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Making Sense of Climate Finance

N. A. S.

Linking public finance and national climate change policy in the Asia-Pacific region

Making Sense of Climate Finance

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Executive Summary

The concept of 'climate finance' has gained considerable currency following commitments from developed countries to provide new and additional funding for action on climate change. There have been a series of studies estimating the size of the financing need and assessments of how the international financing architecture can meet those needs. Sources of 'climate finance' comprise not only finance that governments spend, but also private finance for private actions on climate change. These studies have served a useful purpose of putting the mobilization and effective use of increased international resources for action on climate change firmly on the agenda.

More recently, there has been growing interest in looking at 'climate finance' from the perspective of recipient countries and building 'readiness' to plan for, access, deliver and monitor 'climate finance'. This paper aims to build on this country focused work by providing central policy decision makers and donors with accessible guidance on how government might make use of the national budget system to prioritise a response to climate change. The paper also explores how governments can make complementary use of domestic and international sources of public finance to resource a climate change response.

The focus on public finance does not negate the importance of private sector flows: indeed, these flows will be absolutely essential in effectively limiting the negative impacts of climate change, as well as maximising new opportunities in green, low-emission climate-resilient growth. However, given the range of public interventions that will need to be financed, guidance in managing public finance, which relates to a climate change response, is also warranted.

Achieving climate change objectives will involve public interventions that are both economic (e.g. taxes, subsidies, loans), regulatory (formulating and enforcing legislation that specifies the behaviour required of organisations or individuals), and informational (e.g. awareness campaigns, corporate reporting requirements). In addition, changes in a government's provision of goods and services (e.g. building roads, running primary schools) will be required. Executing public interventions in these areas will undoubtedly require additional public finance to be managed across a range of public institutions.

Critically, the full suite of climate change related public interventions that is required will need to be considered as a whole, both in terms of the potential synergies between interventions and as well as potential contradictions. To address climate change will require not just an increase in expenditures dedicated to activities for climate change mitigation and adaptation; but also a qualitative shift across government in the overall composition of expenditures, so that 'harmful' expenditures are reduced and potential synergies with developmental expenditures are maximised.

The comprehensiveness of a climate change response will not only be built on climate change specific policies, but on interventions to achieve other government goals like higher employment, increased exports, improved food and energy security. A response to climate change therefore needs to be at the heart of development policy and its financing considered as part of the entirety of the national budget. Thailand and Philippines governments have set up inter-ministerial, multi-stakeholder, climate finance groupings to act as advisers on the implications of new policy initiatives for climate change across government.

As the key instrument for policy makers to make decisions on prioritising public interventions across the whole of government, the national budget is of fundamental importance for developing a coherent government response to climate change. When using public finance for a national response to climate change, the question that should be asked is not what does a system of 'climate financing' look like; but rather, how can climate change considerations be integrated within existing planning and budgeting processes?

In practise much of the government's budget for the coming financial years is already committed and so space to make these changes in the immediate future may be limited. However, over time, the *discretionary* resources in the budget will increase and as such a medium-term outlook in budgeting can help to shape this reallocation.

Analysis of how climate policy relates to existing patterns of public expenditure has begun with UNDP support in Asia and the Pacific. Nepal, Bangladesh, Thailand, Cambodia and Samoa have undertaken Climate Public Expenditure and Institutional Reviews (CPEIRs). These reviews provide an analytical base for informing how budgetary allocations may need to be redirected over time to address climate change. CPEIRs also show how the impacts of climate change are likely to disproportionately affect services delivered at the local level. For example, the Indonesian Government is looking at building upon their existing inter-governmental fiscal transfer system, by introducing a Regional Incentive Mechanism to support localities to achieve their respective REDD targets. Nepal is also building their climate change adaptation work on the existing systems developed for delivery of local level energy services.

It is widely agreed that to adapt to and mitigate climate change there is a need to mobilize increased finance. Recognising the historical legacy of greenhouse gases emitted by the industrialised nations, it has been agreed it is incumbent upon those countries to make additional finance available from public and private sources. There are three broad ways of disbursing these sources of finance: (i) to the national treasury to be allocated through the budget; (ii) to extra-budgetary funds with their own governance arrangements outside of the budgetary process; or (iii) directly to agencies responsible for the implementation of specific projects.

CPEIRs show that, in practice, the majority of additional climate finance is currently being disbursed outside of national budgetary procedures, through extrabudgetary funds or project finance. Funds provided outside of the budget are potentially more easily visible and, in the context of climate change, this is particularly appealing to providers of finance to be able to demonstrate links with climate specific impacts and to demonstrate that finance is additional. On the other hand if the financing of a climate change response take place outside of the national budgetary system, it will undermine the mainstreaming of climate change considerations into national planning and budgeting systems.

Some lessons from the management of Official Development Assistance (ODA) can strengthen the management of public sources of climate finance. Project and extra-budgetary funds can support comprehensiveness, transparency and accountability of the national budget if they utilize country systems of planning and public financial management to the maximum extent possible. For example, projects and activities to be funded can be drawn from a country's national planning process; and planned revenues and expenditures related to extra-budgetary funds and projects can still be recorded in budget documentation and use the national budget classification system. Using planning and budgeting processes at sector and national levels to prioritise climate change related interventions can help identify gaps and reduce overlaps in expenditures. Likewise more focus on ensuring complementarity between budgetary allocations and extra-budgetary mechanisms can reduce fragmentation and ensure a comprehensive national response to climate change.

1. Introduction

A large body of analytical work has built up in recent years on the issue of 'climate finance'. Much of this work was initially dedicated to establishing the scale of finance needed to sufficiently limit the negative impacts of man-made climate change through mitigation and adaptation. There have been a series of estimates both at international and national levels, which have sought to put a financial value to how much it might cost to reach defined objectives of climate change mitigation and adaptation (see for example 'Generating the Funding Needed for Mitigation and Adaptation' from the World Bank 2010 Development Report)². Given that responsibility for the increased concentration of greenhouse gas emissions that has already occurred lies primarily with developed countries, a formalized commitment was made at the CoP in Cancun to jointly mobilize and deliver new and additional funds of USD 100 billion per year by 2020 (Buchener et al. 2011a, Copenhagen Accord Ref.). The collective financial commitment made also articulates the requirement of a system to measure, report and verify (MRV) the relevant financial flows across a variety of sources.

Emerging from the need to mobilize explicitly new and additional finance and also to measure, report and verify the impact of those financial flows, Bird (2012) notes a 'first wave' of analytical work that aims to better understand (i) the architecture with which 'climate finance' is expected to be delivered (see for example Atteridge *et al* 2009 and Buchener *et al* 2011b); (ii) how climate finance might be tracked (see for example Buchner et al. 2011a); as well as (iii) considerations of what new and additional climate finance might reasonably be defined as (as in World Bank 2010). This body of work is primarily from the perspective of the provider of finance: it asks 'how can the money be raised and delivered to a developing country?' A 'second wave' of analytical work began in 2010, looking at how climate finance might be delivered more effectively drawing from the principles by which the delivery of development finance has been judged (Bird 2012). In this vein, the recent 4th High Level Forum on Aid Effectiveness in Busan recognized the relevance of the principles agreed in the Paris Declaration and the Accra Agenda for Action and particularly the importance of country-ownership, the use of country systems, and avoiding fragmentation (OECD 2012).

