtained and lobbied from the projects and donors.

The CCCO communicates and works with other government agencies and ministries via meetings held at least twice a year or when necessary with the *Ad Hoc* Inter-Ministerial Working Group on Energy and the *Ad Hoc* Ministerial Working Group on Forestry. Both groups consist of technical staff from the relevant ministries on energy and forestry. They also assist the CCCO in undertaking the assessment of proposed CDM projects related to the energy and forestry sectors (MoE, 2005).