KINGDOM OF CAMBODIA
NATION RELIGION KING

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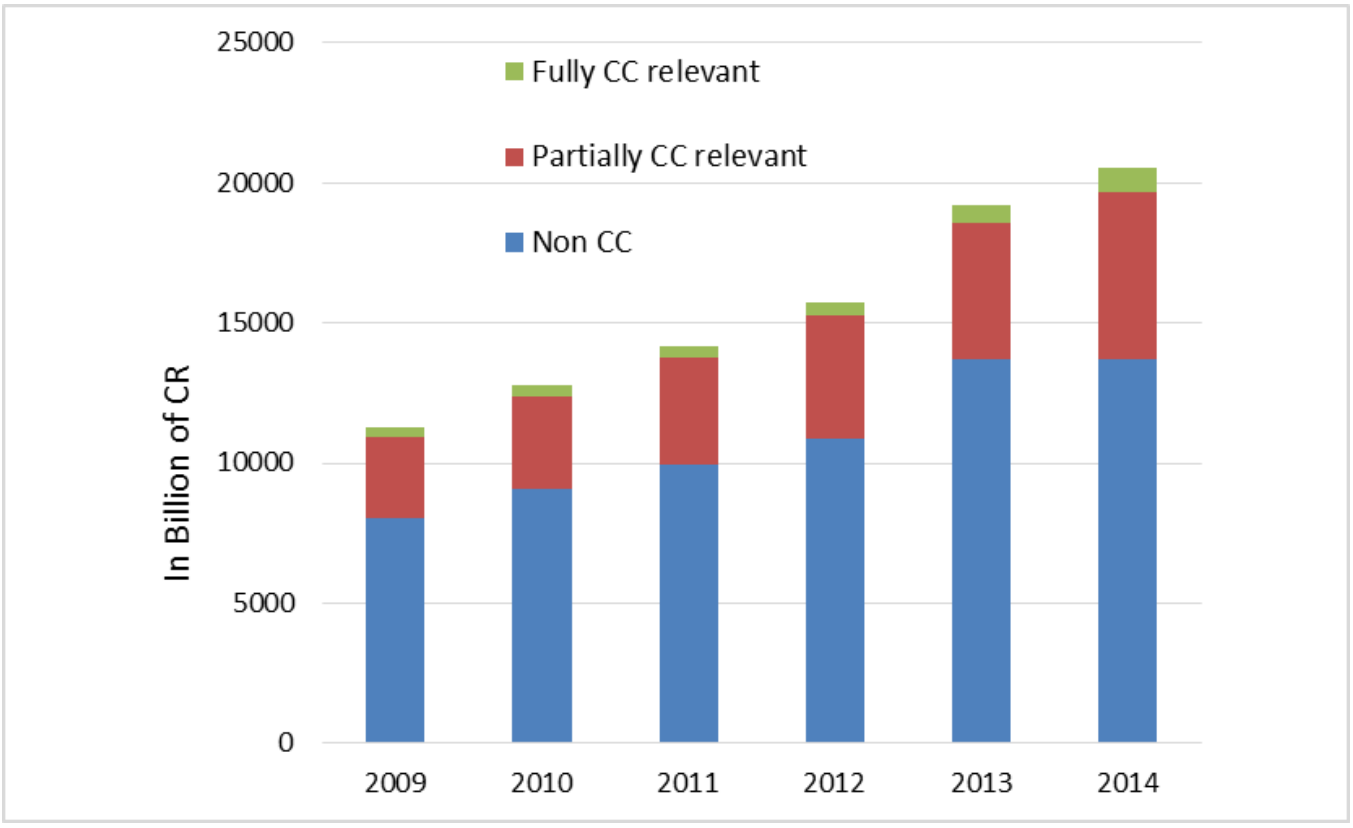
Ensure Sustainable Growth and Development

REPORT ON
CLIMATE PUBLIC EXPENDITURE REVIEW
2013-2014



APRIL 2016

Preface

Cambodia is highly vulnerable to climate change, due to its exposure to frequent flooding, drought and other extreme weather events as well as sea-level rise. A large part of the population depends on rain-fed agricultural activities and natural resources for their livelihoods; and their capacities to adapt to climate change are limited. Although Cambodia's share by total Green House Gases Emissions is extremely small – 0.1% in 2012 according to World Resources Institute – Cambodia is experiencing strong economic growth and is also at a key stage in its industrialization process. The Royal Government of Cambodia (RGC) wants to ensure that this economic transition takes a path that will deliver sustainable benefits in the context of climate change.

This review is part of a broader effort by the Ministry of Economy and Finance (MEF) to support the Cambodian Climate Strategic Plan adopted by the RGC in 2013, and to ensure that climate change, as a cross-cutting priority in the National Strategic Development Plan (NSDP) 2014-2018, is well reflected in public investments and activities on the ground. Cambodia is one of a few countries in the world to regularly monitor the status of its climate-related expenditure.

This report presents the evolution of public expenditure since 2009 and analyzes its alignment with Climate Change Action Plans in key ministries. While the sectoral allocation of resources is broadly in line with plans, work remains to be done to ensure that all key priorities identified by the RGC are appropriately resourced.

With the introduction of a stronger monitoring and evaluation component in budget reforms over the next few years, the MEF will be able to better analyze the efficiency and effectiveness of climate-related expenditure and to direct public resources where they bring the most benefits in a climate change context. In fact, initiatives are already ongoing to develop capacity in key ministries to integrate climate change concerns in their budget submissions and in their negotiations with development partners.

This 2013-14 update of the Climate Public Expenditure Review contributes to transparency on the RGC's management of the climate change response and demonstrates Cambodia's commitment to put in place systems to effectively manage climate finance as a key resource for the sustainable development of Cambodia in the coming years.

Ros Seilava
Under Secretary of State

Acknowledgment

The Ministry of Economy and Finance would like to express its gratitude to the extended cooperation and contribution from the National Council for Sustainable Development (NCSD) and the Cambodia Climate Change Alliance (CCCA) in providing technical support, comments and training on the concept of tracking climate expenditure and to the Cambodian Rehabilitation and Development Board in providing data from the Cambodia ODA database as an input to this report.

The Cambodia Climate Public Expenditure Review report has been developed, with technical support from the NCSD and CCCA, by the Climate Change Technical Team of Ministry of Economy and Finance with support of their technical officials from Department of Investment (DI), Budget Formulation Department (BFD) and Department of Cooperation and Debt Management (DCDM) of General Department of Budget, and Department of Macroeconomic and Fiscal Policy (MFPD) of General Department of Economic and Public Finance Policy.

