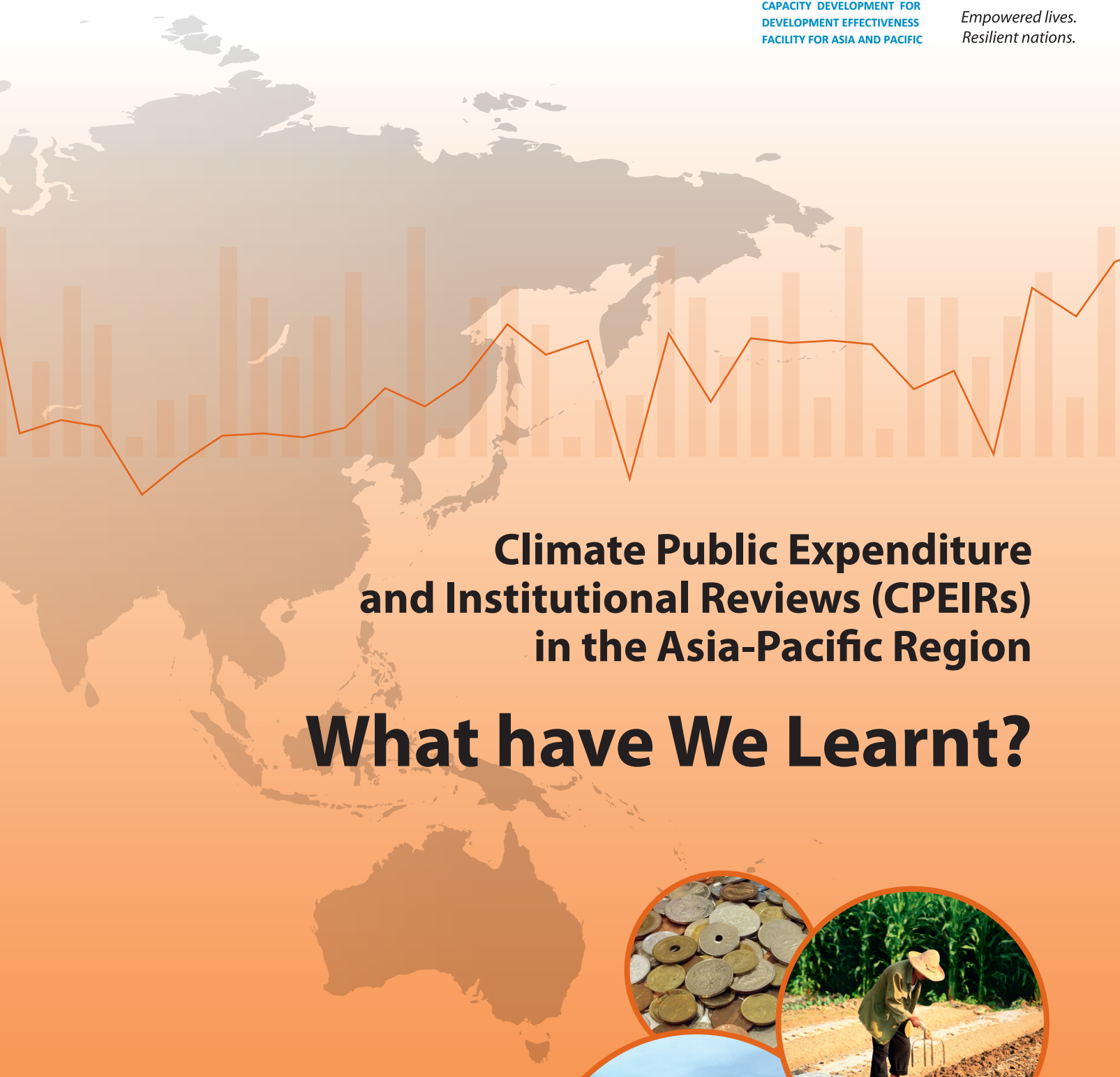




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Climate Public Expenditure and Institutional Reviews (CPEIRs) in the Asia-Pacific Region

What have We Learnt?



The Climate Public Expenditure and Institutional Reviews (CPEIRs) in Asia-Pacific region: What have we learnt?

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**Climate Public Expenditure
and Institutional Reviews (CPEIRs)
in the Asia-Pacific Region**

What have We Learnt?

Author: Mark Miller

CPEIRs in the Asia-Pacific Region – What Have We Learnt?

*This working paper is provided as a draft review document posing some lessons learnt from the recent UNDP experience in implementation of Climate Public Expenditure and Institutional Reviews (CPEIRs). The paper also provides proposal for implementing future CPEIRs and undertaking complementary analyses. It is expected that the **CPEIRs: Workshop on Past Experience and the Way Forward, from 10-12 September 2012 in Bangkok** will provide an opportunity to further strengthen the findings and proposals in this paper.*

1. Introduction

The Climate Public Expenditure and Institutional Review methodology was first pioneered in Nepal, with UNDP and UNEP support in 2011. In a context common to many countries in the region, a proliferation of financing mechanisms and various donor-government dialogues on how to address climate change had been emerging. These discussions had often been fragmented and typically taking place amongst environment or climate change specialists, but not yet rooted in key national debates on how the government might best promote the country's economic and social development.

The CPEIRs were introduced as the very first climate change studies of their kind that sought to move away from a parochial focus on the use of funds that are primarily dedicated to addressing climate change issues. Rather, they aimed to help countries to review how their own stated national climate change policy aims were being reflected in public expenditures more broadly and how institutions might be adjusted to ensure that financing a response to climate change is delivered in a coherent way across government. It was anticipated that CPEIRs would provide a useful starting point for longer term government-led multi-stakeholder dialogue on how the government might utilise increased financing as part of the national response to climate change.

Since the first CPEIR was undertaken in Nepal in 2011, four further countries have followed suit: Bangladesh, Thailand, Samoa and Cambodia. With five CPEIRs now completed, and further CPEIRs already in the pipeline in Indonesia, Timor-Leste and Viet Nam; it is an opportune moment to review this body of work and promote dialogue and learning. The CPEIR process is still evolving: where they have been undertaken, CPEIRs have already played an important role in stimulating more comprehensive and inclusive reflections on climate change than had taken place previously. However, there is still much to be learnt on how this type of analysis can be utilized and built upon to assist delivery of climate change policy goals. There is also scope to further refine and tailor the process to better meet the requirements of countries undertaking CPEIRs.

In this regard, this paper provides a comparative analysis of (i) the methodology used in the five CPEIRs done to date, (ii) the initial findings that have emerged from the CPEIRs and (iii) the recommendations that have been made to take the work forward at a country level. Further, drawing from this body of work, a number of proposals are then made, which look at how the methodology could be improved upon for future studies. Proposals are also made for potential complementary analyses and support that would be required to take the CPEIR analyses forward.

