



Oxford Policy Management

Key lessons for developing Climate Change Financing Frameworks

Integrating climate change into national planning and budgeting processes



The UN Climate Change Conference in Paris in late 2015 re-confirmed the global commitment to spend US\$ 100 billion a year on dealing with climate change. For developing countries, the bulk of this expenditure will need to be on adaptation (that is, programmes to moderate the damage caused by climate change), which is expected to account for half the US\$ 100 billion.¹

Across many low- and middle-income countries, the level of spending on adaptation falls short of a socially desirable level, giving rise to what is termed the 'adaptation gap' (that is, the extent to which planned climate change funding fails to reduce loss and damage caused by climate change). Harnessing the resources of national budgets will be critical to closing this gap, and to achieving the adaptation spending commitments agreed in Paris. The Climate Change Financing Framework (CCFF) is an approach for integrating climate change into standard techniques of planning and budgeting, in order to enable governments to monitor the adaptation benefits of budget spending and prioritise budget resources for climate change ends.

Oxford Policy Management (OPM) has been working with various governments in South and South East Asia to pioneer the CCFF methodology. This note summarises the good practice that has begun to emerge from this programming experience. It recaps the rationale for CCFFs by providing a conceptual framework for the adaptation gap, before describing the features of a CCFF and detailing key lessons for responding to some of the common challenges.

Background: closing the adaptation gap in low-income countries

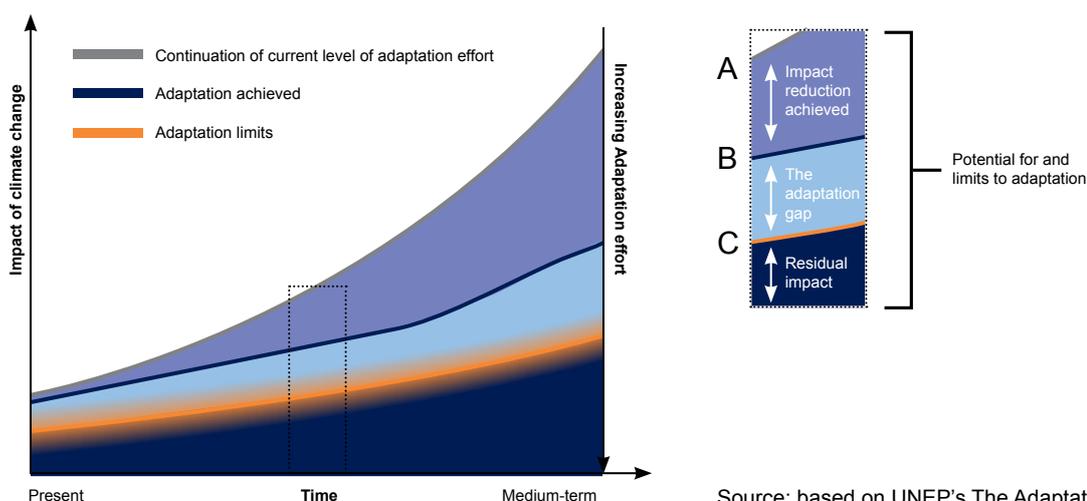
Modelling the future impact of climate change on economic performance at a global- and country-level, and on outcomes in different sectors, is fraught with technical challenges and uncertainty. Nevertheless, the trend such models forecast is unequivocal: climate risks and the impact of climate change are expected to increase significantly in the coming decades. For example, recent work on the impact of climate change in South Asia suggests that, by 2050, GDP growth rate will be 2%- 7% lower than it would have been without climate change, and that GDP will be as much as 50% lower.²

Adaptation spending – through such programmes as flood defences, early warning systems and building codes – reduces the future impacts of climate change by moderating the harm caused.³ The effect of this adaptation is shown in Figure 1 below as a reduction in climate change impact from A to B. There are, however, physical and technological limits to how much loss and damage can be avoided through adaptation, and, furthermore, few governments would consider it cost-effective to mitigate all climate change impacts possible given the high marginal and opportunity costs of doing so. As such, most governments will tolerate some degree of residual climate change impact (C in Figure 1).