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List of Abbreviation and Acronyms

ADB	Asian Development Bank
PB	Programme-based
CBR	Cost Benefit Ratio
CC	Climate Change
CCCSP	Cambodia Climate Change Strategic Plan 2014-2023
CCAP	Climate Change Action Plan
CCFF	Climate Change Financing Framework
CCTT	Climate Change Technical Team
CDC	Council for the Development of Cambodia
CRDB	Cambodia Rehabilitation and Development Board
CPER	Climate Public Expenditure Review
CPEIR	Climate Public Expenditure and Institutional Review
CR	Cambodian Riel
CRI	Climate Relevance Index
DI	Department of Investment
DBF	Department of Budget Formulation
DCC	Department of Climate Change
DCDM	Department of Cooperation and Debt Management
FMIS	Financial Management Information System
GDP	Gross Domestic Products
GHG	Greenhouse Gas
MPTC	Ministry of Posts and Telecommunications
MAFF	Ministry of Agriculture, Fisheries and Forestry
MEF	Ministry of Economy and Finance
MRD	Ministry of Rural Development
MoH	Ministry of Health
MoEYS	Ministry of Education, Youth and Sports
MPWT	Ministry of Public Work and Transport
MIH	Ministry of Industry and Handicraft
MME	Ministry of Mines and Energy
NCCC	National Climate Change Committee
NCDD-S	National Committee for Sub-National Democratic Development Secretariat
NCDM	National Committee for Disaster Management
MWA	Ministry of Women's Affairs
MoWRAM	Ministry of Water Resources and Meteorology
MoInfo	Ministry of Information
MoT	Ministry of Tourism
MLMUPC	Ministry of Land Management, Urban Planning and Construction
MoE	Ministry of Environment
NCSD	National Council for Sustainable Development
NGO	Non-Governmental Organization
NSDP	National Strategic Development Plan
ODA	Official Development Assistance
ODI	Overseas Development Institute
PB	Program-based

PFM	Public Financial Management
PFMRP	Public Financial Management Reform Program
RGC	Royal Government of Cambodia
SNC-UNFCCC	Second National Communication for United National Framework for Climate Change Convention (UNFCCC)
WRI	World Resources Institute

Executive Summary

Climate Change expenditure has risen from 0.9% of GDP in 2009 to 1.3% of GDP (CR 847 billion) in 2014. This is not only the result of an increase in external support for climate change, but also higher allocations from the Government budget, which currently funds almost 25% of climate-related public expenditures (CR 211 billion).

Externally funded climate finance increasingly uses national systems and is being channeled through the Ministry of Economy and Finance (MEF). This was the case for two thirds (67%) of external climate finance in 2014, mostly for large infrastructure and agriculture projects. The situation has changed significantly since 2011, when only 41% of these externally funded programmes were channeled through the MEF.

Sectoral allocation shows a strong focus on irrigation, climate resilient national and rural roads, representing CR 433 billion or 51% of the total estimated climate spending, followed by 20.7% on disaster response, 16% on climate-resilient livelihoods (including agriculture), 3.4% on health, 1.3% on the energy sector and 1% on disaster risk reduction. The largest spending ministries are Ministry of Water resources and Meteorology (MoWRAM), Ministry of Public Works and Transport (MPWT), Ministry of Rural Development (MRD), Ministry of Agriculture Forestry and Fisheries (MAFF), Ministry of Health (MoH) and Ministry of Environment (MoE).

Expenditure in 2014 is broadly in line with the sectoral allocation of the Climate Change Action Plans (CCAP) issued by the 15 key ministries contributing to the climate change response. However, many action plans were launched only in 2014 and 2015, so climate-related expenditure within each sector in 2014 was not yet fully aligned with the priorities expressed in the action plans, and many of the new actions proposed in the plans remain under-funded. This will require more detailed analysis and resource mobilization in each sector.

The report also suggests some improvements in the data collection process, in order to ensure quality and facilitate regular reporting the future. The next phases of the public financial reforms, which include the introduction of a financial management information system and a focus on monitoring and evaluation, will provide opportunities to not only track climate expenditure, but also monitor its efficiency and effectiveness.

I. Background

Cambodia is highly vulnerable to climate change, due to its exposure to frequent flooding, drought and other extreme weather events as well as sea-level rise. A large part of the population depends on rain-fed agricultural activities and natural resources for their livelihoods, and capacities to adapt to climate change are limited. Although Cambodia's share of total Green House Gases Emissions is extremely small, 0.1% in 2012, Cambodia is committed to play its part in global mitigation efforts, as recently described in its Intended Nationally Determined Contribution submitted to the UNFCCC in 2015.

Climate change is a cross-cutting issue in the National Strategic Development Plan 2014-2018, and priorities for the climate change response are outlined in the Cambodia Climate Change Strategic Plan 2014-2023 (CCCSP). Fourteen ministries and agencies now have climate change action plans in place, detailing actions to be taken in their respective sectors.

Tracking of climate public expenditure is essential to assess to what extent public resources are contributing to the implementation of this CCCSP. Cambodia is one of the few countries to have put in place mechanisms for annual tracking of public climate finance trends.

1. Reminder on the first Climate Public Expenditure and Institutional Review (CPEIR) and Climate Change Financing Framework (CCFF)

Cambodia was one of the five pilot countries to conduct a CPEIR in 2012, under the coordination of a sub-group of the Climate Change Technical Team (CCTT) including representatives of the MEF, the Ministry of Environment (MoE), the Ministry of Planning (MoP), the Council for the Development of Cambodia (CDC) and the National Committee for Sub-National Democratic Development Secretariat (NCDD-S), and with support from the United Nations Development Programme (UNDP). Overseas Development Institute (ODI) national and international experts conducted this initial review in cooperation with concerned Government officials.

The objective of this exercise was to help improve the balance and focus of existing climate expenditure, and to guide new climate finance that is likely to be available to Cambodia through international climate funds, domestic funds and through the funding provided by bilateral and multilateral programmes.

The CPEIR included a review of climate public expenditure for the period 2009-2011 (with a focus on six key ministries[1]), as well as an analysis of capacity and institutional framework for the management of climate finance. Recommendations from the CPEIR reflected in the development of the Climate Change Financing Framework (CCFF) for Cambodia, which was adopted by the National Climate Change Committee (NCCC) on 20 November 2014.

[1] MAFF, MoWRAM, MIME, MRD, MoH, and MoE.

The CCFF includes an update of the climate public expenditure data (2009-2012) and a broader focus on ten ministries and agencies[2], as well as sub-national administrations. It also includes scenarios for climate finance, cost of action plans of key ministries and recommendations on required improvements at national and sub-national level for climate finance management.

As part of its responsibilities under the CCFF, the MEF is committed to improve the integration of climate change in the national budget. This includes conducting regular monitoring of climate finance through climate public expenditure review, in cooperation with CDC for externally-funded programmes.

2. Methodology and scope of study

a. Scope of this study

This study updates the information provided in the CCFF in the following ways:

- Includes public expenditures for years 2013 and 2014 (total period covered: 2009-14);
- Analyses the expenditure data for the 14 ministries and agencies with an approved Climate Change Action Plan, and for the Ministry of Posts and Telecommunications[3] (MPTC);

b. Methodology

The methodology for tracking of climate finance in Cambodia has evolved over time, based on lessons learnt from the CPEIR in 2012 and the CCFF in 2014.