2. Methodology

Objectives of the studies

The CPEIR methodology was initially piloted in Nepal as a first step to enable national policy makers to assess the present status of the national response to climate change in readiness for scaling up access and delivery of climate finance. This methodology was developed to allow for a review of the expenditure on activities that are related to climate change, and to assess the extent to which the national policy and institutional context guides those expenditures (Bird et al. 2012). In that regard, running through each of the CPEIRs is:

- An assessment of current policy priorities and strategies as these relate to climate change;
- A review of institutional arrangements for integrating climate change policy priorities into budgeting and expenditure management processes; and
- An analysis of public expenditure and its relevance to climate change. (CPEIR Bangladesh)

The CPEIR approach

The CPEIR methodology builds upon the approach taken in World Bank Public Expenditure Reviews (PERs), which involve analysis of the allocation, management and results of public expenditures (although CPEIRs have as of yet focused less on results than a regular PER given the lack of climate change monitoring indicators currently in place). This methodology is particularly appropriate, as crucially, this type of analysis begins from a starting point of reviewing public expenditure across the whole of government. By taking a more holistic view of how climate change is integrated with national policies and public expenditures, the studies served as a unified engagement point both for government departments that have specialised in climate change, but also institutions such as ministries of finance, planning and local government who historically have been less involved in these issues.

Each of the CPEIR studies has been led by a multi-disciplinary team of researchers, combining experts on climate change policy, but also governance and public financial management in order that climate change can be reviewed as part of broader institutional processes. International and national consultants were used to blend international expertise in this field with local knowledge of the country context. This inclusive, multi-disciplinary approach required careful management as it was not always clear during the studies whether authority resided in finance ministries or climate change departments.

In each of the countries, government steering committees have been established to oversee the process of implementing the CPEIR, predominantly led by representatives from ministries of finance, but with other key ministries also represented. This has meant that the studies have also been well positioned to respond to the specific concerns of the committee representatives. The studies, moreover, have played a vital process function, acting as a starting point for longer term government-led multi-stakeholder dialogue and learning.

The CPEIR methodology introduced to a standard PER the innovation of incorporating an institutional analysis at the heart of the studies. While the importance of 'mainstreaming' climate change in government operations is often repeated, specific responsibilities for development and

implementation of climate change policy are in practise typically unclear and administratively unacknowledged. Ministries and agencies with large expenditures relevant to climate change, such as Agriculture or Local Government are also regularly found to have no explicit recognition of climate change within their own sector policies. The CPEIR thereby provides a much needed mapping of the institutional arrangements within government for addressing climate change actions. It also considers how climate change is integrated with national budgetary systems from planning, through to budget preparation, execution and oversight. Further, with local governments having a vital role to play in delivering services to those likely to be most vulnerable to the effects of climate change, the CPEIRs have undertaken case studies looking specifically at the role played by local government institutions in implementing climate change policies.

Defining 'climate relevant' expenditures

At the heart of all the CPEIRs undertaken is the classification of public expenditure into different categories that are relevant to climate change (Thailand CPEIR 2012). In the absence of an internationally recognized definition of climate expenditure, researchers in each of the countries have come up with national definitions of what constitutes the 'climate relevant' component of the national budget. Activities have been grouped into categories of varying levels of relevance to climate-change mitigation or adaptation outcomes (although studies to date have excluded expenditure on activities that may lead to exacerbation of climate change, such as fossil fuel subsidies). Overseen by steering committees, this contributes to a useful process of thinking through how different government expenditures might be related to climate change mitigation and adaptation.

There is inevitably a degree of subjectivity in defining how relevant different types of expenditure are to climate change. Bird et al. (2012) point out that where awareness of climate change is more established, as in Samoa, researchers may more readily identify expenditures with climate change. Nevertheless, they note a fairly consistent categorisation across the five pilot countries of the relevance of various sector expenditures (see Annex 1). Relevance criteria are also typically based on stated policy objectives, rather than evidence that funds are actually being utilised to contribute to goals of climate change mitigation and adaptation. For example, while investments of the Thai Royal Irrigation Department in agricultural water management are deemed *relevant* for adaptation to climate change; the criteria as outlined do not necessarily show whether those investments have in fact contributed positively or negatively to that goal.

As well as variations in how climate relevant expenditure has been defined, there have also been differences in the composition of public expenditure analysed. For example, in the studies undertaken in Cambodia and Samoa, off-budget donor support has been incorporated in defined public expenditure, while in the other studies the focus has been explicitly on the budget. Further, at present, extra-budgetary funds¹, tax expenditures, public private partnerships and quasi fiscal liabilities have also been excluded from detailed analysis, which has varying implications on the findings depending on the country context and the relative importance of these unbudgeted or indirect expenditures.

¹ With the exception of donor financed funds in the cases of Samoa and Cambodia

Finally, existing public financial management systems and data availability have also influenced how the expenditure analysis has been undertaken. For example, in Samoa where there are delays in the production of final accounts, the CPEIR relies on budgetary data rather than information on actual expenditures. The Samoa, Cambodia and Nepal CPEIRs have also used donor commitment data from aid management systems as a proxy for donor financed expenditures.

3. Findings

Policy-based findings

As part of the CPEIR, an assessment is undertaken of current policy priorities and strategies as these relate to climate change. **All the countries assessed to date have in place a leading national climate change policy document and there is evidence in all pilot countries that the formulation of these national policies has been guided by the United Nations Framework Convention on Climate Change (UNFCCC).** National climate change policy is seemingly reactive, responding to decisions of annual UNFCCC Conference of the Parties meetings (UNFCCC COP).

Despite the importance of the UNFCCC in stated national climate change policy, it does seem that policy is also responding to specific country circumstances, including varying levels of economic development and the specific geographical context. In Bangladesh and Samoa for example, the climate change agenda is primarily adaptation focused and building upon a legacy of supporting preparedness and the capacity to respond to natural disasters. In Nepal, priority is being given to climate change adaptation at the local level, given the high levels of rural poverty and vulnerability. In Cambodia, ambitious infrastructure development plans are factoring in the country's vulnerability to more frequent flooding. In contrast, in Thailand, where the economy is more developed, climate change policy has been more focused on mitigation and catalyzing private sector investment in mitigation through initiatives such as renewable energy subsidies and promoting access to the Clean Development Mechanism.

A common feature identified in the CPEIRs is that while these policy documents are typically comprehensive, they are not prioritized, costed or sequenced. This makes it difficult to assess whether sufficient resources are being allocated to meet the stated objectives.