Typically the actual amount of adaptation falls short of this ‘optimal level’ (i.e. residual impact only), particularly in low-income countries. This is due to a combination of: government institutional capacity constraints (the limited ability to provide the requisite emergency services, or to enforce the regulatory environment, for example); demand constraints (with individuals less able or prepared to pay for climate protection, or less informed of the benefits of doing so); and supply constraints (from limited resources). The extent to which climate change adaptation funding fails to reduce loss and damage to the level which would be left if spending was optimised, is termed the adaptation gap (depicted as (B–C) in Figure 1).

Given that the majority of the world’s climate change-vulnerable populations live in low- and middle-income countries where adaptation gaps tend to be larger, there is a strong argument for harnessing the resources of the national budget in these countries to better support adaptation efforts. This means integrating climate change into planning and budgeting processes, so that adaptation is recognised and rewarded in resource-allocation processes. CCFFs provide a toolkit for doing this.

Figure 1 | The adaptation gap



Source: based on UNEP’s The Adaptation Gap Report 2014⁴

² Mahfuz Ahmed and Suphachol Suphachalasai (2014) Assessing the Costs of Climate Change and Adaptation in South Asia. www.adb.org/sites/default/files/publication/42811/assessing-costs-climate-change-and-adaptation-south-asia.pdf

³ Mitigation can also reduce the impact of climate change, by reducing the climate change itself, but this is not the focus of this note given that the primary challenge for most developing countries is adaptation.

⁴ See www.unep.org/climatechange/adaptation/gapreport2014/portals/50270/pdf/AGR_FULL_REPORT.pdf

What is a CCFF?

A CCFF sets out the adaptation gap in a country and proposes a combination of policy options for reducing it through an approach that is embedded in national planning and budgeting processes. Typically, a CCFF will involve the following components:

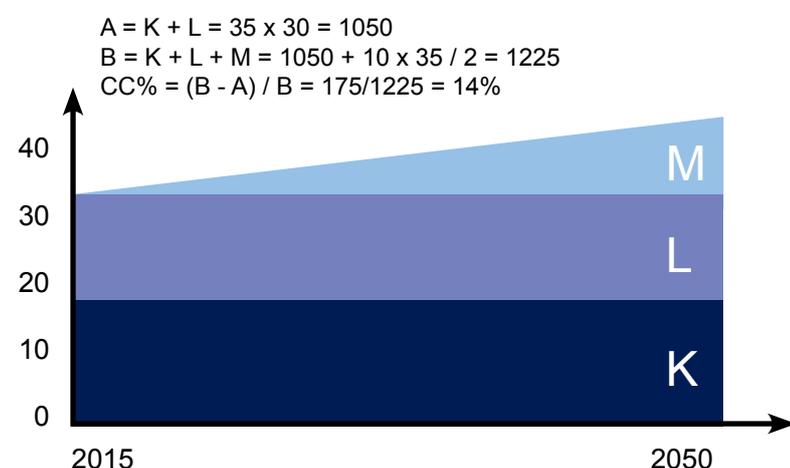
1. Calculation of the way in which climate change affects the benefits from budget expenditures

The principal function of the budgeting process is to weigh up competing demands and allocate scarce resources to those proposals with the highest net benefits, as defined against stated priorities set out in the policy architecture. The challenge lies, therefore, in integrating climate change into a conventional evidence-based policy appraisal, which in turn requires an understanding of the additional costs and benefits of individual spending proposals arising from climate change. This is complicated by the fact that, for the most part, adaptation occurs as a by-product of conventional development programmes, with few programmes specifically addressing adaptation as their central objective. There is a need then to understand the relevance of climate change to the performance of an array of development programmes.

Previous attempts to assess climate change relevance have focused on whether climate change features explicitly or implicitly in the objectives of the programme.⁵ Such an approach, however, often overstates the importance of climate change, either through a lack of evidence and experience or through deliberate exaggeration in order to improve the chances of accessing climate finance (a moral hazard risk). As a result, finance ministries have largely been sceptical about the credibility of such assessments.

CCFFs have sought to introduce a higher degree of objectivity into the weighting process through the application of a climate change relevance score (CC%), which provides an assessment of the proportion of total benefits from the programme that are associated with adaptation and mitigation (see Box 1).