The **initial CPEIR** used a "Climate Relevance Index (CRI)" with three categories of climate relevance:

- High climate change relevance programmes which have a clear primary objective of delivering concrete and visible outcomes that improve climate resilience or contribute to GHGs mitigation. The CPEIR assumed that 80% of the expenditure in these programmes contributed to adaption or mitigation;
- Mid climate change relevance programmes, either have secondary objectives related to building climate resilience, or are mixed programmes with a range of activities that are not easily separated but include at least some that promote climate resilience or GHGs mitigation. The CPEIR assumed that 50% of the expenditure contributed to adaption or mitigation;
- Low climate change relevance programmes are limited to indirect adaptation and mitigation. The CPEIR assumed that 25% of the expenditure contributed to adaptation or mitigation.

[2] MoWA, MoEYS, MPWT and NCDM were added to the initial 6 ministries and agencies.
[3] MLMUPC, MoT and MoInfo were added to the CCFF exercise, and MIME was split in two: MIH and MME. MPTC was included although its CCAP is pending approval.

According to the above classification of expenditure, the proportion of public expenditure related to climate change grew from 14.9% in 2009 to 16.9% in 2011. However, it was felt that the percentages of climate relevance applied to the high, mid and low relevance categories could lead to an over-estimation of climate finance, and that a more evidence-based methodology would be needed to refine these first estimates.

The **CCFF exercise**, conducted in 2013 and finalized in 2014, provided a first opportunity to refine the methodology. A Benefit Cost Ratio (BCR) approach was used to estimate the climate relevance of a programme by comparing its benefit cost ratio "with" and "without" climate change, and then calculating the share of the benefits of a programme that is related to climate change. Case studies were conducted for nine typical climate change activities, leading to refined percentages of relevance for these activities (often lower than the initial estimates used in the first CPEIR). Once weighted, expenditure specifically focused on climate change was estimated at 5.8% of total public expenditure in 2012 (or 1.29% of GDP).

This **Climate Public Expenditure Review** is based primarily on the Benefit Cost Ratio approach, using the latest available evidence (the table of BCR in table annex 1). All figures for previous years have been recalculated to ensure consistency in the methodology and allow for the monitoring of trends over time. Given the possible over estimates from the CRI method, the analysis and findings in the report use only the CC BCR method unless indicated otherwise.

It is important to note that climate-related expenditure as defined in this methodology covers all expenditure that plays a role in increasing resilience to climate change or reducing GHG emissions. This expenditure may or may not be explicitly identified as "climate finance" by concerned implementing agencies or donors, and a large portion of the Cambodian climate change response is currently funded with "regular" development funds that do not have climate change as one of their primary objectives. This CPER provides policy-makers with a comprehensive view of all public funds that contribute to the climate change response so that they can make informed decisions on the allocation of these funds. The figures presented in this report may therefore differ from the figures presented in other contexts, for example any reports focused on monitoring only the "new and additional" climate finance that developed countries committed to provide in support of developing countries.

The following sources of data have been used:

- National budget (recurrent expenditure): the recurrent budget data was provided by the Department of Budget Formulation (DBF/MEF). The analysis focused on the approved budget documents as the actual expenditure data disaggregated on a functional basis is not yet readily available due to ongoing public financial management reforms, with some ministries using programme budgeting while other still use older economic classification. It is planned that all ministries will fully implement program budgeting by 2018. The data obtained for programme budget was only broken down to programme level (neither sub-programme nor activity);

- National budget (capital expenditure): budget data provided by the Department of Investment of the MEF;
- External finance: data provided by the CDC (ODA database) and the Department of Cooperation and Debt Management of the MEF. The CDC data includes all development partners' loans and grants with data templates designed by CDC. The MEF data includes actual disbursements from development partners' loans and grants under MEF management (mostly from development banks). When there are two sources of data on loan and grant projects, the data from the MEF are used.

Although data availability is deemed sufficient overall for the ministerial and sectoral analysis, the following areas for improvement have been identified:

i) Detailed data on the functional classification of the PB ministries' expenditures are not available;

ii) information of each project/program on loan and grant disbursements to different implementing agencies reflecting their shares to the total amount disbursed by each year is not available. Therefore, when a project has several implementing agencies, estimated percentages per each involved ministry receiving the disbursement have been introduced based on the project/program document and past experience. It is assumed that percentage share is constant each year over the multi-year life of the project/program.

The CPER assignment was coordinated by the Department of Cooperation and Debt Management, which also coordinates with other departments of the MEF to provide and process data as well as provide inputs for the report. The Information Management Department of CDC/CRDB provided the loan and grant data of the ODA database for the assignment. Both CDC and MEF technical officials have received training on climate change concepts and CPER methodology, including data processing, tagging and weight computing.

II. Climate Public Expenditure Review 2009-2014

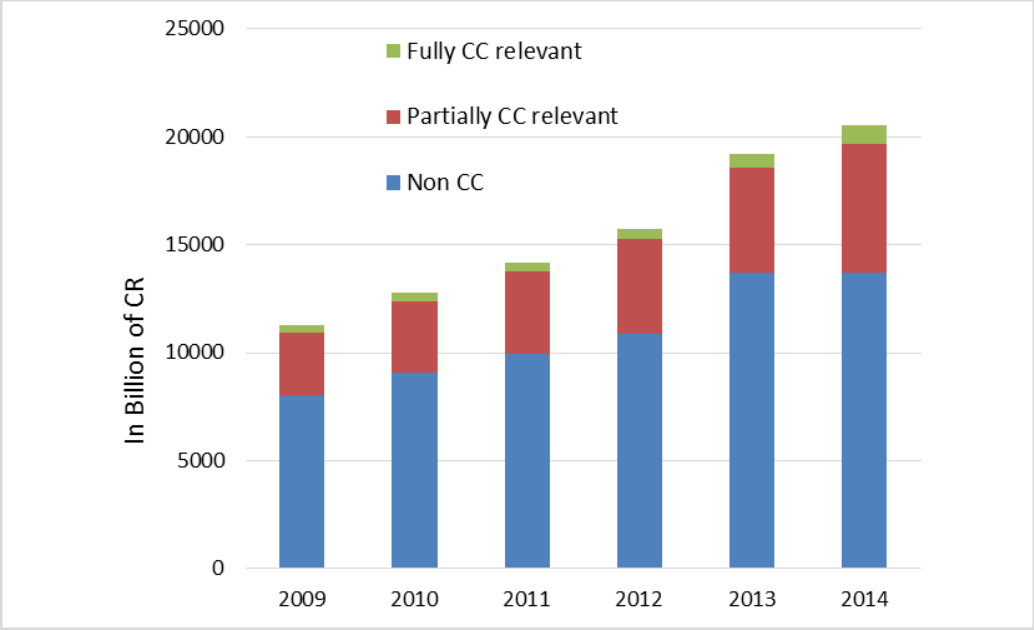
1. Overall trend

Climate change spending has steadily increased in Cambodia over the reporting period, from CR 367 billion in 2009 to CR 847 billion in 2014.