More recently, there has been a growing body of work that has focused in on the recipients of climate finance and considered the 'readiness' of these countries to receive a significant increase in international financial flows to address the challenges of climate change (see for example UNDP, 2012 and GIZ, 2012). UNDP (2012) have developed a framework, which can be used to assess 'readiness', which they define as the capacities to (i) plan for finance for climate changes, (ii) access different forms of finance, (iii) deliver finance for implementation of activities, and (iv) monitor, report and verify climaterelated expenditures and their impact.

This whole body of literature is playing a vital role in raising the importance of mobilizing additional finance and also putting on to the agenda the issues of national capacities to manage those increased financial flows. From the perspective of the national decision maker who is determining a national response to climate change, the concept of 'climate finance' is operationally not easily understood and needs further disaggregation. For example 'climate finance' comprises public finance that governments spend, but also private finance for private actions on climate change.

This paper seeks to build on this recipient-centric approach, but suggests that in practise governments manage public policy, not 'climate finance' and public policy is operationalized through the national budget process based on the resources available, not on the size of the financing need. Governments have a number of objectives they wish to achieve (including objectives on climate change amongst others), a range of policy instruments at their disposal to achieve them and limited resources to finance those policies.

² According to this study, mitigation in developing countries could cost \$140 to \$175 billion a year over the next 20 years (with associated financing needs of \$265 to \$565 billion); over the period 2010 to 2050 adaptation investments could average \$30 to \$100 billion a year. Efforts to date to raise funding for mitigation and adaptation stand at less than 5 percent of projected needs.

This paper is principally targeted at central policy decision makers and aims to provide accessible guidance for thinking through how policy interventions might be prioritized and financed through the national budget and complemented by international public financing. However, it may also be of interest to researchers and those working with donors who are involved in financing public interventions on climate change in developing countries. This paper is not intended to replace more comprehensive guidance on public expenditure management; rather it draws out some of the key principles of this literature and applies them in the context of climate change, using illustrative examples from the Asia-Pacific region. It is intended to help build common understanding between officials in finance and planning ministries and their counterparts in climate change and environment institutions on how public policy on climate change might be financed.

The paper is structured as follows: section 2 presents a simple framework of public policy instruments at the disposal of government and applies them to a climate change context. Section 3 proposes some mechanisms for linking climate change policy and public expenditure. Section 4 looks in more detail at how international public finance can complement government policy on climate change. The final section summarizes the key recommendations made in this paper.

2. Public policy instruments and climate change

2.1 Framework of public policy instruments

Governments have a number of objectives they wish to achieve and a range of policy instruments at their disposal through which they would look to achieve them. Bemelmans-Videc et al. (1998) put these policy instruments into three main groupings: "carrots, sticks and sermons": where "carrots" are economic instruments (e.g. taxes, subsidies, loans), "sticks" are regulations (formulating and enforcing legislation that specifies the behaviour required of organisations or individuals), and "sermons" are information instruments (e.g. awareness campaigns, corporate reporting requirements). It has been noted by Howlett (2011) that these three groupings of instruments underplay the importance of a fourth grouping: the government provision of goods and services (e.g. building roads, running primary schools).

To achieve the goals of climate change mitigation and adaptation, countries are using a mixture of all four types of instrument. Table 1 has some examples:

Arguably, international development agencies have focused more on the latter grouping: government pro-

vision of goods and services. Improved government service delivery has been a central platform in setting out to achieve the Millennium Development Goals. Better schools, better district health centres and better roads have tended to be the visible hallmarks of the development agenda and the increased public financing thereof.

The way government manages the provision of public goods and services is undoubtedly having an impact on climate change. The choices made over infrastructure investments for example will influence both the concentration of greenhouse gases as well as the resilience to climate risk. However, governments and providers of finance will benefit from not losing sight of the whole range of potential policy interventions at their disposal. A significant component of public policy on climate change will be about shaping behaviours of households, communities and businesses, which may require a change of mind-set from the prevailing service-delivery oriented development agenda. Investments to put in place appropriate economic incentives and suitable regulatory structures, as well as to gather and disseminate appropriate information will have a vital role to play in effectively limiting the negative impacts of climate change. (Hallegatte et al. 2011) It is through this whole range of policy instruments that government will influence the magnitude and composition of private financial flows for actions to adapt to and mitigate climate change. For example, information on the risks of vector borne diseases can result in households investing in insecticide treated mosquito nets. Regulations on energy efficiency standards for

Type of Instrument	Examples			
	Adaptation	Mitigation		
Regulation	Securing local rights for the sustainable and long-term utilisation of forest	Laws on vehicle emissions		
Economic	Performance-based transfers for preserving ecosystems	Feed-in tariffs for renewable energy, carbon taxes; concessional loans for energy efficiency		
Information	Early warning systems for extreme weather events	Energy audits; support for business to access CDM		
Provision of goods and services	Building seawalls	Building energy efficient public-transport networks; constructing solar power station		

Table 1: Examples of Public Policy Instruments for Climate Change Mitigation and Adaptation

Policy interventions with				
Secondary benefits for adaptation	Secondary benefits for mitigation	Negative impact on adaptation	Negative impact on mitigation	
ECONOMIC: Micro-credit schemes for rural livelihood development	GOODS AND SERVICES: Transport infrastructure improvements that reduce congestion	GOODS AND SERVICES: Construction of public housing in vulnerable coastal area	ECONOMIC: Fossil fuel subsidies to provide affordable energy	
INFORMATION: Agricultural extension to inform farmers about crop diversification;	ECONOMIC: Congestion charging schemes	REGULATION: Providing permits to convert forest land to agricultural land		

Table 2: Examples of Public Policy Interventions with secondary impacts on climate change outcomes

new residential buildings could lead to greater investment in low-carbon infrastructure development.

Further, it is not just how resources are spent that influences climate change, but also how those resources are raised. Many countries in the Asia-Pacific region are using their tax policies to shape private incentives for investment. Vietnam and China have for example introduced taxes levied on extraction of coal; while a number of countries are offering tax credits for 'green investments'. (Ernst & Young 2011)

2.2 Indirect impacts on climate of public policy instruments

Climate change will be influenced not only by policy interventions with the primary objective of mitigation or adaptation to climate change. In many cases, policies put in place to achieve other objectives may have complementary secondary benefits or costs on climate change outcomes. For example, interventions that promote sustainable development such as microcredit schemes for rural livelihood development are also likely to have co-benefits for increasing resilience to climate risks. Equally, one can think of interventions to achieve objectives that may conflict with the goals of climate change mitigation and adaptation: for instance, to promote agricultural productivity countries may convert forests to land for commercial agriculture. Finally, in some cases, policy interventions beneficial from a mitigation perspective could potentially leave affected communities less resilient to climate change (e.g. large scale hydroelectric projects) and vice versa

(e.g. subsidizing fossil fuel usage for rural irrigation schemes).

Although additional finance will be necessary to address the impact of climate change, it will not be addressed solely by increasing expenditure on activities aimed at mitigating or adapting to climate change. An effective public policy on climate change will require the promotion of behaviours that lead to adaptation and mitigation, but also inhibit behaviours that lead to exacerbation of climate change or maladaptation. The policy interventions highlighted will be undertaken both at the centre of government (e.g. tax policy, environmental regulations), but also importantly across different sectors of government (e.g. energy, transport, agriculture) and at the local level. Within certain sectors, there will be no/low regret options of policy interventions where existing core sector objectives can also lead to benefits from a climate perspective. For example, energy efficiency measures can improve energy security and also reduce greenhouse gas emissions. However, there are many sectors where there are direct trade-offs that sector policies will need to address.