Box 1 | Calculating climate change relevance scores (CC%)



Source: CPGD CCIA Guidelines 2015⁶

A climate change relevance score (CC%) is a calculation of the marginal changes in performance of a programme caused by climate change; or the proportion of total benefits from the programme that are associated with adaptation and mitigation. It normally varies between 0% and about 30%, although it can be up to 100% for dedicated programmes and is negative for maladaptation.

Where A is benefits when climate change is not taken into account and B is benefits with climate change taken into account (i.e. including adaptation and mitigation), then $CC\% = (B - A) / B$.

The programme depicted in the figure below generates a stream of two types of net benefit: the first is unaffected by climate change and generates a constant net benefit stream (20 units) and the second increases with climate change (from 10 to 20 units). Total benefits without climate change are 1050 units (K+L) and the total benefits when climate change is taken into account are 1225 units (K+L+M), giving a CC% of 14%.

In theory, calculating CC% scores should be a rapid exercise adding only a day or two to whatever impact assessment has already been undertaken, capturing and communicating the evidence that is easily available and supplementing this with the opinion of experts. However, it is often applied where the existing impact assessment is insufficient and therefore requires a more significant effort. For larger programmes, investment in a more detailed cost-benefit analysis approach may be justified (where benefits are converted into monetary value), but in cases where evidence is limited, and/or where communities are strongly involved in the delivery of the programme, qualitative methods such as participatory appraisal and expert opinion may be more appropriate.

⁵ Climate Public Expenditure and Institutional Reviews and the climate change markers in the database of Official Development Assistance maintained by the OECD have employed this approach, typically applying three categories of weighting: 75–100% where climate change is a primary objective; 25–75% where it is one of a mix of objectives, and 25% or less where climate change is a secondary or significant implicit objective.

⁶ OPM (2015) Climate Change Impact Assessment (CCIA) guidelines

2. Reviewing past trends of climate change expenditure, weighted by CC% scores

Reviewing past trends also provides an indication of the direction of travel, and whether the government is maintaining any overall policy coordination to ensure there is gradual increase in climate change-related expenditure. From this it is possible to judge whether a country is on or off track for delivering on climate change spending commitments, such as those made at the 2015 Paris Climate Conference.

Under a CCFF, total adaptation expenditure can be estimated through a relatively straightforward analysis of expenditure against all climate change-relevant budget lines, weighted by their respective CC% scores. This component may also be done as a separate exercise, forming part of a Climate Public Expenditure and Institutional Review.

3. Defining financing scenarios

Many climate change action plans are still costed using a zero-based estimation of the ideal costs for completing an action, regardless of financing constraints. This produces total costs that are sometimes much higher than the funding that is likely to be available, and sometimes much lower. It is therefore important to define scenarios of likely available funding and match these scenarios with the range of existing and planned actions. Financing scenarios should include resources from: the budget in line with the Medium-Term Expenditure Framework; international development funds; climate funds, both domestic and international; and the private sector.

4. Defining various policy options for reducing the adaptation gap

Using key macro fiscal data and CC% scores, user-friendly models can be built that simulate the impact of various policy option combinations on the adaptation gap. Typical policy options include combinations of:

- **Additional financing:** New financing scenarios may be required that involve some additional resources or different allocation patterns, such as prioritising programmes or sectors with higher CC% scores, as well as improving the climate relevance of existing programmes.
- **Leverage ratios:** Whilst the focus tends to be on how a government can increase public expenditure on adaptation, or increase the climate relevance of existing expenditure, there is also a role for the state in leveraging private investment, which does not put similar pressure on the budget. The policy options proposed under a CCFF should consider a variety of means of increasing leverage ratios, such as introducing and enforcing adaptation regulations, establishing investment incentives, and developing the financial services markets (including insurance).
- **Auto-adaptation:** Evidence suggests that individuals typically respond faster than governments to climate change impacts but, at the same time, there is undoubtedly a role for government in improving the speed of individuals' auto-adaptation and reducing the potential for maladaptation. Such measures may include improving information flows.

5. Estimating the total benefits from the proposed policy options in terms of the reduction in loss and damage

The focus on benefits in estimating CC% provides the evidence to assess the reduction in loss and damage that should be generated by the various policy options. The remaining adaptation gap is calculated as the proportion of loss and damage due to climate change still remaining after the adaptation benefits of the selected policy options are taken into account. International evidence (e.g. in the Stern Review) suggests that 30% is the typical lower bound for this, as some residual damage cannot easily or cost-effectively be prevented.