The CPEIRs have looked beyond country climate change policy documents and also outlined relevant sector policies (e.g. transport, energy, agriculture, water management etc.), which have direct and indirect impacts, both positive and negative, on climate change. In Bangladesh, for example, the CPEIR identifies and draws out the linkages between the government's social protection policy (including food security and livelihood schemes), which may support resilience to climate change at a household level. However, at the time the study was conducted, no specific reference was made to climate change in the social protection policy. In certain cases, climate change policy was also found to be competing with other policy goals. In Cambodia, for example, climate change policy (CMDG 7) aims to achieve and maintain 60% forest cover by 2015, although current forest cover is at 57% and declining. This may partly be explained by incentives created by Economic Land Concessions (ELC) which support the conversion of land for economic purposes and would seem to run counter to environmental goals.

Institution-based findings

Historically, Ministries of Environment have had the lead role in taking forward climate policy at the national level. That national climate change policy is seemingly reactive, responding to decisions of annual UNFCCC CoP (see above), suggests that the drivers for mainstreaming climate change policy are primarily external. Predominantly, Ministries of Environment have represented governments at UNFCCC CoPs and have had primary responsibility for taking climate policy forward at a country level. This has implications for 'embedding' climate change concerns within the planning and budgeting of different government agencies. **Ministries of Environment are not 'core' or 'upstream' ministries like planning and finance and may have limited influence over the underlying reforms necessary to implement a systematic response to climate change.**

In all the countries where reviews have been undertaken, steering committees have already been put in place to coordinate and oversee the response to climate change across government. However, a recurrent theme from the CPEIRs is that mechanisms for coordination are not as well established as they might be, with committees meeting on a sporadic basis (Samoa, Nepal) and insufficient resources to support the secretariat to follow up on recommendations (Thailand). **Whilst steering committees have been established to coordinate climate change policy, their influence over existing patterns of expenditures within different ministries has been demonstrated by CPEIR findings to be low.** Some governments have established committees focused on climate finance to try and address this (e.g. Thailand's Climate Fiscal Framework Working Committee).

Alongside considerations of coordination mechanisms, there has been less demonstrable progress in establishing the appropriate framework of incentives for government agencies to participate in a more systematic approach to articulating their climate change expenditures. Whilst in most countries, priority sectors and agencies have been identified as having significant relationships with climate change adaptation and mitigation, this has not led to planning and budgeting processes scaling up climate finance to those sectors where further investments could support 'positive' approaches to climate change. CPEIRS did not look in depth at sectors, which might have potentially conflicting interests with taking forward a climate change response (e.g. energy) and the incentives for changing patterns of taxation and expenditures that could influence reform. CPEIRs have found there to be a lack of appraisal criteria for assessing the impact of planned major investments and policies on climate change across countries. **Establishing the right incentives and strengthening capacities to appraise projects and programmes in relation to climate change in priority sectors will be a key next step in institutionalising a climate change response.**

All CPEIRs have identified processes of decentralisation and deconcentration as key to ensuring that climate change expenditures respond to location specific contexts and reach the poor and vulnerable. In Nepal, policy commitments have been made that 80% of public resources for climate change be spent at the local level. In Nepal and Bangladesh, ministries of local government are the highest spending agencies on climate change. However, in no CPEIR were climate change issues found to be systematically considered in local level planning or budgeting. The climate related initiatives of non-governmental and community based organisations were reviewed to a limited extent as part of the CPEIRs, but are likely also to have significant implications for how climate change interventions are coordinated at the local level.

Transparency and accountability in delivering a national climate change response is very limited.

Issues in defining ‘climate change expenditures’ mean that existing budget classification and reporting structures are not capable of tracking climate change expenditures over time without considerable manipulation of data. Specific monitoring and evaluation criteria to guide the measurement, verification and reporting on the impact of investments in climate change adaptation or mitigation do not exist. Oversight institutions including parliamentary committees and audit organisations are not yet analysing how the use of public funds is impacting climate change. CPEIRs did not look into the issue of how civil society and media are creating demand and pressure for more transparency and accountability in national-led climate response.

The CPEIRs have raised useful questions about how much information and human resources should be devoted to the management of climate finance.

Existing systems of performance budgeting are already creating strains on government systems and the CPEIRs have attempted to identify opportunities for adapting these systems, rather than creating new analytical and reporting requirements, wherever possible. These lessons are beginning to bring into focus questions of the appropriate breadth of coverage of climate expenditure, including, in particular, the treatment of infrastructure, livelihoods and welfare payments.

Coordination challenges are seemingly further amplified by the fragmentation of donor financing flows and also a lack of coordination of efforts amongst donors.

Responsibility for management of donor funds is often split between different institutions. In Bangladesh and Cambodia for example, the responsibility for management of multi-donor trust funds resides with ministries of environment, while resources from the PPCR are channelled through finance ministries. Governments and donors will need to align approaches to climate financing to support the necessary coordination mechanisms and incentives frameworks across government’s planning and budgeting processes.

Parallel arrangements for the management of new flows of international finance dedicated to climate change are also being established, although in most cases they still constitute a minority of the total sums available and used by government.

There was also evidence of Governments creating extra-budgetary funds themselves – in Thailand especially – but also in Bangladesh. The public presentation of this is to bypass bureaucracy. There are also political considerations in that these national climate funds provide significant visibility to the climate change agenda (although in practice they are a very small component of the overall climate response required). However, the evidence suggests that new mechanisms and institutions lack institutional maturity and agility and take a lot of time to operationalise.

Findings from expenditure analysis

How much are governments spending on climate change?

One of the key findings of the expenditure analysis in the CPEIRs has been estimates of the proportion of public expenditure that are defined by the researchers as being relevant to climate change. As shown in Figure 1, there is large variation in these figures with between 2.7% of the total

budget in Thailand deemed to be ‘climate relevant’ and up to 16.9% in Cambodia in the most recent financial year.²

Figure 1: Climate relevant expenditure as a proportion of total expenditure and GDP

Country	Headline statistic (as % of budget)	Headline statistic (as % of GDP)	Comments on how data captured
Nepal	6.7 %	1.8%	<ul style="list-style-type: none"> Limited to 10 Ministries ‘likely to undertake activities relevant to climate change on a functional basis’ Does not include ‘off-budget’ donor support
Bangladesh	5.5 – 7.2 % (2010/11)	0.9% (2010/11)	<ul style="list-style-type: none"> Analysis identified 37 out of 57 ministries or divisions that had climate relevant expenditure Does not include ‘off-budget’ donor support
Thailand	2.7 %	0.5%	<ul style="list-style-type: none"> 14 Ministries ‘had a climate programme in the period reviewed’ Does not include ‘off-budget’ donor support
Cambodia	14.9 – 16.9 %	3.1 – 6.9%	<ul style="list-style-type: none"> Analysis of budgeted expenditure covered all Government programmes and projects Includes ‘off-budget’ donor support
Samoa	15 %	6 %	<ul style="list-style-type: none"> Analysis of budgeted expenditure covered all Government programmes and projects Includes ‘off-budget’ donor support