3. Linking policies to public expenditure

3.1 Prioritisation of policy interventions

Policy interventions will have varying financial implications, both on revenues and expenditures. This is true of investments in government-delivered services but also 'enabling' investments: tax collection costs money to verify and enforce, regulations require funding to draft and enforce, while information will also have a cost to prepare and disseminate.

Estimating the costs of introducing a policy and the total resources that are likely to be available can be one useful framework to help assist prioritisation and sequencing of policies. Institutions can identify which policies might be affordable given the *projected resources available*; but can also provide a clear signal to possible providers of finance as to what could be achieved *if additional resources were to be forthcoming*. Most countries in the region have in place comprehensive climate change policy documents; but at present, these policy documents can sometimes read like wishlists, rather than prioritized policy plans. For example, the CPEIR in Bangladesh suggests that the Bangladesh climate change strategy is not yet a costed and sequenced delivery framework (CDDE/UNDP 2011).

The stated needs of policy interventions will always be greater than the total resources available to government: whether in the field of climate change or health, in a developing country or developed. While this does not in any way lessen the importance of mobilizing additional resources for climate change *it does point to the need to make choices* over how government can best achieve its objectives given the resources available.

The national budget process provides a framework through which government makes trade-offs between competing policy interventions across the whole of government and is therefore a key instrument for assessing how climate change may complement or compete with other policy objectives at a national, sector and local level.

3.2 Linking climate change policy and the national budget

When preparing the national budget, the Ministry of Finance will determine the likely total resource envelope for the budget and then allocate that budget to different sectors (e.g. health, education, energy, transport etc.) at different levels of government (e.g. centre, local). The allocations made to sectors should be based on the priorities of the government. This then provides the sectors with a resource envelope with which they can implement their own prioritized plans. For example, based on the budget allocation provided by the Ministry of Finance, the Ministry of Transport will prioritise certain programs and policy instruments over others in order to best achieve the objectives given the resources available.

As choices of how to allocate the budget are meant to be reflective of government priorities, it is often said that the budget should be the financial mirror of government policy (ADB 1999). The following discussion provides some concrete guidance on how policy makers might facilitate the reflection of climate change in the budget.

3.2.1 The budget framework

As a general point, it is useful to remember that budgets evolve over time. Budgets do not start from a zero-base each and every year, with all potential policy interventions analysed and then the whole budget allocated accordingly. Where efforts have been made to do such an exercise, known as 'zero-based budgeting', they have been described as an 'expensive illusion' (ADB 1999). In practise, much of government's budget for the coming financial years is already committed: there is an existing wage-bill to pay, interest on outstanding debt, social security payments, on-going capital projects, and the costs of providing certain priority goods and services like basic education and health services. This means that in the near term, the discretionary resources, (often called fiscal space) that a government has at its disposal to implement new policy initiatives in any single annual budget are minimal. (ADB 1999)

Box 1: Medium Term Expenditure Framework (MTEF) in Indonesia

The Government of Indonesia has been in the process of introducing a Medium Term Expenditure Framework (MTEF) since 2003 since the issuance of Act 17 of 2003 on State Finance.

The Government of Indonesia has a 'rolling 3 year' medium-term expenditure framework in place. This means that each year when the annual budget is prepared, budgets are presented at an aggregate level for the coming 3 years (although only the coming financial year is legally agreed upon by Parliament).

Indonesia also provides budgets for each sector for the coming 3 years. By providing sector Ministries with more predictable resource envelopes, it helps Ministries to allocate funds in line with priorities in a fiscally sustainable way.

Further, as part of the MTEF in Indonesia, each sector is required to provide a breakdown of their budget by programs. It is therefore possible to monitor both how the budget is evolving over time at a national level between sectors, but also how the budget is changing within sectors, which is important for monitoring cross-cutting issues like climate change.

The Indonesian MTEF separates on-going and new policies. All new policy initiatives are submitted for scrutiny by the Cabinet, who ultimately decide upon how discretionary resources should be allocated. Trade-offs are therefore made at the highest level of government on how budgetary resources should be allocated over the medium-term to best achieve government policy objectives.

Source: The Indonesian Budget Overview 2011, Ministry of Finance, Directorate General of Budget

A medium-term outlook for the budget can give greater space for governments to shape the overall direction of spending patterns over time, as the margin for change will be typically greater in the medium-term with revenues growing and existing commitments coming to an end (ADB 1999). This is one of the major reasons why many countries in the region have introduced, or are in the process of introducing Medium Term Expenditure Frameworks (see Box 1).

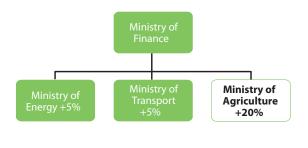
3.2.2 Processes for allocation of discretionary resources

Normally, at a national level, the easiest way to prioritize budgets is to adjust the allocations of sector ministries. For example, to increase the budget for agricultural productivity, the Ministry of Finance can increase the budget allocation for the Ministry of Agriculture (see example 1 in Figure 1). One of the challenges with climate change is that it is affected by the policies of a number of sectors, and so to prioritize resources for actions on climate change, allocations *within Ministries* dedicated to climate related actions need to increase. This is more difficult to directly influence through centralised allocations (see example 2 in Figure 1). One way to attempt to shift behaviour away from 'business as usual' would to be identify the discretionary resources available in the budget framework that could be dedicated to specific new climate change policy initiatives, as shown in Table 3. In Vietnam, for example, there are established processes in place during budget preparation for the Ministry of Natural Resources and Environment (MONRE), the Ministry of Finance (MoF) and the Ministry of Planning and Investment (MPI) to allocate a proportion of the resources provided through its budget support operation (see page 20, Box 4) to dedicated climate change schemes and projects. First, the Ministry of Natural Resources and Environment (MONRE) develops prioritized duties and criteria to guide other ministries in the formulation of their projects, which are potentially eligible for financing. Appropriate ministries and localities then formulate those project outlines and send them to the appropriate natural resources and environment agencies for comments (i.e. at a national or local level). Based on the comments, ministries and localities prepare a finalized prioritized list of potential projects for financing. Finally, MoF and MPI then decide upon which projects to finance based on the available resource envelope identified for new initiatives on climate change, in consultation with MONRE. (Ministry of Finance Viet Nam, 2012)

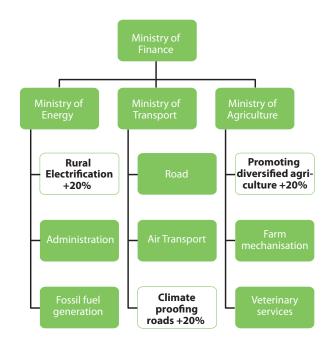
Figure 1: Prioritization of budgets through inter-sector and intra-sector budgetary allocations

Example 1:

Prioritizing Agriculture through sector allocations



Example 2: Prioritizing climate change adaptation within sectors



Source: Author's own

Focusing solely on how resources can be allocated to new initiatives that promote adaptation or mitigation does not address the issue of reducing interventions with secondary impacts on climate change outcomes. Responding to climate change requires not just more dedicated expenditures for climate change actions, but also a qualitative shift across government in the overall composition of expenditures over time, so that expenditures which exacerbate climate change are reduced and potential synergies are maximised.

