Report

Fair share: climate finance to vulnerable countries

Neil Bird

Key messages

- Significant public expenditure on adapting to climate change is taking place through national budgets in some of the world's poorest countries.
- In Ethiopia and Uganda, the overwhelming majority of this expenditure is being funded domestically.
- International support to assist such countries adapt to climate change, as called for under the UNFCCC, has not been forthcoming at the scale necessary.
- International support should, at a minimum, match the level of domestic public spending relevant to climate change in the most vulnerable countries.

Introduction

While the international community deliberates on new development goals to eradicate poverty, climate change threatens to slow and even reverse progress in human development (Stern, 2009). Many of the most severe impacts of global warming will be felt in the world's poorest countries – and the poorest citizens of those countries will be hit first and hardest (World Bank, 2010). Efforts to cut greenhouse gas emissions have the potential to reduce the impacts over the long term, but some degree of global warming is now inevitable. As a result, poor countries and vulnerable people have no option but to adapt to the risks that will come with climate change. While the pattern of risks will vary across and within regions, it will include less predictable and more intense rainfall, more severe and protracted drought, higher temperatures and increased exposure to extreme weather events (Intergovernmental Panel on Climate Change, 2013).

Approaches to adaptation raise fundamental questions about climate justice. Women farmers working small plots of land in the eastern highlands of Ethiopia have made a miniscule contribution to the emissions driving climate change. Yet like vulnerable rural populations across sub-Saharan Africa and beyond, they face immense risks to their livelihoods, health and wellbeing of their children. The disjuncture between responsibility and risk is at the heart of the case for an international response. However, the international community has fundamentally failed to put in place at sufficient scale either the financing or the delivery mechanisms needed to strengthen the resilience and enhance the adaptation capabilities of vulnerable people. As a result, government and household budgets in the poorest countries have been left to foot the bill for a threat that originates principally in richer countries.

Drawing on ODI-led research from three countries in sub-Saharan Africa, this paper highlights the significant public expenditure on adaptation that is taking place through national budgets (Eshetu et al., 2014; Tumushabe et al., 2013; Yanda et al., 2013). This expenditure represents a considerable burden on a limited revenue base. Arising from this research, a new approach to supporting national action on climate change is proposed. Under this approach, public climate finance from the international community[1] would, at a minimum, match the level of domestic public spending relevant to climate change in those countries acknowledged to be the most vulnerable (namely the least developed countries, small island developing states and African states).

Box 1. Adaptation and mitigation

Climate change adaptation seeks to reduce the risks posed by the consequences of climate change. They include large-scale infrastructure projects such as building flood defences, farmers planting more resistant crops and storing water, and more households and businesses buying flood insurance. **Climate change mitigation** aims to address the root causes of climate change by reducing greenhouse gas emissions. These include improving energy efficiency, switching to low-carbon energy sources such as renewables and nuclear power, and protecting forests that absorb large amounts of carbon dioxide from the atmosphere.

Adaptation financing – the poor cousin

The Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) provided the scientific evidence on past trends and plausible projections for climate change. Beyond the physical science, climate change will have far-reaching social, economic and environmental consequences. Some of the impacts of climate change that will affect food security, water availability and human health are already evident (Climate and Development Knowledge Network, 2014). Looking ahead, there is a danger that climate change will compromise efforts to eradicate extreme poverty and to reduce the vulnerability of the world's poorest people.

While the long-term impacts of climate change are partly contingent on mitigation policies, over the short-to-medium term there is no alternative to adaptation (Box 1). Rich countries are already investing heavily in adaptation through strengthened flood-defence systems, coastal protection and other measures. For example, the United Kingdom spent approximately £700 million on flood defences between 2010 and 2011 (Bennett, 2014). Poorer countries and their citizens have to address the adaptation challenge with far fewer resources.