Source: From Bird et al. 2012

Caution should be taken in making cross-country comparisons of these figures given the methodological differences highlighted in the previous section. Results are affected by the judgment involved in determining the relative relevance of expenditure categories on climate change (outlined in more detail in Annex 1). For example, in Cambodia, stated policy on road building is that all roads ought to take into account climate proofing in the design, but for a large part of the road building program there is no explicit evidence of the size of the ‘climate proofing’ component or means of establishing the additional investment required to ‘climate proof’ these roads. The proportion of climate related expenditure falls by 3-4% points if these ‘low relevance’ roads are removed from the analysis. How public expenditure is defined and measured in the analysis can also have a considerable bearing on the proportion of climate change related expenditure. For example, in Thailand, according to the 2009 Public Expenditure and Financial Accountability (PEFA) assessment, there are 95 extra-budgetary funds, which are excluded from the budget and by extension the expenditure analysis of the CPEIR. The Energy Conservation Fund alone has an annual budget of approximately \$US226m, which is equivalent to 0.3% of total budgeted expenditures.

Nevertheless, given the significant range of estimates between countries, the variance between countries is unlikely to be attributable to differences in methodology and data alone. It seems

² These estimates are based on weighted figures with different relevance categories given different expenditure weightings

likely as Bird et al. (2012) suggest that ‘real differences in national circumstances’ may also be influencing the level of climate change relevant expenditure.

With a large proportion of ‘climate relevant’ expenditures predominantly embedded in sector expenditures with other primary objectives, the size and distribution of climate-relevant expenditures is not seemingly being affected first and foremost by considerations of *climate change* policy, but rather more generally by the overall composition of the budget. One key example of this is that countries which have a high proportion of ‘development expenditures’ also seemingly have budgets with a greater proportion of climate relevant expenditure. In Cambodia, a much larger proportion of the overall government budget is channelled to investment projects than is the case in Bangladesh or Thailand where recurrent expenditures are relatively much greater. While investment projects include irrigation, livelihoods and road building programs deemed relevant to climate change; recurrent expenditures comprise major expenditures such as social sector wages, pension commitments, public debt payments and security expenditures that are not deemed relevant (see for example the different proportions of recurrent and development expenditure relevant to climate change in Figure 2). Decisions to commit resources to ‘development expenditures’ rather than ‘recurrent expenditures’ are not primarily driven by climate change policy; but rather, by the relative level of dependence on externally financed projects and also government policy on appropriate levels of public capital investment.

Figure 2: Comparing recurrent and development expenditure in Cambodia and Bangladesh

	Cambodia	Bangladesh
Recurrent expenditure as a % of total budget	46.3%	73.3%
Development expenditure as a % of total budget	53.7%	26.7%
% of recurrent expenditure relevant to climate change	0.7%	3.3%
% of development expenditure relevant to climate change	28.5%	14.7%

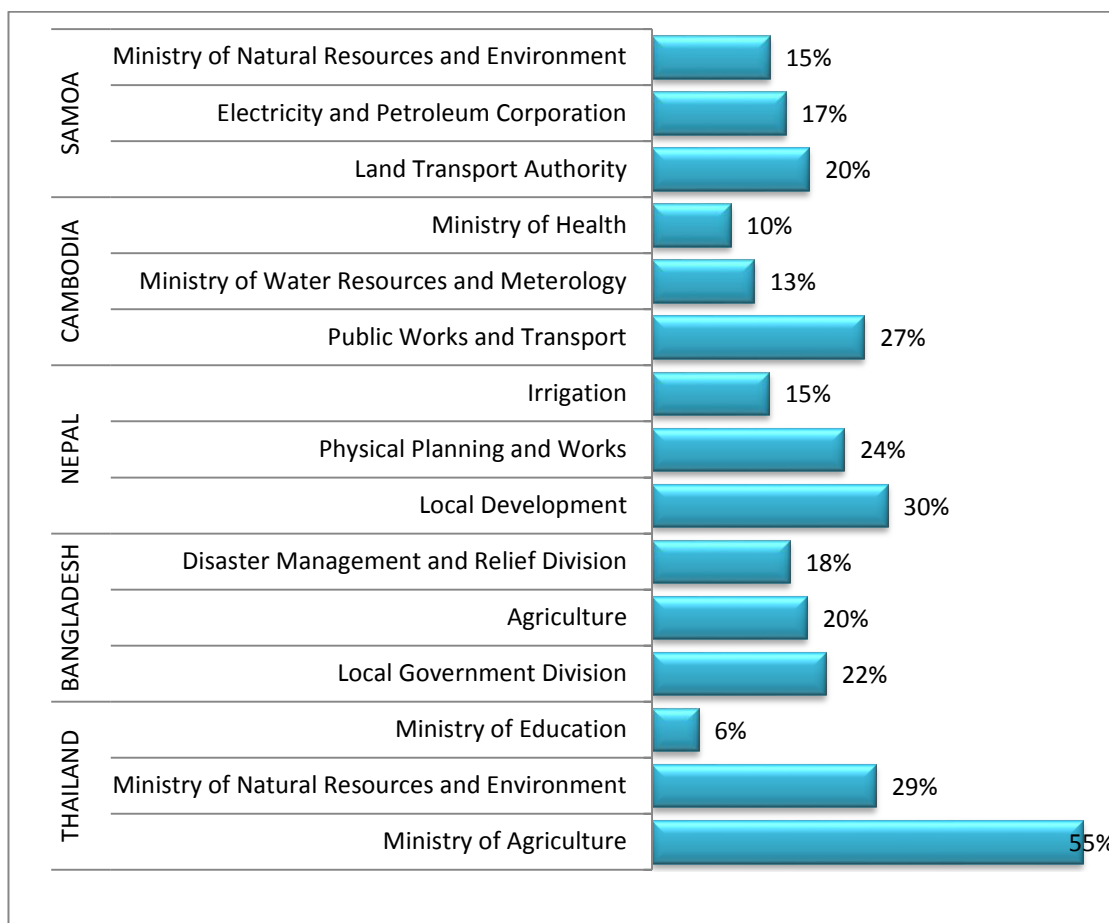
As economies develop, there is also typically a shift away from a reliance on concessional external public financing of infrastructure towards a greater role for private finance. In Thailand, for example, large investments in renewable energy or metropolitan public transport networks are typically made through public-private partnerships and would not be captured in the budget. In Samoa, on the other hand, where there are fewer profitable opportunities for renewable energy investment; the government is relying upon donor funds to finance a large renewable energy expansion project. As such *public* renewable energy investment is significantly higher as a proportion of the budget in Samoa than in Thailand.