In practical terms, it may be difficult to analyse each and every policy intervention through a 'climate lens'; however, government may wish to identify policies and sectors which potentially have the most significant linkages with climate change. In those sectors, it is not just dedicated 'climate change' initiatives that need to be considered, but also the impacts on climate change of all key new policy interventions and major investments. For example, decisions made today on infrastructure to provide additional energy generation capacity will have significant implications into the future. A number of countries have set up multi-stakeholder climate finance groups who may be best placed to advise on the implications of major policies on climate change. For example, the Philippines Government, has created a multi-stakeholder Climate Finance Group while the Government of Thailand has formed a Climate Fiscal Framework Working Committee to comment on such issues.

Where additional resources are made available for new policy interventions, which have significant implications on the budget, there can be benefits in recording those measures in the budget documentation so agencies can be held to account for the use of those resources. This type of approach is currently undertaken in the Solomon Islands for all government agencies (see Box 2). Climate change policy is not reflected under a single institution and so a useful addition to budget documentation would be to dedicate a section to climate change that shows key new climate change policy initiatives in the budget across government that have been agreed with different implementing

Table 3: Example budget with a proportion ofdiscretionary resources dedicated to new climatechange policy initiatives

	2013	2014	2015
Total resources	1,000	1,150	1,280
Total expenditures already committed	900	920	860
Fiscal space/discretionary re- sources	100	230	420
Total for new climate change policy initiatives	20	55	90

Source: Author's Own

agencies and the budgetary allocations for those initiatives. Such a section could also highlight key new policy initiatives that have secondary benefits or costs from a climate change perspective.

3.2.3 Reviewing public expenditures

As climate change is an emerging policy issue, at present there is a lack of understanding at a national level on how existing policies and public expenditures are affecting climate change. Carrying out a Climate Public Expenditure and Institutional Review (CPEIR) can help to partially fill this analytical gap. A number of countries in the region have completed (Nepal and Bangladesh) or are in the process of completing (Thailand, Cambodia, Samoa) Climate Public Expenditure and Institutional Reviews (CPEIRs). While the specifics of the studies vary from country to country, each CPEIR to date entails:

- An assessment of current policy priorities and strategies as these relate to climate change
- A review of the institutional arrangements for promoting the integration of climate change policy priorities into budgeting and expenditure management
- A review of the integration of climate change objectives within the budgetary process, including as part of budget planning, implementation, expenditure management and financing. (ODI, CDDE 2011)

Emanating from the CPEIR, policy makers should gain greater insight into how climate change is being reflected in the budget and how public expenditures may need to be restructured if climate change objectives are to be met. One of the key benefits of this type of

Box 2: Recording new initiative in the Solomon Island's Budget Documentation

In the Solomon Islands, where additional discretionary resources are allocated to Ministries in annual budget preparations, the description of what that allocation is intended for is highlighted in the budget. This provides a useful record for internal accountability mechanisms; but also provides a clear record for oversight institutions and the wider public on what additional public resources are being used to finance.

The example below is taken from the Ministry of Agriculture:

Name of new initia- tive	Cost	Description	Time Period
Dala Agricultural Training Centre.	350,000	Funding to revitalize and rehabilitate the Dala Agriculture Training Cen- tre (ATC) in Malaita Province including the provision of technical services and materials to farmers.	One-off
Government support to farmers	250,000	Additional funding to assist disadvantaged farmers through the provision of equipment, seeds, materials, feed and livestock.	One-off
Plant Health Diag- nostic and advisory services	200,000	Funding to assist farmers identify pest and diseases ensuring appropri- ate control measures are undertaken.	Ongoing

Source: Solomon Islands 2011 Recurrent Budget, Excerpt from Ministry of Agriculture

Box 3: Climate Public Expenditure and Institutional Review (CPEIR) in Bangladesh

Bangladesh is the second country in the region to have conducted a Climate Public Expenditure and Institutional Review. The process has been led by national consultants with technical and financial support provided by UNDP, Capacity Development for Development Effectiveness (CDDE) and UNEP.

Emerging from the CPEIR, there are a number of findings and recommendations, which can help to inform policy, institutional and process reform as well as highlighting possible areas where there may a strong case to reconsider allocations of public expenditure. The examples outlined below are a sample of the type of findings and recommendations that emerged from the review.

Assessment of current policy priorities and strategies as these relate to climate change.

- It is clear from the analysis that climate change strategy is not yet integrated into the formulation of policy at the sector level, particularly in key economic growth sectors including energy and transport.
- It is noted that the active disaster risk management agenda has been a long running focus for development, and has helped put in place some local planning processes and policy transformations which help provide resilience for climate change.

Institutional structures

- Institutional constraints at the Ministry of Environment and Forest (MoEF) are noted: such as weak structure, duality in mandate, lack of manpower, trained human resources and weak legal framework.
- It is suggested that The National Parliamentary Standing Committee on Environment should be empowered so that the body, with its legal authority, can oversee and guide various activities related to climate change, including involvement in international negotiations for adaptation.

Integration of climate change objectives within the budgetary process

- The importance of including a climate change dimension to the Medium Term Budget Framework procedures is highlighted to ensure that the activity is fully recognised by line ministry accountability, performance management and governance structures.
- Given the fragmentation of funding streams, it is noted that there is a clear case for addressing colordination at the technical, financial and planning levels and perhaps even a case, after due consideration, for specialisation of funding streams.

Analysis of expenditure also points to key priority sectors where there may be greatest benefit in reviewing more closely public expenditures.

- The CPEIR highlights the significance of social protection and livelihoods schemes in total government expenditure. There is
 considerable overlap between these schemes and climate change adaptation; yet at present, the Bangladesh social protection policy makes no explicit mention of climate change. In as far as increased climate risk is likely to exacerbate vulnerability
 in certain localities, there may, for example, be implications that need considering on the regional distribution of Bangladeshi
 social protection policies.
- The Bangladesh CPEIR also looks at government position on energy and power policy. Energy generation is considered at
 present to be a significant constraint on economic growth; however the country faces a dwindling stock of natural gas, which
 has led to exploring the possibility of introducing coal power stations to fill this gap. This clearly has significant implications
 for the mitigation of climate change and points to potential further analysis to plan scenarios on how much additional funding would need to be accessed in order for the country to opt for a greater balance of renewable energy or cleaner coal technologies.

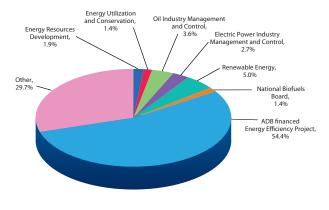
Source: Bangladesh CPEIR, CDDE (2012)

analysis is that it looks beyond those expenditures that have a primary objective of mitigating and adapting to climate change, but also helps government to focus on some of the key indirect linkages between some 'big ticket expenditures' of government that have considerable secondary impacts, either positive or negative, on climate change outcomes. Further, in practical terms, it may be unrealistic to review the entire budget each and every year through a 'climate lens': but this type of analysis can help to highlight those key priority sectors and programs where central ministries may wish to focus upon when considering climate change in budget preparation (see Box 3 for examples from Bangladesh).

A CPEIR can also play an important process function, acting as a starting point for longer term Governmentled stakeholder dialogue and learning involving the public and private sectors, academia, civil society and international development partners (ODI/CDDE 2011).