International financing for adaptation has been limited to date. Considerable attention has been directed towards the commitment to mobilise $100 billion a year from 2020. However, the allocation mechanism that will direct this funding remains unclear (e.g. Polycarp et al., 2013). What is clear is that adaptation has been neglected. Analysis of 'Fast-Start Finance'[2] for 2010-2012 suggests only 18% of global funding went to adaptation projects: $5.7 billion out of a total of $31.9 billion (Nakhooda et al., 2013a). This translates to slightly less than one dollar per person in the developing world.

1 Specifically, Annex II Parties of the United Nations Framework Convention on Climate Change (UNFCCC).

2 The Cancun Agreements of December 2010 (http://cancun.unfccc.int/) formally committed developed countries to collectively provide resources approaching $30 billion for the period 2010 – 2012 to support developing countries' climate efforts.

Table 1. Country data

Attribute	Ethiopia	Tanzania	Uganda
Population (million, 2013)	94.1	49.2	37.6
GDP per capita, PPP (current international dollar, 2013)	1,354	1,775	1,410
UNDP human development index (rank out of 187, 2013)	173	159	164
TI corruption perceptions index (rank out of 174, 2012)	113	102	130
GAIN index on vulnerability to climate change (rank out of 177, 2012)	167	140	137
ODI estimate of present climate finance delivery as a percentage of domestically determined need	6	59	10

Several dedicated multilateral climate funds have been created, including the Least Developed Countries Fund, the Special Climate Change Fund, the Adaptation Fund and the Pilot Programme for Climate Resilience. Total disbursements from these funds over the period 2008-2011 to countries in sub-Saharan Africa amounted to less than $130 million a year (Climate Funds Update, 2014). To put such spending in context, spending in response to German flood damage in 2013 was $10.9 billion (Nakhooda et al., 2013b).

The relative neglect of adaptation matters at several levels. Most obviously, it limits the resources available for poor countries to protect their people, and their social and economic infrastructure, from climate change. Adaptation also matters for the wider climate negotiations. For many of the world's poorest countries, international support for adaptation has become a touchstone for the credibility of any agreement. This reflects the deeper climate justice issues at stake.

Adaptation finance cannot insulate countries from climate change risks – but it can provide some protection. Investment in adaptation can take many forms. It can range from spending on flood defences to the development of drought-resistant seeds and small-scale water harvesting systems. Integrated into wider programmes aimed at strengthening social protection, delivering cash transfers to marginalised groups, and strengthening economic growth through infrastructure spending, adaptation investments can help to build an enabling environment for more equitable growth.

East Africa: a regional perspective

Evidence from East Africa demonstrates the inequity built into the current international system. Countries across the region face huge risks from climate change (Climate and Development Knowledge Network, 2014). Their overwhelmingly rain-fed agricultural systems are acutely vulnerable to changes in rainfall patterns and temperature. High levels of background poverty and vulnerability create conditions under which a reversal in human development could accompany climate change (Shepherd et al., 2013). In the face of this challenge, governments across the region have begun to invest in adaptation. Research carried out by ODI and its partners has examined the national climate change strategies and public finance provisions in Ethiopia, Tanzania and Uganda to provide a first estimate of the level of relevant spending. The headline figures are instructive:

- **Ethiopia:** The country's climate change strategy has called for annual spending of $7.5 billion to respond to climate change (Federal Democratic Republic of Ethiopia, 2011). With national budgetary resources for climate change-relevant actions estimated to be around $440 million per year, and international sources adding an uncertain amount that may be in the tens of millions of dollars per year, there appears to be a major financing gap (Eshetu et al., 2014).
- **Tanzania:** A 2011 study concluded that the immediate needs for building adaptive capacity and enhancing resilience against future climate change is of the order of $150 million per year. However, additional funding is needed to address current climate risks, with a conservative estimate of an additional $500 million per year, adding to a total of $650 million (Watkiss et al., 2011). This compares to an estimated current annual spend of $383 million (Yanda et al., 2013).
- **Uganda:** The draft climate change policy is supported by an implementation strategy that sets out how much it will cost. This cost is put at $258 million per year compared to current public spending in the region of $25 million per year (Tumushabe et al., 2013).