The proportion of climate expenditure to GDP also increased overall, from 0.9% of GDP in 2009 to 1.3% of GDP in 2014, with a low point in 2011 (0.8% of GDP). 2009 and 2010 were marked by relatively high levels of disaster recovery expenditures due to typhoon Ketsana and flood in the late 2009.

In 2014, one third of public expenditure was either fully or partially related to climate change (up from 28.9% in 2009). Once climate change relevance weights are applied to this expenditure, climate finance constituted 4.1% of public expenditure (up from 3.3% in 2009).

Figure 1: Climate change related expenditure and total public expenditure (in billions of CR)



Source: MEF, CDC, and MEF & expert team calculation.

Table 1: Proportion of climate change expenditure to total spending and GDP

	2009	2010	2011	2012	2013	2014
CC related spending to total spending	28.9%	28.9%	29.8%	30.9%	28.7%	33.3%
CC spending to total spending	3.3%	3.5%	2.9%	3.1%	3.3%	4.1%
CC spending to GDP	0.9%	1%	0.8%	0.9%	1%	1.3%

Source: MEF, CDC, IMF and MEF & expert team calculation.

Highest spending sectors include infrastructure (irrigation, bridges, national and rural roads), and agriculture. Sectoral allocation of resources is further detailed in section II.4.

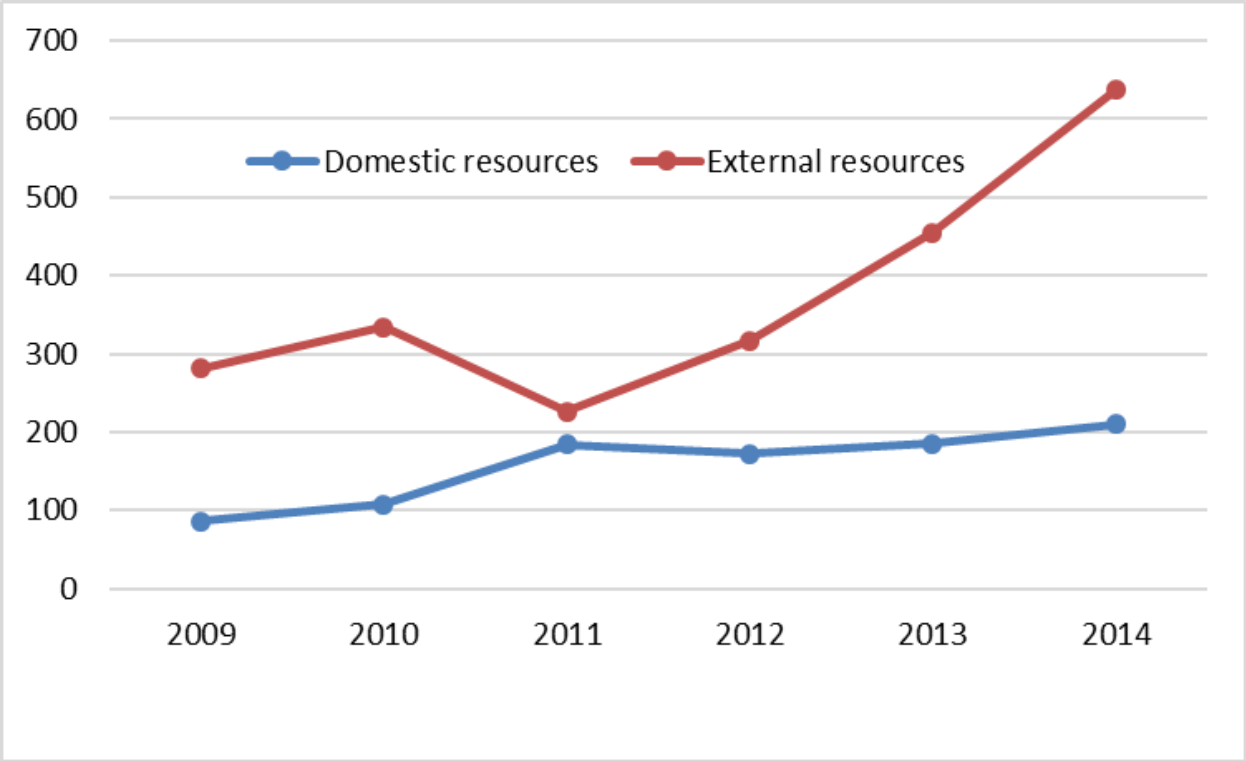
2. Sources of climate public expenditure

The amounts allocated from domestic resources (national budget) for climate-relevant expenditure increased steadily from CR 87 billion in 2009 to CR 211 billion in 2014. In 2014, almost one quarter (24.8%) of public climate expenditure was funded by national budget.

External financing continues to represent the largest source of funding for climate expenditure in Cambodia. It has been more volatile than domestic funds, with a dip in 2011 probably due to the simultaneous completion of several large climate-related projects, but the overall trend is clearly positive, with a sharp increase in 2013 and 2014.

Only 41% of these externally funded programmes were channeled through the MEF's systems in 2009. The situation has changed significantly since 2011, with the majority of externally funded climate expenditures flowing through MEF systems (67% in 2014), mostly for large infrastructure and agriculture projects.

Figure 2: Source of Public Climate Finance (In billions of CR)



Source: MEF, CDC, and MEF & expert team calculation.

3. Climate-relevant expenditure and the implementation of the Climate Change Strategic Plan

The Cambodia Climate Change Strategic Plan (CCCSP) 2014-23 was launched in 2013. It is operationalized through Climate Change Action Plans (CCAP) in key sectors of the climate change response. This section provides an initial analysis of 2014 climate expenditure data against the needs expressed in the Climate Change Action Plans.

a. CCAP ministries' profiles

Fourteen ministries approved their Climate Change Action Plans by the end of 2015. This CPER covers expenditure from these fourteen ministries plus the Ministry of Posts and Telecommunications, whose CCAP is available in final draft form.