The depth of insight gained from a public expenditure review is partly dependent upon the expenditure

Figure 2: Composition of the 2012 Department of Energy Budget in the Philippines



Source: Department of Budget and Management, The Phillipines, 2012 Budget Documentation for Department of Energy

classification. This does not mean that 'climate change related expenditure' necessarily needs to be explicitly defined: governments do not typically define other broad outcomes such as 'economic growth' expenditure or 'job creation' expenditure. Yet to understand, for example, how expenditure in the energy sector is impacting upon climate change, the policy analyst would be interested to know how expenditures are being split between different power generation options. A good program classification in the budget can make it clearer to central government and external stakeholders as to how budgets are being allocated within sectors. The example shown below in Figure 2 is taken from the Philippines and shows how the operational budget of the Department of Energy is split between different programs.

3.3 Central Transfers to Local Government

The spending responsibilities of local government agencies are typically greater than their abilities to raise revenues. As such, they rely upon transfers from central government that are agreed during the budgetary process. As with the national budget more generally, governments have systems in place for managing these inter-governmental fiscal transfers. The question that should be asked therefore is not what does a system of 'climate finance' transfers look like; but rather, how should existing inter-governmental fiscal transfers be adjusted or complemented by additional dedicated funds given the impacts of climate change.

The World Bank's 2007 guidance on inter-governmental fiscal transfers notes that the assignment of responsibilities between the centre and local levels are broadly similar across countries: with central government typically assuming responsibility for national public goods (defense, foreign affairs, money and banking, national infrastructure, legislation); while local government structures provide local public goods and services, including water and sanitation, local health and education facilities, local roads and recreational facilities.

It is unlikely that addressing climate change will necessitate a significant shift in how responsibilities for expenditures are assigned to different levels of government, but a shift in the aggregate size and geographical composition of transfers from the centre may be required. This is because it is at a local level, where the effects of climate change are manifested. Local geographical conditions and the level of economic development will also impact upon both the vulnerability of communities and households to climate change (OECD, 2009). The impacts of climate change are likely therefore to place a disproportionate strain on those services delivered at the local level that respond to local needs. To maintain local services even at their existing standards may require additional resources over time as a result of the impacts of climate change. In recognition of the impacts climate change will have on local communities, and the challenges in directing resources to them, the Nepal government has committed to channelling 80% of additional resources for expenditure on climate change to the local level (CDDE, 2011).

The effects of climate change will also vary depending upon the geographical context: for some regions climate change may bring with it benefits, while for others increased strain. In the interests of equity and factoring in the global discussions on climate justice, the size of funding for some regions may therefore need to be adjusted in order that those most vulnerable to climate change can access government support.

Decisions on how to structure any adjustments to transfers will clearly be country and situation dependent: It is worth noting though, that the need which transfers are addressing ought to shape the structure of grant used. Inter-governmental transfers can broadly be divided into two groups: the first are *general purpose grants* over which local governments have complete autonomy over how the grants are used. (WB 2007b) For climate change adaptation, the importance of responding to the localized impacts of climate change might point to the importance of maintaining a high degree of autonomy on how those resources are used and as such increasing 'general purpose grants' may be more appropriate.

Alternatively, with specific purpose grants, central government provide conditions on what those grants can be used for. In the forestry sector, it is expected that large sums of international finance may potentially be mobilized to pay for mitigation, but this will be contingent upon the verified achievement of agreed localized Reduced Emissions from Deforestation and Forest Degradation (REDD) targets. To incentivize localities to achieve their respective targets, the Government of Indonesia is considering building upon their existing inter-governmental fiscal transfer system and introducing a Regional Incentive Mechanism (Government of Indonesia, 2009). These specific purpose grants would be conditional on outputs, with payments linked to successful program implementation and measurable carbon reductions. How the projects are designed to achieve these targets would still be fully under the control of the local government.

4. Managing international public finance for responding to climate change

It is widely agreed that to adapt to and mitigate climate change there is a need to mobilize increased finance. Given the primary historical responsibility for increased greenhouse gas emissions to date lies with developed countries, it is incumbent upon those countries to make additional finance available from public and private sources. There is however potentially a tension between the need to mobilize additional resources for climate change and the importance of a holistic, country-owned, whole of government approach to addressing climate change that has been stressed in the previous section.

At the recent 4th High-Level Forum on Aid Effectiveness held in Busan, it was agreed that the principles of development effectiveness outlined in the Paris Declaration and the Accra Agenda for Action are also of considerable relevance to international public resources dedicated to supporting actions on climate change. Particular mention was made of the importance of country ownership, the use of country systems and the need to avoid fragmentation. (OECD, 2011)

This section provides a brief outline of the major funding modalities being used to deliver finance and offers some guidance on how donors and government can work together at a national level to ensure that international finance is complementary to a governmentowned agenda on climate change.

4.1 Funding Modalities

Broadly speaking, international funds are disbursed in three ways: to the national Treasury to be allocated through the budget (as is the case with budget support); to extra-budgetary funds with their own governance arrangements outside of the budgetary process for allocation of funding; or project-based finance where funds are allocated and delivered directly to projects.

4.1.1 Direct Budget Support

One way that donor countries are supporting country ownership of the climate change agenda is through budget support operations. According to the OECD-DAC,

Direct budget support is defined as a method of financing a partner country's budget through a transfer of resources from a donor to the partner government's national treasury.

From a national perspective, once received, revenues from budget support are indistinguishable from domestically collected revenues. They would be allocated according to the national budget and then disbursed to line ministries through government's standard funding procedures. In this respect country ownership is high.

Choosing to deliver finance through a budget support operation provides donors with a clear avenue for engaging on climate change at a high level and particularly on issues of policy coordination. There is General Budget Support, but also Sector Budget Support in relevant sectors (e.g. EU Budget Support in Samoa for the Water Sector) or as is the case in Viet Nam Climate Change Budget Support (see Box 4). The focus of engagement on policy dialogue and monitoring and evaluation varies accordingly.

Where funds are channelled through the budget it can be more difficult to attribute measurable and verifiable impacts to specific funding streams. For example, the UK National Audit Office (2008) wrote in their assessment of budget support, specifically about aid, but also applicable to climate finance:

Monitoring the impact of aid, and particularly budget support, is challenging given the weaknesses in developing country data and difficulties in attributing changes to a particular type of aid such as budget support. This is why conditions of disbursement are often linked to high-level policy actions and considerable emphasis is placed on the importance of policy dialogue, which brings with it its own significant transaction costs

4.1.2 Extra-Budgetary Funds

In most countries in the region, there are a number of extra-budgetary funds through which public resources are spent that impact upon climate change outcomes. Certain funds have climate change mitigation or adaptation as core objectives (e.g. national climate funds, REDD+ funds); while other funds have been created where mitigation or adaptation may be a secondary benefit (e.g. rural electrification funds, contingency funds). Extra-budgetary funds are created for a variety of reasons. In many cases, funds are formed at the request of donors, who wish their finances for climate change to be insulated from other financial flows in the budget. (ADB 1999) There are also numerous examples of extra-budgetary funds solely financed by domestic resources. In certain cases, this will be down to political reasons: by receiving earmarked revenues for a specific program, the implementing agency has dedicated funds secured and can therefore bypass the annual process of budgetary negotiation and scrutiny (WB 2007a).