As these figures highlight, very significant national budget provisions are being made for climate change action (Table 2). Over four years, both Ethiopia and Tanzania committed $1.5 billion. These figures respectively represented 14 per cent and 5 per cent of the national budget. For countries with such large human development deficits these expenditures come with significant opportunity costs. For example, Ethiopia's spending on climate change activities represents almost half of the national spending on primary education. In the case of Tanzania, climate spending represents almost two-thirds of health spending. Spending on climate change runs the risk of crowding out urgently needed spending in other priority areas (see Figure 1).

Table 2 also illustrates differences in political weight attached to climate action. Public spending is ultimately a political decision, with ministry budgets under the direction of each minister, accountable to the head of state (and the national legislature). Uncertainty over the national impacts of climate change continue to raise doubts for policy-makers, who have to determine an appropriate level of funding for climate change actions among the many development challenges facing each country. Whereas Ethiopia adopted an ambitious climate change strategy under the former Prime Minister Meles Zenawi, and subsequently built on those foundations, political leaders in Uganda have attached less weight to the issue.

The overwhelming majority of development expenditure relevant to climate change adaptation or mitigation is funded domestically in Ethiopia and Uganda, as evident from Figure 2. The situation is different in Tanzania, where on-budget donor funding makes a significant contribution to the overall pool of funding available for climate change actions. While there is no 'correct' funding mix between government and donors, the international commitment under the United Nations Framework Convention on Climate Change (UNFCCC) is that vulnerable countries should receive new and additional resources to assist national efforts. There is little evidence that this is happening through the national budgetary systems in Ethiopia and Uganda. In Tanzania the question is whether the donor resources are in addition to longstanding development assistance to the country.

Figure 1: Climate change spending versus other priority areas

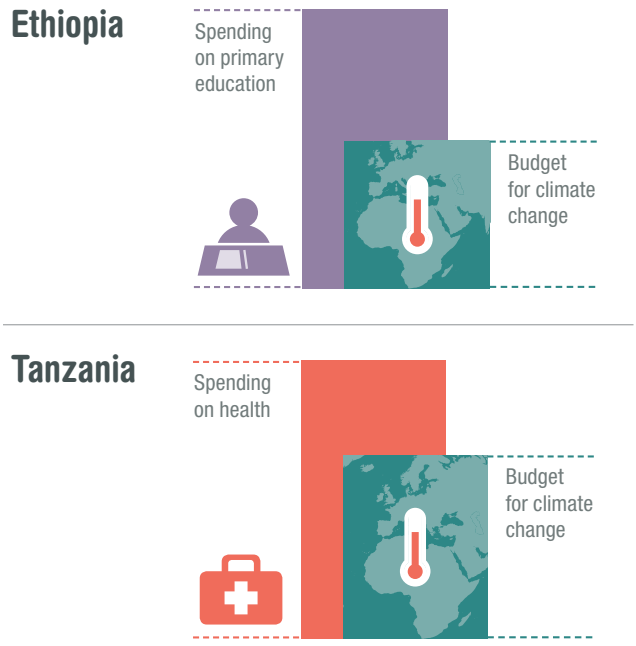
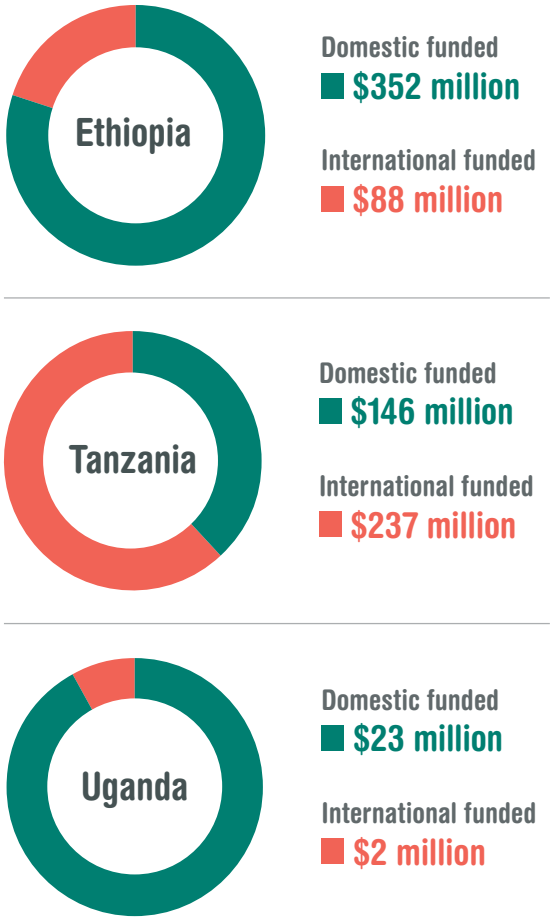