The key strategies included in the CCAPs of these ministries are as follows:

1. The Ministry of Agriculture, Forestry and Fisheries (MAFF) identifies 5 CC strategic objectives: (1) To enhance human and institutional capacity in developing new technology of rubber seed, animal production, forestry, fishery and tolerance to weather, disease, and insects; (2) To enhance capacity of farmers with new technology in coping with climate change; (3) To reduce GHG emission through forest degradation, animal production, crop production, and to encourage sustainable forest management in particular forest community, renewable energy (biomass) and appropriated agricultural technology; (4) to develop and enhance the effectiveness of fishery management through water ecological improvement, protected flooded forest and mangrove forest, increase research development on aquaculture and post-harvest processing and to continue strengthening capacity of the fishery community; and (5) to strengthen capacity on crop production, rubber, livestock, forestry and fishery community;
2. The Ministry of Water Resources and Meteorology (MoWRAM) identifies 4 four strategic areas, including (1) improved hydrological planning and management and early warning, (2) improved flood and drought management, through changes in design of reservoirs and irrigation and protection infrastructure, (3) staff capacity building and (4) promoting gender responsiveness in cc planning in the water sector;
3. The Ministry of Rural Development (MRD) focuses on climate change adaptation through, (1) climate change resilience for rural road and infrastructure, (2) adaption to climate change for local business opportunities, (3) awareness in vulnerable areas and (4) capacity building to village development committees (primary health care, and water sanitation).
4. The Ministry of Mines and Energy (MME) focus on 4 strategic priorities: (1) developing policy for energy sector to meet SE4 ALL target for Cambodia, (2) promoting energy infrastructures to be climate proof or climate resilient, (3) implementing the GHG emission management approach for energy sector and (4) strengthening capacity, knowledge and awareness concerning climate change response.
5. The Ministry of Health (MoH) currently has four priority areas related to climate change: (1) combatting water stress, vector-borne/water-borne diseases; (2) reducing malnutrition and

strengthening food safety related to climate change, (3) reducing impacts from extreme weather events (disaster); and (4) building capacity of health personnel to cope with climate change impact;

6. The Ministry of Education, Youth and Sports (MoEYS) identifies the following priorities in its CCAP: (1) climate change policy, (2) capacity building, (3) formal and informal CC education mainstreaming and (4) CC resilience of schools, university and education facilities.
7. The Ministry of Women Affairs (MoWA)'s CCAP is to address the vulnerabilities of women and other vulnerable groups such as children and elderly through specific actions for capacity development for women in policy discussions, leadership, livelihood, green growth and community resilience;
8. The National Committee for Disaster Management (NCDM) has the coordination role with government agencies, authorities, and communities in disaster management, preparedness and emergency response. NCDM's CCAP includes staff capacity building in disaster risk management and reduction, food and health security warning, capacity building for sub-national administrations and awareness raising in disaster response and adaptation;
9. The Ministry of Land Management, Urban Planning and Construction (MLMUPC) focuses on (1) promoting low-carbon, climate resilient city development planning and developing city-level coordination mechanism, especially mass transport and wastewater management, (2) promoting land use planning to prioritize adaptation measures for key regions of Cambodia, such as coastal zones, highlands, rural and urban areas, (3) promoting low-carbon planning and technologies to support sustainable development through building code for buildings and infrastructure development and (4) enhancing staff capacity building and raising public awareness on rural house construction resilient to extreme weather events;
10. The Ministry of Tourism (MoT) has strategies to develop tourism sector for cultural heritage and natural ecosystems towards green, low-carbon, climate resilience and sustainable development that contributes to employment generation and poverty reduction. In addition, it aims at enhancing cooperation with relevant ministries, private sectors and development partners to promote tourism;
11. The Ministry of Information (MoInfo) is prioritizing climate change capacity building and awareness, mainly through its broadcasting networks;
12. The Ministry of Post and Telecommunication (MPTC) focuses on Telecommunication/ICT sector development to address climate change, by using technology to reduce GHG emission and prepares a framework for incorporating CC proofing into telecommunication/ICT infrastructure, as well as capacity building and awareness raising in the sector;
13. The Ministry of Environment (MoE)'s strategic objectives are (1) promote climate resilience through improving food, water and energy (FWE) security, (2) reduce sectoral, regional, gender vulnerability and health risks to climate change impacts, (3) ensure climate resilience of critical ecosystems (Tonle Sap Lake, Mekong River, coastal ecosystems, highlands, etc.), biodiversity, protected areas and cultural heritage sites, (4) promote low-carbon planning and technologies to support sustainable development, (5) improve capacity, knowledge and awareness for climate change responses, (6) promote adaptive social protection and participatory approaches in reducing loss and damage due to climate change, (7) strengthen

institutions and coordination frameworks for national climate change responses and (8) strengthen collaboration and active participation in regional and global climate change processes.

14. The Ministry of Industry and Handicraft (MIH) focuses on (1) promoting green industry for climate resilient low carbon production in Cambodia, (2) using renewable energy and energy diversification including promoting on-site renewable energy captive generation for industrial production processes, (3) introducing more path-breaking technologies for low-carbon production industries and (4) managing Industrial waste.

b. Comparison of estimated financing needs with 2014 climate change expenditure

The ministerial Climate Change Action Plans have been gradually developed over 2014 and 2015, and it is therefore not possible to compare exactly the 2014 financing needs (which are not available in all CCAPs) with the actual 2014 climate expenditure.

In order to analyze to what extent financing flows match the resourcing needs, this report uses the average annual resource requirement mentioned in the CCAPs as a proxy for 2014 and compares it to actual climate expenditure in 2014.

Overall, the average annual CCAP requirement for these 15 ministries is CR 716 billion. In 2014, the estimated climate-related expenditure for these same ministries is CR 778 billion (CR 847 billion if other stakeholders are included). This demonstrates that Cambodia's financing needs as expressed in the CCAP are not unrealistic, and are actually in line with the levels of available financing. Cambodia could actually aim to mobilize resources in line with the high growth scenario presented in the Climate Change Financing Framework (CR 832 billion for 2014 vs. CR 792 billion in the low growth scenario).

However, it should be noted that most of the funds disbursed in 2014 were programmed prior to the development and launch of the CCAPs. As a result, climate-related expenditure is not fully aligned with these plans, and there are still significant funding gaps for many of the new activities included in the CCAPs.

There is also an opportunity to increase the level of climate-relevance of these expenditures. For example, while an irrigation system itself contributes to climate change adaptation by reducing reliance on rainfall patterns, its climate relevance could be even higher if it is specifically designed to be climate-proof (e.g. resist floods).

c. Is climate expenditure aligned with plans?