Alternatively, there are also sometimes operational reasons why extra-budgetary funds are created. One of the key motivations is to avoid the 'annual rule'. Nor-

Box 4: Direct Budget support for Climate Change in Vietnam

Source of Funds

Vietnam has received commitments for approximately 220 million USD of concessional ODA loans provided through direct budget support to cope with climate change. Initially, in 2010, Japan and France committed a total of approximately 145 million USD and since that time, the World Bank has committed 70 million USD and CIDA an initial \$4.5 million USD. It is expected that Korea's EXIM Bank and AusAID will also provide financing in the future.

Administration

Providers of finance to the budget support operation and other donors supporting government on climate change engage with the Vietnamese government through the Support Program to Respond to Climate Change (SP-RCC).

Allocation and delivery of finance

Providing resources through the budget gives government full ownership of how resources are allocated and prioritized as part of the broader national budget procedures. Managed in accordance with Vietnam's existing budgetary procedures, the resources provided to the government are indistinguishable from other revenues financing the budget. Nevertheless, the Viet Nam government also has agreed to set aside a proportion of the overall resources provided through the budget support operation and allocate the resources to dedicated climate change projects that are recorded in budget documents according to criteria set out by the Ministry of Natural Resources and Environment (MONRE).

Monitoring and Evaluation

The impact of the support to Viet Nam is based upon monitoring a high-level policy matrix, rather than more specific targets, that cut across key sectors as well as looking at cross-cutting climate change governance issues. For example, the World Bank's monitored policy actions are aimed at:

strengthening the scientific, analytical and technical basis for climate action and promoting an integrated approach for the financing of climate actions, including monitoring and reporting:

E.g. "Establish implementation guidelines for allocation and reporting of financial resources directed at climate change action"

This is consistent with an approach that seeks to strengthen the governance of the response to climate change, the effectiveness of which is more difficult to measure than mitigation-specific financial flows whose impact can be judged according to more clear criteria, i.e. the reduction in greenhouse gas emissions.

Sources: World Bank Program Document for First Climate Change Development Policy Operation, December 28, 2011

mally, if funds are unspent by a Ministry at the end of the financial year, those funds will be returned to the centre and not carried over to the following year. In some cases, these arrangements may not provide sufficient managerial flexibility (WB 2007a). For example, there are a number of extra-budgetary funds in the region that have been created to promote and provide financing to private sector 'green investments' and are managed through extra-budgetary arrangements (e.g. the Thai Energy Conservation Fund and China CDM Fund).

There are a number of examples of countries in the region putting in place National Climate Funds as a means of accessing international finance from multiple sources to fund public expenditures related to climate change (see Box 5). The idea is that disbursements will be made to these funds, which are 'country-owned' and so governments will have full say over how financing is allocated (although in practise, many international financed NCFs currently have multilat-

eral donors as intermediate trustees). These National Climate Funds typically have stand-alone governance arrangements that allocate resources to specific projects implemented by ministries, local governments or in some cases non-state actors.

These funds have been created for a number of reasons:

- National Climate Funds can serve as a clear signal of government commitment to the issue of climate change.
- National Climate Funds can serve as useful conduit for funding from international sources and aligning the contributions with government climate change policy, where donors are not willing to channel resources through the budget. This type of approach can help to foster harmonisation of donor procedures for reporting, budgeting, financial management and procurement, *relative to each donor managing their funds separately* (Flynn 2011).

Box 5: Cambodia Climate Change Alliance

Source of Funds

In 2007, the European Union agreed to build a global Climate Change Alliance between the EU and the developing countries that are likely to be hardest hit by climate change. Cambodia was selected to be a pilot country. UNDP supported an expansion of this vision by facilitating the participation of other donors, initially Sweden and Denmark. The Cambodia Climate Change Alliance (CCCA) was formally launched in February 2010 and receives financing of US\$8.9 million with contributions from DANIDA (US\$0.6 million), the European Union (US\$3.2 million), SIDA (US2.1 million) and UNDP (\$3.0 million).

Administration of Funds

As part of the CCCA programme, a CCCA Trust Fund was set up. The trust fund will be administered initially by UNDP, but it is envisioned that this arrangement will eventually be replaced by country systems, possibly a government-managed trust fund or direct budget support.

Activities financed by funds

The activities of the Cambodia Climate Change Alliance will also support the development of a National Climate Change strategy and Action Plan and support the mainstreaming of climate change into key priority sectors.

It is expected that grants will be made to projects that are aligned with the 39 "no regrets" projects identified as priorities in the National Adaptation Programme of Action to Climate Change (NAPA). Four priority areas for adaptation are identified in the NAPA: water resources management and agriculture, forestry, health, and the coastal zone.

Allocation and delivery of funds

The CCCA Trust Fund secretariat is responsible for screening and reviewing requests for grant funding to ensure that they contribute to the objectives of the CCCA. CCCA grants will be implemented by the government and civil society, with technical support provided by external development partners as required.

Sources: UNDP website http://www.un.org.kh/undp/what-we-do/projects/cambodia-climate-change-alliance, EU (2011)

- In the absence of the 'annual rule', funds can provide flexible timelines for implementation commensurate with the absorptive capacity of recipients. (Pacific Islands Forum Secretariat 2011)
- Finally, climate funds are also being put forward as a possible institutional entity through which governments may be able to gain direct access to international climate funds. (Flynn 2011).

4.1.3 Project-based Finance

Project-based finance refers to funds directed to individual projects or groups of projects that are part of a sector programme (GEF Evaluation Office, 2006). Where project based finance is to be disbursed to government; donors and governments will typically agree upon the allocation of resources on a project by project basis prior to the financing agreement.

Project-based finance shares many of the same characteristics as extra-budgetary funds in that allocations are determined outside of standard budgetary procedures (even if they might be recorded in the national budget and impact allocations within the budget).

However, within each of these three modalities outlined, there is considerable variation in the institutional arrangements by which they are managed: processes for donor coordination (e.g. programme based approaches, sector wide approaches etc.); the conditions of payment (i.e. performance based payments as proposed for REDD+, conditionalities linked to policy actions etc.); the use of country systems (i.e. the processes for planning, procurement, reporting, accounting), systems for measurement, reporting and verification; all of these can vary considerably from fund to fund and project to project. Some of these variations will be considered in more detail in the next section.

4.2 Managing a range of funding modalities at the national level

Despite commitments on the importance of country ownership, the majority of finance that is being provided by international financiers is being channelled outside of the national budget. By keeping financing flows separate from other sources of ODA and domestic revenues, money dedicated to climate change can be more easily tracked from source through to use. This is particularly appealing to providers of climate finance given the international pressure to demonstrate *additional* finance is being provided and also the requirements to measure and verify the impacts of the increased funds (Brown and Peskett 2011).

There is however a real risk that as funding for climate change proliferates outside of the standard budgetary system, it could be perceived to be a problem to solely be addressed with those dedicated extra-budgetary financial flows. Further, as funding sources become fragmented, there is a danger that the benefit of a unified view of how government resources are being allocated is lost, which can lead to gaps and overlaps in expenditure. The findings of the Bangladesh CPEIR are indicative in this regard: there is a proliferation of potential funding mechanisms, each with their own institutional arrangements, through which sector Ministries could potentially request additional financing (CDDE 2012) as shown in Figure 3.

There are a number of approaches that donors and governments can take at a national level to manage and coordinate fragmented sources of funding.

4.2.1 Maximising the Use of Country Systems

In Carter's 2008 literature review of putting aid on budget, she draws out three key principles of sound public expenditure management that could potentially be undermined by a proliferation of funds that bypass standard budgetary procedures.