Table 2. Level of public expenditure on climate change actions

Country	Annual climate change relevant expenditure		Years
	($ millions)	(% of government expenditure)	
Ethiopia	440	14.5	2008-2011
Tanzania	383	5.5	2009-2012
Uganda	25	0.9	2008-2011

These figures relate to spending recorded in the national budget only, for the years stated. They do not include 'off-budget' spending (nor commitments to fund in the future). The rationale for this choice is that actual spending is assumed to be most closely aligned with national policy setting and institutional arrangements, documented in official publications of the national budget.

Figure 2: Source of funding for budgeted development expenditure



The figures quoted in this, and subsequent charts, refer to the four-year periods indicated in Table 2.

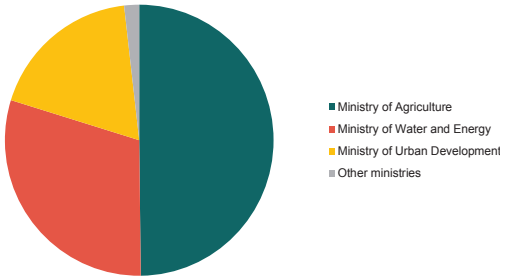
Box 2. What parts of government administration are spending this money?

In all three countries climate change is now seen as an economic development issue rather than solely an environmental concern. This is reflected in the spending ministries such as agriculture, water and energy. Relevant government programmes include irrigation projects, dry-land management programmes and development projects designed to promote renewable energy and energy efficiency.

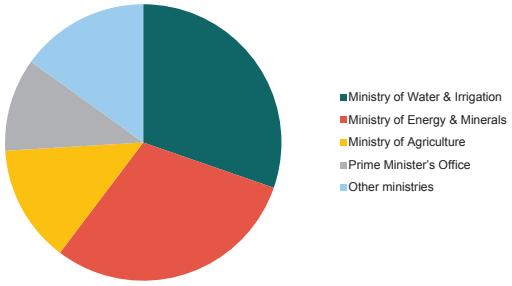
Three to four ministries dominate government spending on climate change-relevant actions in each country (Figure 3). While this highlights where early leadership is developing within the government administration – and can demonstrate early strategic prioritisation, such as the Ministry of Agriculture in Ethiopia – it also highlights the mainstreaming challenge of embedding climate change spending across the whole of government administration, including ministries of health and education.