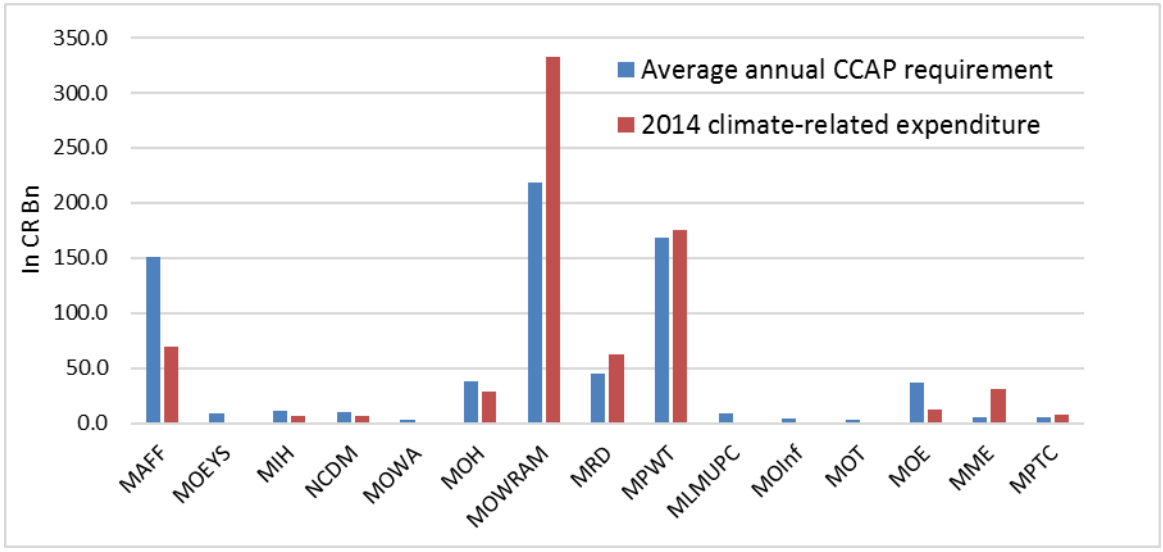
Looking at CCAP ministries only, the allocation of climate-related expenditure is broadly in line with the sectoral allocation in the CCAPs. MoWRAM (42.7%), MPWT (22.6%), MAFF (8.9%) and MRD (8%) are the ministries with the most significant portfolio of climate-related expenditure.

However, while the infrastructure ministries (MoWRAM, MPWT, MRD as well as MME and MPTC) benefit from adequate levels of funding, including both the RGC and development partner, MAFF's CCAP remains under-funded (only 45% funded in an optimistic scenario, assuming that all climate financing is

aligned with the CCAP). This is also the case for MoE (only 34% funded), MoH (76% funded), MIH (61% funded) and MoEYS (7% funded), as well as other ministries with smaller climate change portfolios.

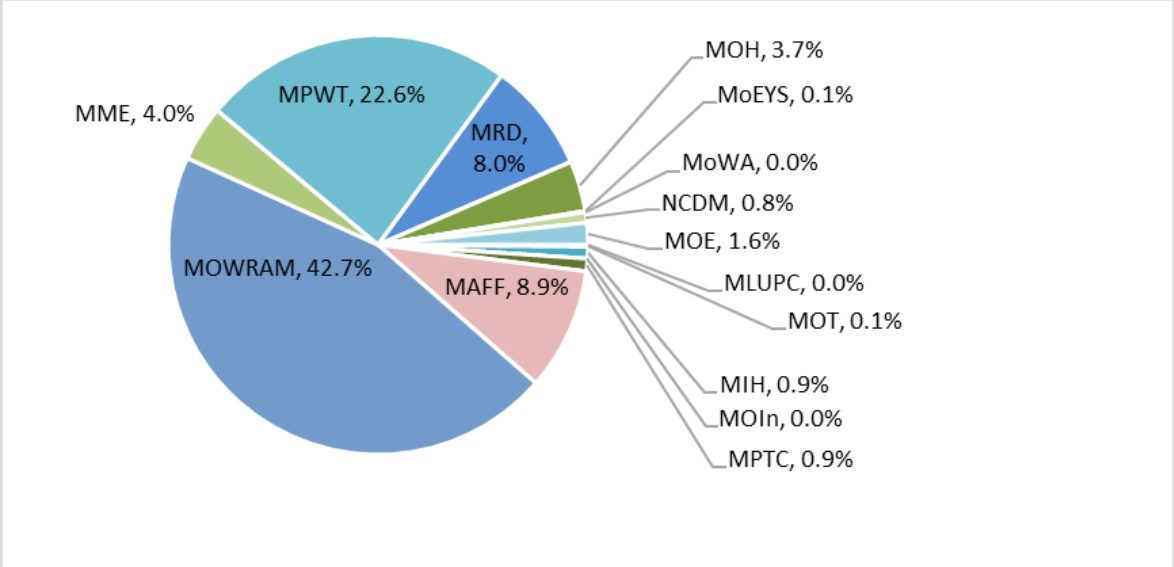
Because the first CCAPs were only adopted in 2014, it is unlikely that these plans had a strong influence on climate finance for that year. A more specific assessment at ministry level will need to be conducted as a part of the monitoring process for CCAPs. While climate finance is available and broadly in line with sectoral priorities, there are opportunities to improve the allocation of these funds to the highest potential actions identified in CCAPs.

Figure 3: Average CCAP annual requirement vs. 2014 climate public expenditure for ministries with CCAP only



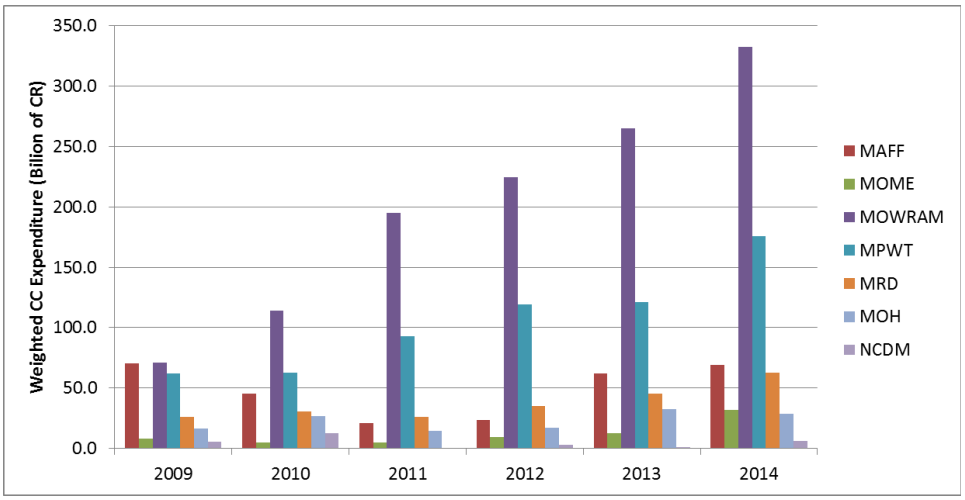
Source: CCAPs, MEF, CDC, and MEF & expert team calculation.

Figure 4: Allocation of 2014 climate expenditure per ministry



Over the reporting period, climate-related spending on infrastructure has steadily increased, while trends in other sectors, such as agriculture and health, have been less clear, with moderate increases or status quo.