Who is doing the spending?

While a large number of Ministries and sectors undertake activities that have relevance for climate change (in Bangladesh for example, activities under 37 government agencies were assessed to be relevant to climate change); in all the five countries assessed, between 60%-80% of

total climate expenditure was concentrated within just three Ministries.³ Despite often taking the lead in the development of climate change policy, only in Thailand and Samoa does an environment ministry feature as one of the top three spending agencies for ‘climate relevant’ expenditures; with climate relevant expenditures predominantly being embedded in sector Ministry expenditures with other primary objectives.

Figure 3: Highest climate relevant spending agencies as proportion of total ‘climate budget’⁴



In Nepal and Bangladesh, ministries of local government are the highest spending agencies on climate change. In Nepal, policy commitments have been made that 80% of public resources for climate change be spent at the local level. However, the importance of the local government ministry in this regard is also reflective of the particular institutional structure in Nepal, whereby the Ministry of Local Development is responsible for the allocation of conditional and unconditional recurrent and capital grants to local bodies. Similarly, in Bangladesh, the department of local government plays the role of providing block grants to district government bodies. By contrast, in Cambodia, Thailand and Samoa central government transfers to local government structures are allocated either directly in the budget, or through sector ministries.

³ The figures presented in Table 4 for Cambodia and Samoa also factor in projects implemented by third parties and ‘multiple implementers’. When these are factored in concentration of largest 3 implementing agencies is also over 60%

⁴ Based on *weighted* climate relevant expenditures with exception of Nepal where weighting not done. Cambodia data based solely on CDC database which also includes non-governmental implementing agencies.

In Cambodia and Samoa, climate relevant expenditures are dominated by investments in transport infrastructures that have the stated goal of being ‘climate-proofed’. In Samoa, a large part of this investment has resulted from reconstruction efforts following the 2009 tsunami; while in Cambodia, it is part of ambitious infrastructure development plans. Nepal’s public works ministry also makes a significant contribution to climate relevant expenditure. Given the respective levels of economic development of these countries compared to Thailand, for example, it is perhaps to be expected that public works ministries receive proportionately larger budgetary allocations.⁵

In Thailand, climate relevant expenditure is dominated by the investments of the Royal Irrigation Department on water management that have historically targeted growing productivity in the strategically important agricultural sector. Irrigation investments are managed by the Ministry of Water Resources in Cambodia and the Ministry of Agriculture in Bangladesh and as such the importance of irrigation investments can be seen across the countries surveyed. Further analysis would be needed to better understand the quality of those investments and whether in fact climate resilience is being built or in fact reduced, as is possible if, for example, aquifers are being depleted.

The Electricity and Petroleum Corporation (EPC) in Samoa is the only energy-related institution to be reflected here as one of the top three leading ‘climate relevant’ spending institutions. Large scale investments in the energy sector would not typically be captured by the CPEIR methodology as conducted to date; given that investments are predominantly undertaken by private investors, public-private partnerships or public corporations (that are typically excluded from government budgets). Samoa’s EPC is captured in this analysis because of the way all donor financed projects are recorded in the Samoa CPEIR, even if expenditures are not being managed through the government budget.

How is the expenditure being financed?

The relative size of donor contribution to climate relevant finance varies in line with the overall dependence on external finance in the budget more generally. As can be seen from Figure 4, across all countries, donors are financing a higher proportion of climate relevant expenditures than their proportional contribution to total expenditure. This is to be expected given that donor financing is predominantly project based; while governments have ongoing commitments to service debt, finance wage bills and so on.

⁵ Although these differences also emanate from differences in methodological interpretation whereby roads were deemed not to be relevant to climate change in Thailand, but were in Cambodia and Samoa.

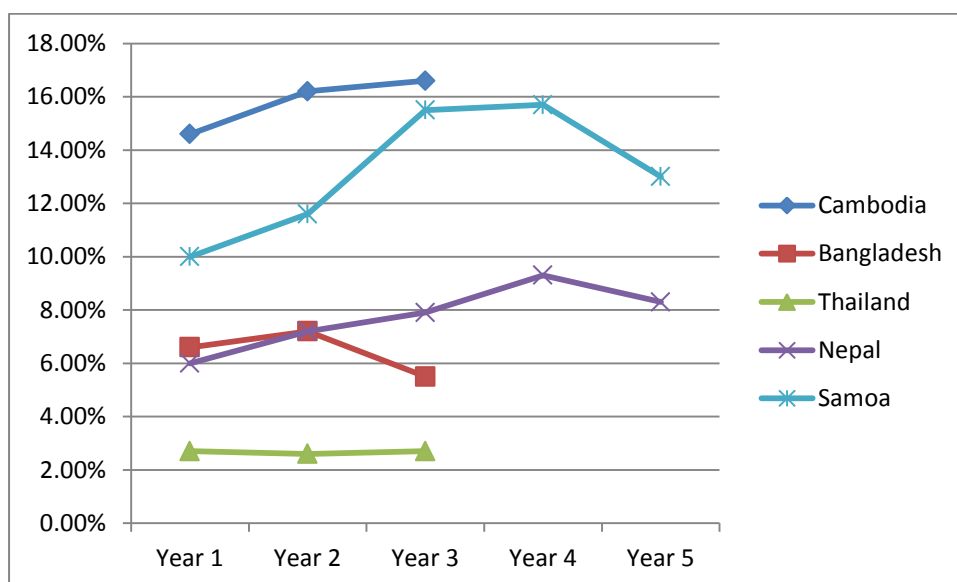
Figure 4: Average proportion of expenditures financed by domestic and external resources over last three years⁶

	Proportion of total expenditure defined in CPEIR analysis		Proportion of 'climate relevant' expenditure	
	Financed by domestic revenues	Financed by external grants or loans	Financed by domestic revenues	Financed by external grants or loans
Bangladesh	86%	14%	77%	23%
Cambodia	33%	67%	13%	87%
Nepal	73%	27%	44%	56%
Samoa	68%	32%	41%	59%

Trends in climate change related expenditure

It is difficult to draw conclusions from just three years of data about overall trends in climate relevant expenditures. Figure 5 shows diverging trends over time in different countries for the proportion of expenditure relevant to climate change. Changes may not necessarily reflect a growing or waning commitment to climate change, but could also be reflective of broader sector shifts (e.g. significant growth in social sector expenditure could lead to a decrease in climate relevant expenditure as a proportion of the total budget). Donor financing trends also seemingly play a significant role. For example, in Samoa, as part of reconstruction efforts following a tsunami unrelated to climate change, there were significant donor investments in climate resilient infrastructure that have since fallen back.