Figure 3: Climate change-relevant spending by ministry

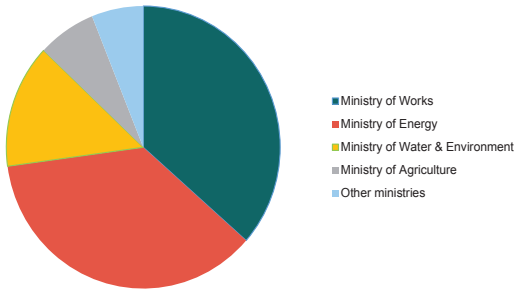
Ethiopia



Tanzania



Uganda



The purpose of domestic spending on climate change actions

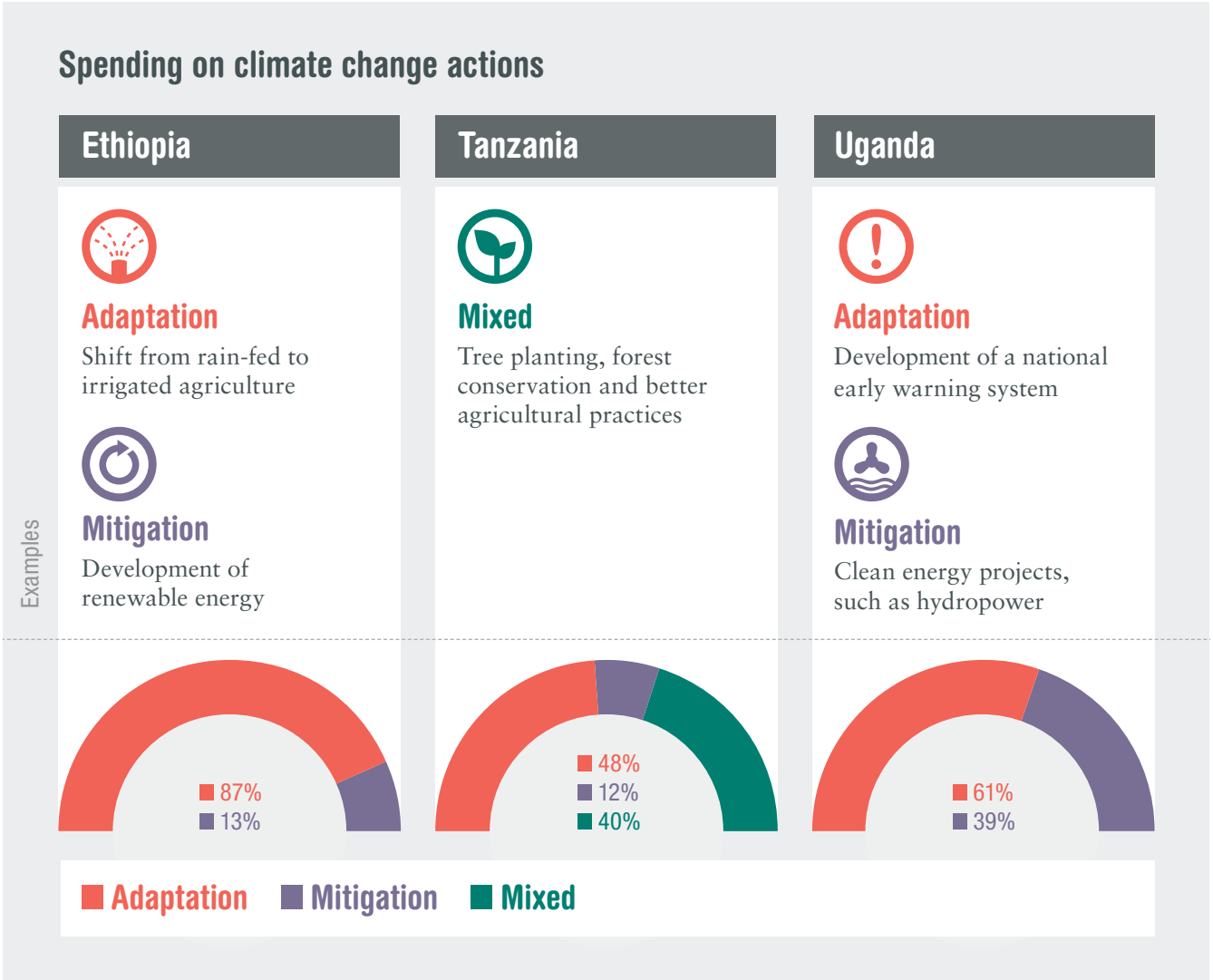
In Ethiopia, spending is significantly higher on adaptation actions compared to mitigation activities. This is to be expected as Ethiopia's carbon emissions are at very low levels compared to many countries. Adaptation spending is heavily concentrated in the water and agricultural sectors, where the new emphasis on irrigation reflects a shift away from rain-fed to irrigated agriculture as an explicit adaptation strategy. Only in one ministry (the Ministry of Water and Energy) is there a significant level of mitigation spending, associated with the development of renewable energy.