First budgets should be comprehensive, that is to say ideally all revenues and expenditures should be captured in the budget in order that they are subject to the discipline of the resource allocation process, whereby trade-offs are made between the different ways financial resources can be used. (World Bank, 1998)

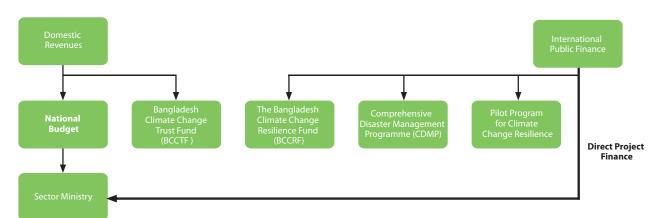


Figure 3: Potential funding sources for activities related to climate change resilience in Bangladesh

Second budgets should be transparent so that decision makers have all relevant issues and information before them when they make decisions. It is difficult, for example, for Ministries of Planning and Finance to allocate resources strategically to climate change programs if they do not have information on the allocations of national climate funds.

Third is the importance of accountability. It is vital that policy decision makers and implementing agents can be held to account by parliament and the wider public for the allocation and use of public resources: this is true both of funds managed through the budget and extra-budgetary funds. If for example, the government manages an extra-budgetary REDD fund and planned transfers to local communities have not been made as projected, local communities will have an interest in knowing why.

To mitigate the risks outlined to comprehensiveness, transparency and accountability, country systems should be used where possible. Drawing from Mokoro's 2007 analysis, Carter (2008) break down seven different ways that aid can be integrated into the national budget cycle, which is also highly relevant for climate finance. As can be seen in Table 4, although budget support by definition uses more country systems, there is still considerable scope for extra-budgetary funds and projects to be more integrated.

Certain financing modalities outlined will not be fully integrated into the budget: by definition, for example, extra-budgetary funds will not go 'through the budget'. However, to minimize negative impacts on comprehensiveness, transparency and accountability, three general principles should be agreed upon for all financing:

- First of all funds should be 'on plan'. For the host country to be able to comprehensively manage a range of funding modalities they need to be brought together in a country's strategic planning processes. In this vein, the Pilot Program for Climate Change Resilience only provides funds to programs of public and private sector *investments already identified in existing national plans and strategies*. To be eligible projects must either (i) provide technical assistance to build upon existing work to integrate climate risk and resilience into national planning and budgeting systems or (ii) provide additional financial resources to fund the building of climate resilience in programs (see Box 6).
- Second, all funds should be 'on budget'. There would be benefit in capturing the planned revenues and expenditures of all extra-budgetary funds in the budget documentation even if they do not follow standard budgetary procedures for appropriation. (ADB, 1999). Often budget documents are one of the most established mechanisms whereby parliament, the press, civil society and communities can hold the executive to account.
- Third, all funds should be 'on accounting' and adopt the same expenditure classification system as the national budget. (ADB, 1999) This is particularly important in a cross cutting issue like climate change if there is to be a 'whole of government approach' to

Table 4: Integrating	climate finance with country systems
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Term	Definition	Funding Modality		
		Budget Support	Extra-Budgetary Funds and Projects	
On plan	External financing integrated into spending agencies' strategic planning and supporting documentation for policy intentions behind the budget submissions.	Yes, although can add singificant transaction costs in terms of policy dialogue	Should be, but often not	
On budget	External financing, including programme and project financing, and its intended use reported in the budget documentation.	Yes	Should be, but often not	
Through the budget	External financing included in the revenue and appro- priations approved by parliament.	Yes	No	
On treasury	External financing disbursed into the main revenue funds of government and managed through government's systems.	Yes	No	
On accounting	External financing recorded and accounted for in government's accounting system, in line with government's classification system.	Yes	Should be, but often not	
On audit	External financing audited by government's auditing system.	Yes, although donors will often conduct their own fidcuiary assessments	Should be, but often not	
On report	External financing included in ex post reports by gov- ernment.	Yes, although can add significant transaction costs in terms of report- ing on policy actions	Should be, but often not	

Source: Carter (2008) and Author's Own

addressing the issues. If different classifications are being used from one fund to the next, it is very difficult to get a transparent picture of how allocations and priorities are changing over time across government.

Finally, extra-budgetary funds should continue to be reviewed over time. Routing funds through the national budget should be the default option unless there continues to be strong reasons otherwise. As an emerging policy area, political visibility for climate change expenditure may be more important now than in five to ten years time. If an extra-budgetary fund is a good idea today, it does not necessarily mean it will be in the future. In practise, extra-budgetary funds tend to proliferate over time and are more easily created than withdrawn.

4.2.2 Coordination of financing

The fragmentation of the international financing architecture is such that the public response to climate change in developing countries in the Asia-Pacific region is likely to be financed by a diverse range of funding modalities. The core element of the public response to climate change will continue to be from funds allocated through the national budget, possibly including budget support. In addition, the close links between climate change adaptation in particular and sustainable development also mean that many actions on climate change will be financed through existing ODA funding streams. Further, as increasing flows of international finance become available, dedicated sources of 'climate finance' are also likely to play an ever greater role.

Box 6: Pilot Program for Climate Change Resilience in Cambodia

Source of Funds

US\$105 million has been committed by the Asian Development Bank to undertake the PPCR, with US\$50 million of grants being used to support 'soft' enabling investments and US\$55 million of concessional loans for 'hard' infrastructure investments. It is expected that further co-financing of US\$299.4 million will be raised from ADB's and other donor's operations.

Administration of Funds

The funding for the PCCR is largely *additional* to ongoing and planned investments from the Asian Development Bank, as part of their conventional ODA lending program. It will continue to be administered through the existing project arrangements agreed between the Cambodian government and the ADB.

Activities to be financed by funds

Funds are primarily dedicated to sector and locality specific projects in three priority sectors: water, agriculture and infrastructure. A fourth component is to build upon the pilot programs and support more generally the integration of concerns on climate resilience into the national development agenda. The breakdown of allocations is outlined below:

Investment Component I: Promoting Climate-Resilience of Water Resources and Related Infrastructure (US\$ 33 Million)

- Climate Risk Management and Rehabilitation of Small- and Medium-scale Irrigation Schemes in the Tonle Sap Basin
- Enhancement of Flood and Drought Management in Pursat and Kratie Province

Investment Component II: Enhancing Climate-Resilient Agriculture and Food Security (US\$ 23 Million

- Promoting climate resilient agriculture, forestry, water supply and coastal resources in Koh Kong and Mondulkiri provinces
- Climate proofing of agricultural infrastructure and business focused adaptation

Investment Component III: Improving Climate-Resilient Infrastructure (US\$ 42 Million)

- Climate Proofing of Roads in Prey Veng, Svay Rieng, Kampong Chhnang and Kampong Speu Provinces
- Climate Proofing Infrastructure in the Southern Economic Corridor Towns
- Flood resilient Infrastructure Development in Sisopohon, Siem Reap, Kampong Thom, Battambang, Pursat and Kampong Cham

Investment Component IV: Cluster Technical Assistance (US\$ 7 Million)

Mainstreaming climate resilience into development planning of key vulnerable sectors

Allocation and delivery of funds

The PPCR funds the *incremental costs* of climate proofing existing programs that are financed through other means. In this way it seeks to support government ownership and coherence with the development strategy more broadly, but makes the 'climate' component of the investment visible and more easily measurable.