Figure 5: Changes in the proportion of total expenditure that is climate relevant over time



While climate relevant expenditure growth in Bangladesh has been less than total government expenditure growth (16% vs. 47% respectively, between 2009/10 and 2011/12); over the same

⁶ Caution should be exercised in making international comparisons as studies defined 'total expenditure' in different ways. In Cambodia, for example off budget expenditures have also been included which raises overall contribution of donors.

period the number of activities labelled as having relevance for climate change has increased dramatically (just 24 in the 09/10 budget, revised to 115 in the same year following the publication of the Bangladesh Climate Change Strategy and Action Plan). This suggests that while policy may be influencing the labelling of activities, it is not necessarily leading to increased finance for activities.

What is the money being spent on?

In the three countries where estimates have been made on the proportion of climate change expenditure allocated to adaptation and mitigation, there has been a relatively consistent breakdown of 70%-80% allocated for adaptation and 20-30% for mitigation. This is likely to partly reflect government priorities: in the cases of Samoa, Nepal and Bangladesh adaptation, broadly defined, is the clear priority of government policy on climate change. However in Thailand, where mitigation is a more explicit policy priority, a similar figure was arrived at. This seems to reflect the fact that while a large proportion of adaptation expenditure is embedded in the provision of public goods; for climate change mitigation, the Thai government is primarily playing a catalytic role aimed at promoting *private* investment in energy efficiencies and renewable energy provision.

4. Recommendations and actions emanating from CPEIRs

CPEIRs articulated recommendations for policy and institutional reforms as well as changes in the ways in which climate change expenditures are managed through planning and budgeting processes as well as within programming. The CPEIRs in Cambodia, Samoa and Thailand include short, medium and long term frameworks for taking forward these reforms. In all cases, CPEIR recommendations are based on a recognition that the planning and budgeting reforms necessary for a comprehensive approach to climate change are just beginning.

Climate policy development

One of the key findings of the expenditure analysis in the CPEIR countries is that expenditures relevant to climate change are being shaped primarily not by climate change policy, but by expenditure priorities more generally. The CPEIRs therefore reiterate the recommendation that climate change should not be seen solely as an environment concern, but also an economic and social concern and incorporated in national development strategies. The study undertaken by the National Economic and Social Development Board (NESDB) in Thailand on the implications of climate change on food and energy prices is a good example of effectively linking knowledge on climate change with the strategizing of government policy on economic development.

While a ‘whole of government’ approach is often recommended to respond to climate change, the apparent concentration of relevant expenditures to a small number of Ministries suggests **that governments may actually be able to take strategically focused approach and concentrate efforts on integrating resilience to climate risks into the policy development of a small number of key sectors.**

Planning and finance institutions have a leading role to play in facilitating the incorporation of climate change concerns into policy development and public investment planning at a sector and local level. A number of CPEIRs therefore recommend that appraisal criteria for investment projects

are revisited to ensure the climate sensitivity of major projects is screened. This is true not just of 'climate change projects'; but all major investments where impacts on climate change, both positive and negative, ought to be considered at the investment appraisal stage.

While each of the CPEIR study countries have had national climate change strategies in place, there is a recurring suggestion that plans would benefit from greater evidence of prioritisation. Further, in none of the countries surveyed has there been a financing plan put in place to outline how such strategies might be funded. It is recommended in the CPEIRs that climate fiscal frameworks are developed in conjunction with planning and finance ministries which outline the expected role of different sectors of the economy (e.g. public sector, NGOs, businesses, households) in financing a response to climate change. A fiscal framework would help to identify all potential sources of climate financing (both public and private as well as national and domestic) and how these resources could best be accessed, combined and sequenced. Work has begun in Cambodia on the development of a climate change financing strategy emanating from the recommendations made in the CPEIR.

Climate Institutions

Institutional reforms to address climate change concerns are not happening in a vacuum and will be most effective when built upon existing governance reform programs. Many of the institutional challenges identified in the CPEIRs are not in fact specific to climate change: linking budgets to policy priorities; responding to the needs of the most vulnerable in local communities; issues of transparency and accountability; these are all concerns that touch upon a range of policy domains.

Where climate change is particularly problematic to manage is that the majority of climate relevant expenditure is embedded in sector expenditures with other primary objectives. As such it does not have a single agency that acts as a natural champion for goals of climate change adaptation and mitigation during policy preparation or budgetary negotiation. All the countries studied have therefore put in place some kind of high-level, multi-stakeholder, national committee for overseeing the national climate agenda. While these committees on climate change have been active in designing strategies, they have often been weaker in monitoring their implementation on an ongoing basis. **Both the Samoa and Cambodia CPEIR recommends that an annual monitoring report be developed, which provides an update on new policy related to climate across all sectors, recent trends on the level of climate expenditure, as well as updates on prospects for climate funding.** This type of report would assist in formalising the meetings of climate change steering committees whose mandates are still evolving.

A further recurring theme is the significant overlap in institutional structures between agencies responsible for disaster risk management and those leading the climate change adaptation agenda. There is seemingly scope for these agendas to converge and economise on resources.

In order for policy integration to improve at the sector and local level, **a number of CPEIRs also make the case for supporting the development of technical skills in priority sectors for appraisal of policies and performance monitoring and evaluation from a climate change perspective.** Given the linkages between climate vulnerability and poverty, areas such as social protection and other poverty programming are also considered as priorities for focused investment to integrate climate related activities.

A number of the CPEIRs highlight that more work needs to be done on awareness of climate change at the local level and its possible impact. It is suggested that local government agencies ought to work in conjunction with planning institutions and climate change departments to adapt materials for policy planning and investment appraisal to the needs of local government officials.

It is recommended that where available local government agencies also complement their vulnerability assessments with analysis on how the impacts of climate change will affect different geographical regions, in order that funding can be prioritized for the most vulnerable.

In certain cases, local government structures may not be best equipped to meet the needs of local communities and there may be scope for NGOs to more effectively fill this role. **The Bangladesh CPEIR recommends an appraisal of the capacity and comparative advantages of different local stakeholders to manage larger scale projects.**

Local variability of the impacts of climate change requires that local government agencies have some discretion over how funds for climate change adaptation are utilized. There is therefore a suggestion in the Nepal CPEIR, echoed elsewhere, that existing fund modalities that provide general purpose grants might be complemented with climate finance. The Samoa CPEIR suggests that modalities for making cash transfers to households also be explored as a means of building resilience at a household level.