6. Detailing the institutional changes required to manage these changes in climate change policy and financing

In all of the stages required in implementing a CCFF, there is a technical task; however, there is also an institutional task to create interest and capacity, and to change procedures. The next section includes a discussion of who in government may be the most strategic partner for implementing a CCFF, and the political economy considerations that are necessary.

Key focus areas for implementing CCFFs

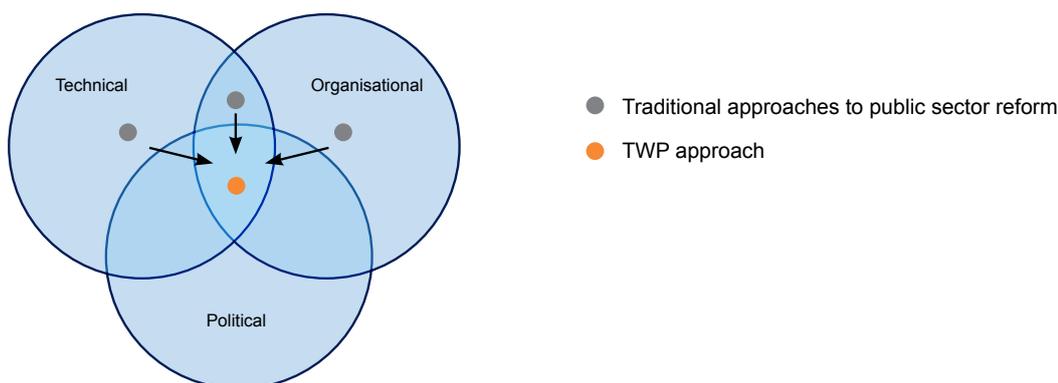
OPM has applied the variants of the CCFF approach in a number of different countries, including Afghanistan, India (through the DFID-funded Climate Proofing Growth and Development (CPGD) programme) and Indonesia (through the DFID-funded Low Carbon Support programme). Some important areas of focus have emerged from this experience that are good practice considerations for any country embarking on a CCFF.

1. Generating political buy-in for climate change (and adaptation spending in particular)

A growing body of literature and evidence demonstrates that conventional public sector reform interventions, which focus on technical issues and capacity building but do not pay sufficient attention to creating political buy-in, have failed to deliver long-term developmental impact.⁷ We have extensive experience of implementing programmes through a ‘thinking and working politically’ (TWP) approach,⁸ which is an attempt to correct this failing. TWP advocates the use of tools such as operational political economy analyses to inform flexible and adaptive programming, where specific interventions are designed, delivered or discontinued on an iterative basis, capitalising on opportunities where there is alignment with political interests. In the framework of Figure 2, this means orienting the programme’s activities to the centre of the Venn diagram.

In the case of climate change, leveraging political buy-in poses particular challenges. There is a tendency

Figure 2 | Aligning technical support and organisational reform with political interests



for climate change reformers to ‘start with the science’ but generating conclusive and specific evidence on the future impacts of climate change is fraught with difficulties, and the evidence that has emerged is open to misinterpretation. Furthermore, more often than not, politicians make decisions based on factors other than the scientific evidence. At the same time, there is also a huge amount of very generic climate change literature that is unconvincing to those politicians at the heart of the planning and budgeting process.

In addition, simply providing a climate screening of existing policies may do little to raise political interest and commitment. OPM has found that a TWP approach, where the starting point is the stated priorities of the government (as expressed through national development plans, sector policies and political manifestos, and revealed through past spending patterns), can be more effective. The CCFF approach aims to show how climate change affects these national strategies and policies by focusing on the expenditure implications of the policies, with a particular emphasis on the implications for economic growth, which drives so much national strategic planning. Embedding climate change into these priorities, by articulating the specific risks posed to those priorities, increases the chances of making it a politically salient issue. The CCFF approach aims to pursue this by providing a clear structure within which to focus on the climate change relevance of existing strategies and policies, and the expenditure patterns that deliver these strategies. The success of such a strategy is contingent on strong communication skills and close relationships with the government leadership, which may take some years to develop.