Source: Royal Government of Cambodia (2011), Strategic Program for Climate Resilience (SPCR) Prepared for the Pilot Program for Climate Resilience (PPCR), May 2011

At a national level, recipient governments and donors may have limited influence over the extent to which various funding modalities are made available. Where national governments do have considerable influence though is in thinking about how specific policy interventions within national strategies may be best suited to financing from different available funding modalities (domestic or international) given the characteristics of those modalities.

For example, on the adaptation side McGray et al. (2007) have noted with examples that dedicated cli-

mate financing modalities typically finance activities that 'confront climate change' directly (e.g. reducing the risk of glacial lake outburst floods), where the impact of investments with respect to climate change is potentially most visible and easily measurable. On the other hand, ODA is more development focused and used to 'address drivers of vulnerability' (e.g. diversification of livelihood strategies in areas vulnerable to flooding). Less money is forthcoming to 'build response capacity' (e.g. reforestation to reduce flood induced landslides) and to 'manage climate risk' (e.g. monitoring salinisation of drinking water). Evidently, a coordinated approach is necessary if financing gaps in the existing policy response are to be filled. In practise, managing a combination of domestic budget resources, ODA financing and dedicated climate finance is very difficult, particularly, at a whole of government 'climate change' level. To make it more manageable, gaps in policy could potentially be identified at the sector or local level and appropriate funds identified (budgetary, ODA or international finance) to meet those gaps.

To reduce the fragmentation of funding modalities within sectors, there may also be benefit in using specific funding streams specifically for certain sectors as a means of potentially reducing overlaps. Not all 'climate change funds' need to cater for all sectors impacted by climate change.

4.2.3 Tracking climate change expenditures across funding modalities

A number of countries in the region have already or are considering creating specific codes in the budget classification to track climate change expenditures. This may be a useful tool for making the linkage between public expenditures and climate change more visible across different funding modalities. Nepal, for example, has developed a budget code whereby development expenditures on climate change can be marked (see Box 7). This type of exercise may also provide reassurance to providers of finance that any addi*tional* money that is being disbursed is being allocated towards climate change activities. The Bhutan government has for example developed codes for climate change to track whether local grants being provided by UNCDF are being used for climate change related activities (UNCDF 2011).

As an analytical input for policy review and informing budgetary allocations, such measures should be considered with caution, because of the complex linkages between public expenditure and climate change that a budget classification cannot cover (e.g. a code for 'climate change expenditure' will not track the size of expenditures that have negative impacts on climate change).

Box 7: Climate Change Budget Codes in Nepal

The National Planning Commission (NPC) in Nepal conducted a Climate Public Expenditure and Institutional Review in 2011 to better understand how actions on climate change were being financed. One of the recommendations of the review is that there would be benefit in introducing climate budget codes to assist in tracking climate change related expenditures.

As climate change related expenditures do not come under a single sector Ministry, it is not easy to see how the budget is reflective of climate change policy. The codes being introduced are expected to help delineate climate change related expenditures, to facilitate monitoring and implementation of the actions being financed and also to track whether funds are reaching the grass-roots level where most needed.

The initial proposal drafted is that activities in the development budget will be defined according to their relevance to climate change with activities marked as 'highly relevant', 'relevant' or 'neutral'.

Source: Climate Change Budget Code, Quick Reference Guide, National Planning Commission, Nepal, May 2012

This type of exercise should also be managed carefully to avoid adding significant complexity to budget preparations. These are some possible guiding principles that policy makers might consider if trying to define 'climate-change' related expenditures:

- Policy makers should be consistent in the definitions of climate change related expenditures and where possible avoid 'relabeling'.
- However expenditure on climate change is defined, mechanisms for calculating expenditure on climate change should be commensurate with national capacity and budgeting systems. Overly complex means of calculating climate change related expenditure should be avoided and they should, where possible, use existing budget classification systems to minimize transaction costs.
- In order that expenditure related to climate change can be tracked across time, the definition of climate change related expenditures should be transparent.

5. Recommendations

The key message of this paper is that while mobilizing increased international resources is vital for addressing climate change, an effective response to climate change requires looking outside of dedicated 'climate finance' streams and the activities they fund and understanding how development priorities and public expenditure more generally impact upon climate change. The national budget is the key linkage between the policy agenda and the public financing available and is therefore of fundamental importance for developing a coherent government response to climate change. International finances need to be managed in such a way that it provides complementary support, rather than fragments the policy agenda on climate change.

More specific recommendations are outlined below:

- When designing policies for climate change, governments and providers of finance may wish to consider the whole range of potential policy interventions at their disposal. Enabling instruments including tax policy, regulations, and information provision will have a key role in changing the behaviour of individuals, communities and businesses, as well as more visible infrastructure investments.
- In attempting to shift behaviour away from 'business as usual', some of the *discretionary* resources identified in the budget framework can be dedicated to specific new climate change policy initiatives. However, the impacts on climate change of all major new policy interventions and investments in key policy areas and sectors also ought to be considered before those policies are incorporated in the budget. Institutions responsible for climate change should be involved in decisions over how dedicated resources for climate change might be allocated.
- A medium-term outlook for the budget can give greater space for governments to shape the overall direction of spending patterns over time. To address climate change will require an increase in expenditures dedicated to activities for climate change mitigation and adaptation, but also a qualitative shift across government in the overall composition of ex-

penditures over time, so that 'harmful' expenditures are reduced and potential synergies are maximised.

- CPEIRs can provide a useful analytical input into policy dialogue on climate change and can be used to inform decisions on how budgetary allocations may need to be changed over time to meet objectives on climate change. CPEIRs can be usefully complemented by further analysis on how fiscal and tax policies affect climate change.
- Governments should use, and strengthen where necessary, budget classifications so that it is visible how budgets are being allocated to climate change policies *within* sectors.
- The aggregate size of intergovernmental fiscal transfers may need to be increased upwards given that services delivered at a local level are likely to be disproportionately impacted. The geographical composition of transfers may also require revisiting over time, as the likely impacts of climate change will be dependent upon geographical context. The structure of transfers should take into account the need that is being met. Regional incentive mechanisms may be a useful tool for implementing REDD programs.
- A useful addition to budget documentation would be to dedicate a section to climate change that shows key new climate change policy initiatives in the budget across government that have been agreed with different implementing agencies and the budgetary allocations for those initiatives. Such a section could also highlight key new initiatives that have secondary benefits or costs from a climate change perspective.
- The current proliferation of international funding mechanisms for climate change risks leading to a weakening of the budget process. To minimize the costs to comprehensiveness, transparency and accountability of the budget; it is important that country systems are used wherever possible. Projects financed should be part of government strategic plans, the planned revenues and expenditures of extra-budgetary funding should be recorded in the budget documentation and the same expenditure classification system should be used as in the budget.
- To prevent gaps and overlaps in expenditure emerging as a result of the fragmented sources of finance,

coordination is needed. To make it more manageable, gaps in policy could potentially be identified at the sector or local level and appropriate funds identified (budgetary, ODA or international finance) to meet those gaps. To reduce the fragmentation of funding modalities within sectors, there may also be benefit in using specific funding streams specifically for certain sectors: not all 'climate change funds' need to cater for all sectors impacted by climate change.

Mechanisms which are introduced to track expenditures on climate change can be useful in making more visible expenditures dedicated to actions on climate change across government (although analytically these measures should be treated with caution given the complex linkages between public expenditure and climate change). Where introduced they should be commensurate with national capacity and systems.

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