Relevant Parliamentary committees also potentially have an important role to play in overseeing the development and implementation of government policy on climate change. To do this effectively, they require necessary tools to review the implications of public expenditures on climate change. This includes (i) ensuring that the executive produces necessary information on climate change in development plans, budgetary documentation and monitoring reports as well as (ii) building the skills of parliamentarians to effectively guide climate change activities.

Management of Public Finance

A common message that emerges from the CPEIRs is that governments do not need to build new bespoke budgetary systems to address climate change issues. Rather in all the countries studied, the recommendations have been focused on building upon established planning and allocation systems within government which already act as the key mechanism for reconciling competing demands. Implementation of ongoing PFM reform plans that countries have in place will serve to strengthen linkages between policy priorities and budgetary allocations, as well as improving the effectiveness and efficiency of public expenditures. However, the CPEIRs also highlight that climate change brings it with a number of specific issues that Ministries of Finance ought to consider addressing.

Linking climate change policy and budgets is particularly problematic as responsibility for expenditures do not predominantly reside under a single sector, as with other cross-cutting issues. **To therefore make climate relevant expenditures more visible, a number of the CPEIRs have recommended that a functional marker be applied to climate change expenditures in order that they can be tracked more easily over time.** The Thailand CPEIR also proposes that the marker differentiate between objectives of adaptation and mitigation. Such a marker would facilitate

budgetary analysis and the composition of monitoring reports that track the usage of budgetary resources for implementation of climate change policies. In this vein, the Nepal government has introduced a climate change marker in the 2012/13 budget in order that climate-relevant expenditure can be tracked from year to year.

The CPEIRs also propose the introduction of certain output or outcome indicators against which the quality of climate relevant expenditures can be measured. Without such indicators, it is difficult to currently assess the effectiveness and efficiency of climate relevant expenditures (although the prospects for monitoring mitigation look more feasible, where operational indicators are more easily developed than adaptation). Climate change departments should work in conjunction with relevant planning or budget departments (depending on where responsibility lies) in providing guidance on the development of appropriate indicators. Where countries have an element of performance orientation integrated in budget systems, as is the case with Bangladesh and its medium term budget framework (MTBF), this framework can be built upon to link budgetary allocations and indicators on the effectiveness of climate relevant expenditures. Key spending agencies must also recognize their impacts on climate change in budget preparation. The Thailand CPEIR recommends, for example, that ministries of agriculture and natural resources recognise the climate component of their budgets more explicitly in terms of both performance targets and the policy drivers behind the programmes.

With the exception of Thailand, in all countries considered in the CPEIRs, a significant proportion of public finance to address climate change is being provided by donors. The fragmentation of funding flows for climate change presents institutional challenges. Where numerous national and international extra-budgetary funding sources for climate change exist, there is a risk that gaps and overlaps in public expenditure emerge. The Bangladesh CPEIR recommends that **there may be scope for governments to work with funders to look at how funds could become more specialized and focus on particular sectors in order to reduce duplication.**

Aid management systems can also be adapted to incorporate climate change concerns: Cambodia for example has introduced a tag in order that expenditures on climate change are captured in the national database. CPEIRs in Samoa and Cambodia have also looked at mechanisms that could potentially be used to pool fragmented financing flows including the introduction of national climate funds. The uncertainty surrounding projected financing commitments from donors also contributes to the challenges faced by governments in developing prioritised and costed climate change strategies: funders should therefore strive to provide multi-year financing commitments.

5. Building on the CPEIRs

With five CPEIRs now undertaken it is an opportune time to: (i) review the CPEIR process more generally and consider how the knowledge gained can be used to drive change at a national level, (ii) propose complementary analyses that countries may wish to consider, and (iii) assess how the methodology could be improved upon for future studies.

Supporting implementation of CPEIR recommendations at a national level

The CPEIRs that have been undertaken make a number of recommendations that require critical evaluation and prioritisation, but can feed into country-owned follow up action plans. The recent CPEIRs undertaken in Samoa and Cambodia have broken down proposed activities in line with a number of the recommendations outlined above (e.g. introducing monitoring reports, reviewing expenditure classifications etc.) and expected timings when they should be completed. These suggestions should be reviewed critically, amended where necessary and adopted as plans to be monitored by climate change steering committees and, where necessary, supported by donors.

CPEIRs should also not necessarily be one off exercises. A periodic review of how policy, institutions and the allocation of expenditures are evolving can help to shed light on how the response to climate change is evolving over time.

Recommendations for future CPEIRs

The methodology adopted for future CPEIRs may need to delve into more detail as to not just the ‘relevance’ of expenditures to climate change, but the relevance of particular types of expenditure to the specific policy objectives of the country being considered. Climate change means very different things to different groups in different countries. In Samoa, a small island state vulnerable to rising sea levels, climate change adaptation is the clear policy priority. In Thailand, where rising energy prices have been acknowledged as a risk to continued economic development, greater renewable energy generation is one clear policy objective. In this regard, the forthcoming Indonesia CPEIR is being tailored to focus on the government’s ambitious climate change mitigation targets and how expenditures are impacting those targets both positively and negatively.

While differences in policy call for flexibility in approach to the CPEIRs, there may also be value in pursuing a more internationally consistent methodology for *defining* climate relevant expenditures in order that (i) cross-country comparisons can be made more robustly and (ii) donor and recipient government financing commitments can also be more easily tracked to enhance mutual accountability.

The Samoa CPEIR raises the question of whether existing budgetary allocations are at an optimal level with regard to goals on mitigation and adaptation given that resources are also often competing with other development priorities, including health, education, justice etc. While it may not be possible to determine an optimal quantity of ‘climate relevant’ expenditures, **it is useful to consider how governments are progressively integrating a concern with climate change impacts across the full range of taxation and expenditures.** To accomplish this, a more nuanced approach to the CPEIRs that looks at the overall composition of public expenditure and the different channels through which they can impact climate change both positively and negatively could be considered.

There is a need to focus more on the “dirty” expenditures which may undermine the national climate response – for example fossil fuel subsidies, incentives for deforestation or building of infrastructure in climate sensitive locations. While the relevance criteria employed have made some effort to distinguish between the varying linkages between climate change and public expenditure;

they do not explicitly factor in expenditures that exacerbate climate change or lead to maladaptation.

It would also be important not to focus solely on ‘climate relevant’ expenditures when considering whether to reorient expenditure, but also those that are currently not deemed ‘relevant’ to climate change. Future analyses may therefore benefit from starting with an overview of the functional breakdown of *all* expenditures: one way this could be done is to undertake a full Public Expenditure Review and build the CPEIR analysis on to the PER. **This type of analysis could subsequently drill in to more in-depth analysis of expenditures at a sector level to monitor how allocations within sectors are changing over time** (e.g. investments in renewable energy vs. fossil fuel generation) and combining this with evaluation of progress against targeted policy outcomes for the sector.