In Tanzania, the balance is somewhat different on account of the number of programmes, mostly land-based activities such as tree planting and forest conservation, that are considered to have both mitigation and adaptation benefits for the country. Programmes that aim to promote natural forest conservation, reforestation and better agricultural practices will improve the resilience of rural communities and allow them to adapt to changing climatic conditions as well as storing carbon through land-use practices that promote the retention of tree cover.

In Uganda, adaptation is the area of greatest spending in climate change-relevant expenditures. This includes the development of a national early warning system designed to provide timely information on crop production and national food security, as well as disaster preparedness and management to prepare the country against climate-related disasters. Mitigation spending is also apparent, mostly due to the start of investments in clean energy projects, such as hydropower generation.

In summary, in all three countries, very significant levels of public expenditure are being committed to adapt to changes in the climate.

Figure 4: Adaptation versus mitigation spending



Box 3. Defining adaptation spending

Identifying public expenditure on adaptation actions is a challenging exercise. The key is therefore to develop a nationally appropriate approach that has broad buy-in and confidence. This should be achieved by ensuring consultation with key stakeholders. National experts and funding agencies need to take the lead in identifying relevant spending, as demonstrated by the Nepalese National Planning Commission's work on developing and implementing its climate change budget code (National Planning Commission, 2013).

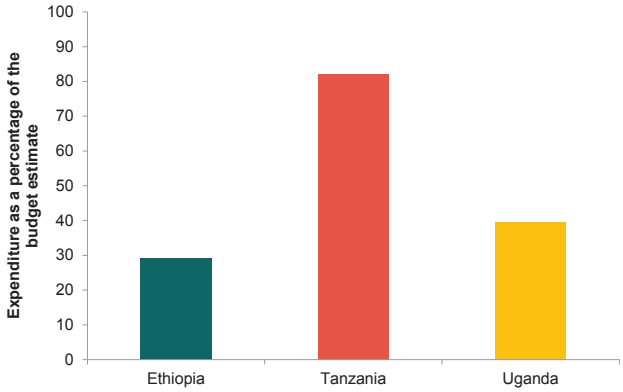
How effective is this spending?

One measure of effectiveness is the degree to which the planned budget is spent in the budget year. Gaps between planned and actual spending can result from cash shortfalls, shifting spending priorities, uneven implementation capacity across ministries and unrealistic budget forecasts. Figure 5 suggests that budget allocations are typically a poor predictor of actual expenditure on climate change-relevant actions. There is significant scope to improve upon the present levels of budget planning and implementation of climate change-relevant actions in all three countries.

Transparency is another indicator of effectiveness – and the transparency of climate finance must improve (Nakhooda, 2014). None of the governments in the region have developed markers for climate change-relevant spending within their national budgetary systems. The relevant programmes and projects therefore have to be identified manually by reviewing all the budgetary documentation. This is a laborious exercise, which is further challenged by the absence of a widely held definition of climate change-relevant actions. In addition, and more broadly, comprehensive budget data covering both budget estimates and actual expenditures are rarely publicly available in one dataset. Some datasets – mostly budgeted expenditure – are in the public domain; however, this is not the case with disaggregated information on actual spending. Extra-budgetary domestic funds complicate the financing picture further (Eshetu at al., 2014).

The limited transparency of domestic spending on climate change actions is compounded by challenges over the transparency of international funding. In all three countries, donor funding for climate change-relevant activities is potentially significant in terms of the size of committed funds. Where these funds pass through the national budget it is often possible to determine the level of annual expenditure. However, where international funding is delivered outside the national budget (which remains commonplace, with donor funding channelled directly to implementation projects) the actual annual expenditures cannot be determined. This is due to the lack of information in the public domain regarding specific disbursements from these donor programmes. Where non-governmental organisations act as service providers the national government may not even be aware of the level of funding supporting these actions.