In India for example, we are working with six state governments to pursue CCFF approaches. Each state government has different levels of political interest and has selected a different focus for the first phase of work.

⁷ See Matt Andrews (2013) *The Limits of Institutional Reform*, Cambridge University Press.

⁸ See, for example, www.opml.co.uk/sites/default/files/OPM_Briefing%20Notes_PDIA_NM.pdf

These include: a rapid overview of CCFFs to raise awareness of the adaptation gap; preparation of an authoritative climate change impact assessment for a sample of climate change actions; providing a framework for costing climate change action; and developing an understanding of the overall fiscal space for increasing adaptation funding within the budget. Each of these initiatives picks up some of the components of a CCFF and builds toward practical solutions for mainstreaming climate change into planning and budgeting.

Further means of generating political traction include working with local media groups to ramp up pressure on the political leadership to act on climate change; We have experience providing direct training and sensitisation activities targeting media outlets in a number of our projects. The CCFF aims to facilitate this by providing headline estimates of the adaptation gap that show how climate change will affect people's lives under different policy options. However, programmes attempting to undertake both supply- and demand-side measures must carefully manage how they work with the media, and the profile given to such activities, in order to avoid jeopardising relationships with government.

The external environment can additionally help generate political buy-in for climate change-related work. International meetings and agreements, such as the targets that emerged from the Paris Climate Change Conference, can provide additional impetus if the requisite monitoring and accountability mechanisms are also put in place. Cross-country rankings have also proven effective motivators in some instances.

2. Reconciling the long-term proposition of climate change with the short-term perspective of government administrations

The exponential growth in climate change risks means returns are initially small and will not be fully realised until the medium to longer term. For example, flood defences built now will prevent some loss and damage from flooding this year - giving routine development benefits associated with existing climate, rather than change in climate - but evidence shows that protective measures taken against floods/droughts today will become roughly twice as important by 2050 in most of South and South East Asia, due to the forecasted doubling of frequency of floods over the next 35 years.⁹ In contrast, government administrations typically face a three- to five-year term in office, and budgets are formulated and approved on an annual basis. Climate change budgeting needs a means of reconciling these conflicting time horizons.

3. Legal frameworks to ensure continuity

Legal frameworks can play a role in ensuring the continuity of climate change commitments throughout changes in government. Broadly speaking, climate change legislation should not be overly prescriptive but should serve particular purposes, including compelling governments to develop climate plans on a cyclical basis (see Box 2 on the experiences of the UK Government, which has relatively sophisticated arrangements for adaptation with a clear legal basis, independent scrutiny and rolling assessments). Furthermore, given that a lot of countries have made commitments to climate planning and financing at the international level, there is a clear role for legislation in crafting a law which translates those commitments into national statutory obligations.

Box 2 | The UK National Adaptation Programme

The 2008 Climate Change Act mandates a five-year cycle of Climate Change Risk Assessments (CCRAs) setting out the climate change risks facing the UK, and subsequent National Adaptation Programmes (NAPs) that detail how individual government agencies will respond to those risks. Responsibility for compiling the NAP rests with the Department of Environment, Food and Rural Affairs, with contributions from various stakeholders and independent scrutiny from the statutory Adaptation sub-Committee.

The first NAP was produced in 2012, at a time when political priorities were focused on fiscal austerity and issues other than climate change. Although some critics have questioned the quality and ambition of the document, it nonetheless put the government on a learning path for incorporating issues on climate financing and strategic decision-making that would have been absent without the process being in place. The second CCRA is currently under preparation, with a revised NAP scheduled for 2018.

⁹ IPCC (2012) Special Report on Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation. See <http://ipcc-wg2.gov/SREX/report/>

To have the intended impact, legislation needs to apply to the level of government where relevant decision-making occurs. For instance, in politically and fiscally decentralised countries, climate change legislation at the federal level may be ineffective if it has no legal bearing for provincial and local governments. Furthermore, implementation of a law requires financing in order to incentivise and monitor compliance, which may lead to calls for establishing a climate change fund. In general, off-budget funds are not considered good public financial management practice as they lead to fragmentation and undermine the budget prioritisation process, although in some instances they can be justified as a temporary means of instilling a new set of behaviours among government actors.