The studies that have been undertaken to date focus on the linkage between budgeted expenditures and climate change; however, they overlook the relationship between tax policy and climate change as well as indirect expenditures such as tax expenditures and public private partnerships. These may not be significant in all countries studied, but may merit further consideration in certain cases.

Greater emphasis could be given in subsequent studies to the governance and institutional analysis. In the pilot countries this largely remained a mapping exercise of the government agencies involved, rather than an in-depth examination of their organisational structures, capacity and operating incentives. Political economy analysis should be integrated into CPEIR implementation to assess the incentives and constraints for scaling up ‘positive’ climate expenditures and reforming patterns of taxation and expenditure that enable ‘negative’ impacts. This seems particularly pertinent on the mitigation side to reducing carbon emissions from particular forms of energy production or industry. The CPEIR use of reviews at local level should be continued and complemented with more comprehensive reviews of how decentralisation and deconcentration processes as a whole have potential for integrating climate related concerns. A more thorough assessment of public administrative reform processes and their potential for integrating key components for capacity development and institutional reform related to managing climate related planning and budgeting could be undertaken. CPEIR institutional reviews could look in more depth at how to ensure governments are more accountable for their effective planning and budgeting in delivering a comprehensive approach to climate change – for example, how media and civil society can create demand for information in this regard, as well as to how parliaments and audit institutions can play a role.

Complementary analyses

The CPEIRs are relatively silent on the issue of whether existing budgetary allocations are appropriate: to do this complementary analyses may need to be undertaken. In the countries surveyed, there is currently a lack of statistical analysis, which looks outside of government and reviews private sector investments, including household expenditures from a climate change perspective. Furthermore, many countries are asking for economic analysis tools to assess how much ‘needs’ to be spent in order to address the risk or to meet necessary mitigation targets. More forward-looking economic analysis may also need to be done to assess how climate expenditures may need to grow over time as climate impacts continue to deepen.

The CPEIRs as currently conceived also primarily consider the quantity of expenditures (ie *allocation* of expenditures) and how that relates to policy. To comment on the quality (ie effectiveness and efficiency) of various expenditures related to climate change would require complementary analysis such as public expenditure tracking surveys and further investigation of the impacts of expenditures.

Further work is needed on the distribution and incidence of climate expenditure to bring in the “poverty” aspects of climate expenditure more explicitly. Clearly climate expenditure will create “winners” and “losers” as these trade-offs need to be recognised. This is of particular relevance to development partners, who are providing a large share of climate finance.

Implications for the international climate change debate

There are a number of key sector policy areas which recur in the CPEIR expenditure analysis, but have been less prominent in the international climate change debate to date. For example, the implications of climate change on social protection policy emerge in the Bangladesh CPEIR. Further work is required to think through how governments might adjust systems of intergovernmental fiscal transfers, agricultural input subsidy programs or cash transfers to factor in vulnerability to climate change, which will vary from region to region.

Expenditure analyses have highlighted that a significant proportion of climate relevant expenditures are embedded in expenditures that have other primary objectives. Creating parallel national systems to manage ‘climate finance’ risks fragmenting the national response to climate change as well as placing further strain on already stretched national systems. **Exploring mechanisms to channel funds through existing national budgetary systems that satisfy donor concerns on fiduciary risk will be a key challenge for the international climate change debate moving forward.**

The CPEIRs have also highlighted synergies between UNFCCC agreements on putting in place monitoring, reporting and verification systems for climate finance and the domestic benefits of improved output and outcome indicators for climate relevant expenditures in order to be able to assess domestically the effectiveness of existing climate relevant expenditures. There is also a potential need in the international climate change debate to recognize that it may not be easily feasible to monitor the outcomes of all resources relevant to climate change given the challenges in isolating ‘climate relevant’ expenditure and defining climate change adaptation indicators.

The role of the UNFCCC in stimulating climate change policy debate at a national level suggests that there would be benefit in development partners providing continued support to developing country governments in preparing and attending the annual COP meetings.

Annex 1: CPEIR classification of programme type (Bird et al. 2012)

Annex 1 summarises the way in which different programme types were classified in the proposed methodology for CPEIRs (method note) and the five different countries CPEIRs completed. The approach to the coordination of the CPEIRs was to allow the broad classification principles to be applied flexibly in each country, to reflect the circumstances in the country and to explore different approaches.

Programme Type	Method Note	Nepal	Bangladesh	Samoa	Cambodia	Thailand
Renewable energy	Hi	Hi	Hi	Hi	Hi	Hi-Mid
Electricity efficiency					Mid	Hi
Energy (general)					Lo	
Industry mitigation					Mid	Mid
Forestry	Mid		Hi	Mid	Hi	Hi-Mid
Disaster management	Hi			Hi	Hi	Hi
Disaster rehabilitation			Hi		Hi	
Disaster relief	Marg				Hi	Marg
Relocation	Hi			Hi		Hi
Water supply/quality	Mid-Lo	Hi	Lo	Hi-Mid-Lo	Mid-Lo	Hi-Mid-Lo
Irrigation	Mid		Mid		Mid	
Biodiversity/conservation	Mid	Hi	Hi	Mid	Mid	Mid
Eco-tourism	Mid			Mid	Mid	Mid
Agriculture	Hi-Mid-Lo		Hi-Mid-Lo			Hi
Pest control			Hi			
Livelihoods/rural development	Mid-Lo		Mid-Lo	Lo	Mid-Lo	Lo
Social protection	Mid-Lo		Mid-Marg			
Railway			Marg			
Climate proofing infrastructure.	Hi-Mid		Hi	Hi	Hi	Hi
Roads and infrastructure	Lo-Marg		Lo-Marg		Mid-Lo	Marg
Health (climate sensitive)	Hi		Mid	Hi	Hi	Hi
Health (general)	Marg		Lo			Marg
Education (general)	Marg					Marg
Climate planning	Hi		Hi-Lo	Hi	Hi	Hi
General planning	Lo		Lo	Lo	Lo	Lo

Annex 2: References

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For more information:

Mr. Thomas Beloe
Governance of Climate Change Finance and Development Effectiveness Advisor
For Governance of climate finance cross-practice team
United Nations Development Programme
Asia-Pacific Regional Centre
Email: thomas.beloe@undp.org
Tel: +662 3049100
Fax: +662 2802700
asia-pacific.undp.org/
www.aideffectiveness.org/ClimateChangeFinance