Figure 5: Comparison of budget versus actual expenditure for climate change-relevant actions



Funding the most vulnerable countries

In the countdown to the 2015 UNFCCC meeting in Paris, which is tasked with agreeing a global climate treaty, a stark question looms. Will the international community fulfil its longstanding obligations to provide new and additional resources to those countries most vulnerable to climate change? Will climate justice be achieved? Securing a global treaty will rest, in part, on how this question is answered.

All Parties to the UNFCCC share a vision that acknowledges common but differentiated responsibilities and respective capabilities. The Convention classifies Parties into three main groups: Annex I countries, which are the industrialised nations that collectively are responsible for most carbon emissions to date and therefore have greatest responsibility to act; Annex II countries, a subset of Annex I countries that have the additional obligation to provide financial resources to enable developing countries to undertake emissions reduction activities under the Convention and to help them adapt to the adverse effects of climate change; and Non-Annex I countries, those developing countries that have not been major emitters historically and are least well placed to cope with climate change. Among this last group of vulnerable countries are Ethiopia, Tanzania and Uganda.

Securing a deal on adaptation is critical to the prospects of the 2015 UNFCCC summit. While international media attention has tended to focus on mitigation and bargaining between developed countries and the major emerging markets, for many of the poorest and most vulnerable countries action on adaptation is key. Beyond the negotiating process, an adaptation deal will also critically influence progress towards the post-2015 development goals. Sustained progress on poverty reduction will require

financial commitments on adaptation measures that enable poor people to cope with the shocks and risks that come with climate change.

What would a credible deal on adaptation look like? The starting point for an answer to that question is 'not like the present'. International public finance for adaptation is inadequate in provision and inefficient in delivery mechanisms. What is needed is an approach that delivers finance at a scale commensurate with the risks to be addressed through a mechanism that creates incentives for effective delivery.

Matched funding is one option that warrants consideration. As illustrated in this paper, some of the world's most vulnerable countries are already making considerable investments in adaptation measures. Under a matched-funding approach, Annex II countries (i.e. those countries that have an obligation to provide funding under the UNFCCC convention) would provide public finance to the most vulnerable countries (the least developed countries, small island developing states and African states) equivalent to, at a minimum level, their published domestic public expenditure on climate change. For example, this would presently amount to matched annual funding of $352 million, $146 million and $23 million for Ethiopia, Tanzania and Uganda respectively. Such flows could be determined annually or periodically, based on national assessments of climate change-relevant expenditure that is recorded in the national budget. The three national studies completed by ODI and its research partners represent prototypes of the type of reporting required. This would represent the minimum transfer of public finance from Annex II countries to the most vulnerable nations – it would not preclude higher transfers based on national need, but would ensure that all vulnerable countries, such as Uganda, do not get left behind in securing some level of international support.

These sums would make a difference not just in providing a predictable flow of funds for adaptation, but in reducing pressure on other vital budgets. With such an international commitment, vulnerable countries would have a positive incentive to continue to scale up their funding on climate change, knowing that international funding would become available.

As new and additional finance becomes available, there is a need to learn from the experience of previous development finance and, in particular, the debate on aid effectiveness. This debate has highlighted the importance of using government systems and ensuring that international funds are recorded in the national budget. Climate change-relevant spending therefore needs to be identified within national budgetary systems and reported upon in a credible manner that withstands scrutiny. This will require improvements in technical reporting and in strengthening the transparency and accountability of public finance systems. Receiving matching climate finance from the international community may be the incentive required for this to happen.

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For further information:

The national climate change finance studies referred to in this paper are available at:
Ethiopia: http://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/8995.pdf
Tanzania: http://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/8627.pdf
Uganda: http://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/8622.pdf

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