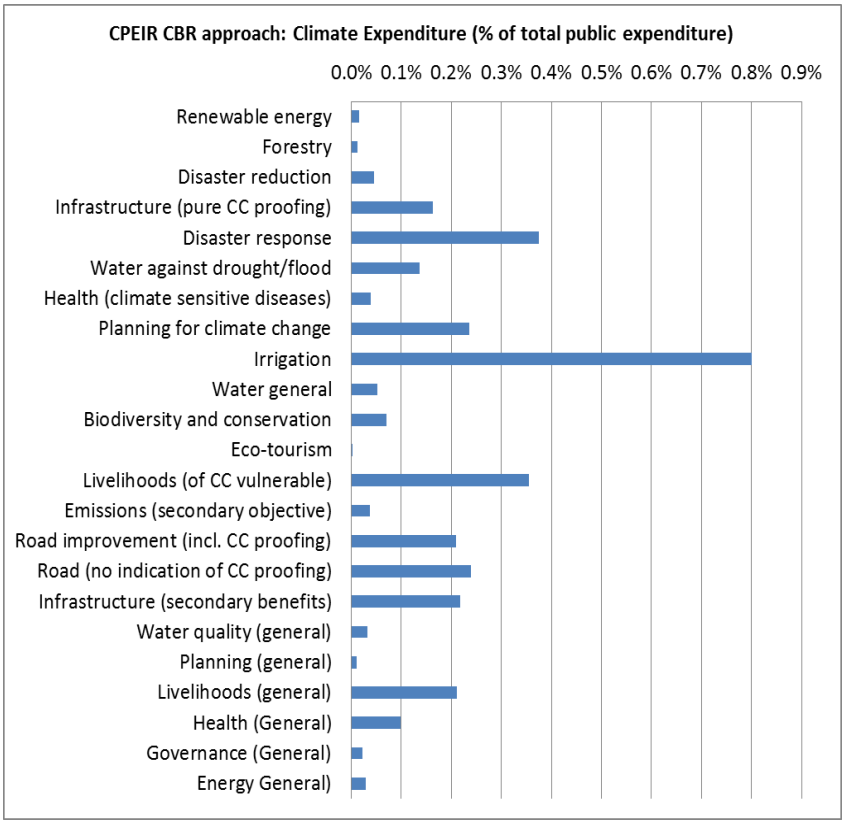
Figure 5: Selected ministries and agencies' cc spending in billions of CR



Source: MEF, CDC, and MEF & expert team calculation.

A more detailed account of climate expenditure per type of activity is presented below (2014 data);

Figure 6: CPEIR CBR approach: Climate Expenditure (Percentage of total public expenditure) in Average, years 2009-14



III. Recommendations

1. Improving the monitoring of climate-relevant expenditure

Cambodia is one of very few countries to regularly track climate expenditures, through annual climate public expenditure review. However, this tracking of expenditure is only one part of a decision support system for policy makers.

Over time, the expenditure data should be combined with data on the performance of climate-related investments so that the effectiveness and efficiency of those investments can be assessed. A monitoring and evaluation framework for climate change is currently being operationalized with support from the Department of Climate Change / General Secretariat for Sustainable Development (DCC/GSSD). A set of national indicators is already available, and sectoral frameworks are being gradually rolled out in concerned ministries. When the next phase of public financial management reforms, including monitoring and evaluation, are launched, there will be an opportunity to include climate-related indicators in the national budget system. This would make reporting and analysis much easier, particularly if indicators are reflected in the new financial management information system (FMIS).

In the meantime, it may be interesting in future CPERs to conduct some analysis on some of the largest investments, particularly in infrastructure, as an initial pilot.

2. Ensuring accurate and continuous tracking of climate finance

Improvements for future climate public expenditure review could be made in three areas:
Detailed methodological guidelines: following discussions with MEF officials, it is necessary to develop a guide book specifically for staff in charge of conducting climate public expenditure review, focusing on key steps including data sources, data processing, data tagging and analysis.

Data improvement: For the CDC database, data capture could include a functionality to indicate, in the case of projects with multiple implementing agencies, the indicative percentage of funding assigned to each agency. This would make the estimates of spending per ministry much more robust. An analysis of the sectors and sub-sectors used in the CDC database could also be done to match them with the CPER types of activities and suggest potential improvement.

With regard to the MEF data, current spending remains difficult to analyze for non-programme budgeting ministries as it is based on economic classification, not functional classification. The government under the PFM reform programme is planning to get all the ministries and public entities to become budget entities by 2018 and fully implement programme budgeting, where spending is classified under a functional basis. This will allow for a more detailed assessment of climate expenditure down to the levels of sub-programs and activities. As for the domestic capital expenditure, it is sufficiently detailed, but the remaining main issue is the allocation of expenditure per implementing agency for projects with multiple agencies (similar to the ODA database). The DCDM is aware of the data segregation and used to process the data by implementing agencies, but it requires time and more coordination to compile the data from the program report. The process could be improved in time.

Resource persons for annual update and report: Conducting data processing and analysis requires focal officials to allocate sufficient time for the assignment. Currently, resource persons have to work on the update of the climate public expenditure review on top of their existing works. Having a designated full-time official to conduct this type of work may be useful in the future. This official could focus not only on climate change but also analyze spending on other cross-cutting issues (industrial policy, gender, etc.). Currently, there is no dedicated capacity in related departments of the MEF to cover cross-cutting priorities (as opposed to sectoral ministries).

Climate change tracking within the FMIS: The new FMIS (currently under development and testing in the MEF) supports functional classification from planning to execution. In the future, the FMIS should consider integrating a "tag" for cross-cutting issues such as climate change. This would make it much easier for the MEF to track climate-related investments. This type of system is already in place in many countries in the region (e.g. Indonesia, Philippines, and Nepal).

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ANNEXES

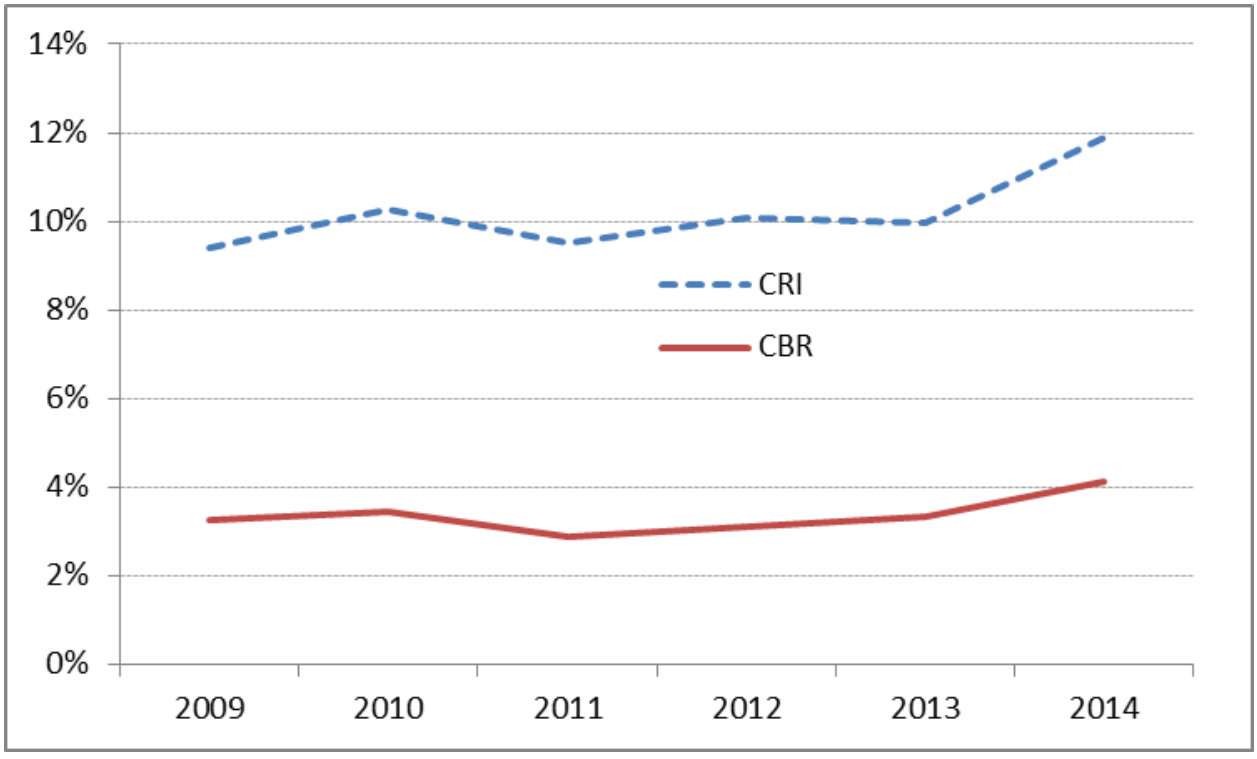
Annex 1: Methodological note: Impact of methodological updates on the results