4. Achieving the right balance between mainstreaming and concentration when assigning responsibility for adaptation within government

Planning and budgeting is an inherently sectoral process. Budgets are compiled, appropriated and executed by ministries, departments and agencies (MDAs), through an organisational landscape of government that tends to be highly static.¹⁰ In contrast, climate change is a cross-cutting concern; its effects are registered across a broad range of sectors and the responsibility for adaptation - which is typically a by-product of development programmes - is similarly diffused throughout government. There is a challenge, therefore, in reconciling a cross-cutting priority with the organisational structure of a budget.

This issue is not unique to climate change. Governments and donors have grappled with other cross-cutting concerns within the budget process, including: gender, HIV/AIDS, environmental issues, nutrition and other cross-cutting concerns through the budget process. Consequently, there is a rich history of mainstreaming efforts to learn from, starting with the UN-led gender mainstreaming that launched in the 1990s. In short, the crowning success of the gender mainstreaming movement was the widespread awareness of the importance of the issue that it generated, particularly in sectors where it was not previously considered a particularly relevant concern. It proved difficult, however, to extend mainstreaming beyond the strategic planning stage of the budget cycle, and to integrate it into budget formulation, execution, accounting and reporting. In some instances, mainstreaming amounted to little more than a box-ticking exercise in plans, and had no real impact on how funds were being spent. Another lesson that has emerged is that to avoid the responsibility of everyone becoming the responsibility of no-one, it is necessary to secure the leadership of an entity with sufficient leverage and influence to ensure sensitisation and compliance. In many countries, the ministry responsible for gender does not possess this leverage.

When introducing a CCFF, we have found that there is a clear role for a mainstreaming-type approach that attempts to diffuse climate change concerns into a broad range of sector strategies and budgets and to build a more broadly based understanding of climate change risks and impacts within government. This may be more effective than with other cross-sectoral mainstreaming initiatives because the implications of climate change for economic growth and for the performance of public policies are more direct and can often be measured in monetary terms. Selecting the right partner institution to lead this mainstreaming process is critical, and usually means reaching out to less traditional counterparts, such as the Prime Minister's Office or equivalent (typically a senior office with a coordination mandate) or the Ministry of Finance (given its responsibility for setting ceilings, developing budget guidance and reviewing agency submissions, all of which should take climate change into account). Building bridges into these institutions can take time, and involves identifying well-positioned focal individuals to champion the climate change agenda, as well as outlining clear indications of the potential threat to economic growth. Political economy analysis can help in identifying these individuals and their motivations.

At the same time, tangible progress on adaptation spending will not result from mainstreaming climate change into plans alone. Commensurate efforts are required to integrate climate change into national budgets, which demands careful timing to ensure close alignment with the budget process timeline (something that is typically stipulated in law). Given the level of technical expertise required to integrate climate change into the budget appraisal process, it may be pragmatic to focus on a few key MDAs, working with them in a concentrated manner to introduce climate change impact analysis techniques. Usually the focus should be on the MDAs where the potential impact of integrating climate change is largest, as the CC% score improves the chance of obtaining funds in the budget or from other sources, but political will and requisite technical capacity are also legitimate considerations. In subsequent years, the more intensive approach can be rolled out to additional MDAs, with the experience (and success) of original pilots acting as an incentive for engagement.

¹⁰ Even in the context of advanced programme budgeting reforms, where budgets are structured into bundles of services with common objectives, the clustering of activities into programmes tends to align with the organisation of government and to reflect the assignment of legal mandates.

Conclusion

CCFFs are a promising means of integrating climate change into national planning and budgeting processes, with the intentions of harnessing more resources for adaptation and minimising the damage of climate change on economic growth and development. They provide an objective methodology for calculating the volume of funds spent on adaptation, and present a menu of policy options for reducing the adaptation gap, grounded in the political realities of the budget. Our experience through the CPGD programme has provided some useful lessons on how to deal with some of the common challenges of climate change reform, including:

1. how to tailor evidence to national priorities and make it relevant to the short-termism of individual government administrations;
2. the need to think critically and freely about the most appropriate government counterparts; and
3. how to balance the broad-based awareness-raising of mainstreaming with the need to focus efforts and resources on priority programmes where there is the most pay-off or traction.

About the authors

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