The methodology for climate public expenditure review is relatively new (first exercises in 2012) and has been refined significantly over the past few years. The first exercise in Cambodia (the 2012 CPEIR) used a climate relevance index (CRI) approach, assigning all investments to four categories: no relevance, low relevance, mid relevance and high relevance to climate change. Each category would have a standard relevance percentage, which was then applied to calculate climate relevant expenditure.

Starting in 2013, a Cost-Benefit Ratio (CBR) approach has been introduced to refine those estimates, by calculating for each type of expenditure, through case studies, the portion of the results (benefits) that could be linked to climate change. This led to a more detailed list of climate relevance percentages per type of activity.

In Cambodia, the adoption of the new methodology has led to a decrease in the estimates of climate change expenditure, as shown in the graph and table below. However, the trends remain similar with both methodologies.

Figure 7: Aggregate climate change expenditure (CRI and CBR methods)



Source: MEF, CDC and MEF & expert team calculation.

Table 2: Comparison of results between the CBR and CRI approaches

		Climate Relevance Index		Cost Benefit Ratio approach	
		CC percentage to CC total	CC percentage to total	CC percentage to CC total	CC percentage to total
RE	Renewable energy	0.6%	0.1%	0.5%	0.0%
FM	Forestry	0.9%	0.1%	0.3%	0.0%
DRM	Disaster reduction	0.7%	0.1%	1.3%	0.0%
ICP	Infrastructure (pure CC proofing)	2.5%	0.3%	4.8%	0.2%
DRR	Disaster response	5.8%	0.6%	11.0%	0.4%
WCC	Water against drought/flood	2.1%	0.2%	4.0%	0.1%
HCC	Health (climate sensitive diseases)	3.0%	0.3%	1.1%	0.0%
PCC	Planning for climate change	1.8%	0.2%	6.9%	0.2%
IRR	Irrigation	15.5%	1.6%	23.5%	0.8%
WG	Water general	0.8%	0.1%	1.5%	0.1%
BC	Biodiversity and conservation	0.7%	0.1%	2.1%	0.1%
ECT	Eco-tourism	0.2%	0.0%	0.1%	0.0%
LVT	Livelihoods (of CC vulnerable)	3.4%	0.4%	10.4%	0.4%
EG	Emissions (secondary objective)	1.8%	0.2%	1.1%	0.0%
ROC	Road improvement (incl. CC proofing)	6.8%	0.7%	6.1%	0.2%
ROG	Road (no indication of CC proofing)	11.6%	1.2%	7.0%	0.2%
IG	Infrastructure (secondary benefits)	10.5%	1.1%	6.4%	0.2%
WQG	Water quality (general)	1.6%	0.2%	1.0%	0.0%
PG	Planning (general)	1.3%	0.1%	0.3%	0.0%
LVG	Livelihoods (general)	10.2%	1.1%	6.2%	0.2%
HG	Health (General)	12.0%	1.2%	2.9%	0.1%
GG	Governance (General)	2.7%	0.3%	0.7%	0.0%
ENG	Energy General)	3.5%	0.4%	0.8%	0.0%

Source: MEF, CDC and MEF & expert team calculation.

Annex 2: Weighted Climate Change expenditure by ministries and agencies

	Total donor and national in Billions of CR							
	2009	2010	2011	2012	2013	2014	Total	% share
WEIGHTED								
MLUPC	2.3	2.0	3.1	0.2	0.5	0.1	8.2	0.3%
MoT	0.6	0.7	0.9	0.7	0.8	0.9	4.5	0.1%
MIH	1.2	0.9	0.0	0.0	2.0	6.7	10.8	0.3%
MoInfo	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
MPTC	0.0	0.0	0.0	0.0	0.8	7.1	7.9	0.2%
MAFF	70.0	45.5	21.0	23.8	61.7	69.2	291.3	9.1%
MoWRAM	71.2	113.8	194.8	224.3	265.0	332.2	1,201.3	37.6%
MoME	7.9	4.8	5.0	9.1	12.3	31.9	70.9	2.2%
MPWT	61.7	62.8	93.0	119.1	121.2	175.5	633.2	19.8%
MRD	26.2	30.8	26.3	35.3	45.1	62.3	226.0	7.1%
MoH	16.3	26.6	14.6	16.9	32.7	28.5	135.6	4.2%
MEYS	0.0	0.0	0.0	0.0	0.1	0.6	0.7	0.0%
MWA	0.8	0.6	0.6	0.8	0.7	0.7	4.1	0.1%
NCDM	5.2	12.6	0.6	2.8	1.2	5.9	28.4	0.9%
MoE	19.9	14.8	14.9	19.1	38.4	12.4	119.5	3.7%
SNA	44.8	75.8	7.1	5.1	0.3	14.6	147.7	4.6%
NGO	15.4	27.4	8.1	9.0	27.6	30.6	118.0	3.7%
Total CC, CCFF ministries	**343.4**	**419.3**	**389.9**	**466.0**	**610.3**	**779.3**	**3,008.3**	**94.1%**
Others	24.1	23.2	20.3	23.1	29.8	68.0	188.6	5.9%
Total CC, all ministries	**367.5**	**442.4**	**410.3**	**489.2**	**640.2**	**847.3**	**3,196.8**	**100.0%**
in USD	91.9	110.6	102.6	122.3	160.0	211.8	799.2	

Source: MEF, CDC and MEF & expert team calculation.

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