RESPONDING TO A CHANGING CLIMATE: CHALLENGES IN FINANCING CLIMATE-RESILIENT DEVELOPMENT ASSISTANCE

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Executive Summary

The inherent link between poverty alleviation, sustainable development and climate change has changed the concept of official development assistance, expanding its traditional focus from economic development and welfare to include environmental sustainability and protection from catastrophic climate change threats. Reflecting this change is the recent proliferation of climate change financing instruments to address these new and rising challenges. Accompanying this rapid expansion are complexities that must be carefully considered as development assistance reform evolves to account for changes in the world's climate and to ensure low-carbon sustainable growth.

This policy brief underlines four key challenges in achieving climate-resilient growth in developing countries:

1. substantial climate change finance resource gaps in developing countries;

2. limitations of the international financing climate change architecture;

3. difficulties in defining "additionality" in resources and incremental costs; and

4. differing perceptions, expectations and levels of trust among developed and developing countries.

The Climate Change Challenge

Addressing climate change is one of the most important challenges of the 21st century. A changing climate has an impact on all people in all countries, but its negative effects most drastically endanger the world's poorest populations. Around the world, millions of poor people are already at risk of tragic crop failures, reduced agricultural productivity, increased malnutrition and hunger, water scarcity and the spread of infectious diseases. *World Development Report 2010* estimates that the developing countries will bear between 75 and 80 percent of the costs of damages associated with climate change (World Bank 2009).

Fighting climate change is a global public good with two principal aspects, *mitigation* and *adaptation*. First, efforts to *mitigate* climate change help to ensure long-term sustainable development for the entire global community, in both developed and developing countries. Second, *adaptation* assistance is critical in protecting the world's poorest people from potentially devastating climate change effects. In addressing climate change, it is important to take careful note of the differences in the conceptual assistance frameworks for adaptation and for mitigation.

Adaptation aid fits conceptually into the traditional development assistance framework because it helps vulnerable countries cope with actual or expected climate change. Take, for example, the resources provided for the construction of climate-resilient rural access roads or early warning systems for extreme weather events. These resources directly benefit local recipients, with little spillover to regional or global populations, and they should therefore appropriately be categorized as resources dedicated to poverty reduction. As with traditional development assistance, there is a moral duty to act. This is particularly strong for adaptation, because the developing countries will suffer most from the past actions of the developed countries, which are responsible for the majority of historic greenhouse gas emissions (GHGs).

Mitigation finance can be seen more as providing a global public good and does not fit so cleanly into the traditional development assistance framework. Mitigation efforts benefit all countries and require a joint financing effort for the global public good of GHG emissions reduction. Although the high-income countries are responsible for the majority of the cumulative atmospheric GHGs, the infrastructure and policies pursued by the rapidly growing emerging economies will have a major role in defining our future path of global emissions. The advanced economies currently account for about 45 percent of global emissions, and assuming that current trends continue, this is estimated to drop to 35 percent by 2030 (World Bank 2009). Countries that rely heavily on coal, such as India and China, are on a path to emit GHG concentrations that rival developed countries' levels. Reducing GHG emissions requires a coordinated international effort.

Thus, it is important to distinguish the conceptual differences between climate change adaptation and mitigation. But it is also necessary to recognize that provisions for both adaptation and mitigation must meet sustainable economic development objectives.

Substantial Climate Change Finance Resource Gaps in Developing Countries

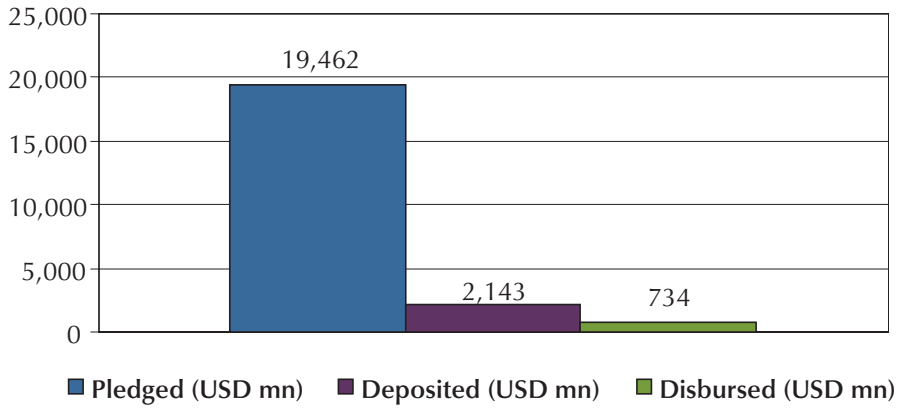
Estimating the costs of addressing climate change is inherently difficult, for a number of reasons—including the heterogeneous effects of climate change across countries, the uncertainty of the force and

magnitude of climate change and the variability of a country's capacity to pay. Nevertheless, there have been various attempts to estimate these costs. For adaptation alone, all estimates indicate that these costs to developing countries are, at a minimum, tens of billions of dollars annually.

In *World Development Report 2010*, the World Bank (2009) estimates that annual incremental mitigation costs in developing countries—using the target that global average temperature increases should not exceed 2 degrees Celsius—could be between $140 and $175 billion a year during the next 20 years, with associated total investment financing needs of anywhere between $265 and $565 billion. It also estimates that adaptation costs in developing countries could average anywhere from $30 to $100 billion a year from 2010 to 2050. The current financing commitments by developed countries to assist developing countries will cover less than 5 percent of these estimated mitigation and adaptation costs. With the Adaptation Fund as the exception (capitalized through a 2 percent levy on the Clean Development Mechanism), the majority of current financing instruments rely on voluntary contributions and lack the predictability required for effective climate-resilient development assistance (figure 1).

Not included in figure 1 are the recent pledges outlined in the Copenhagen Accord in December 2009. Within the accord, many developed countries pledged to provide "new and additional resources" of $30 billion for "fast-start finance" for 2010–12 that will be used equally for adaptation and mitigation ef-

Figure 1. Climate Change Funds: Overall Totals (millions of dollars)



Note: Pledges represent verbal or signed commitments from donors to provide financial support for a particular fund. Deposits represent the funds that have been transferred from the donor into the account(s) of the fund. Disbursed funds represent those funds that have been spent, either through administrative means or directly to an implementation program or project, with proof of spend. Funds totaled include AF, FA, CTF CBFF, CEP, FCPF, FIP, GCCA, EREF, ICI, IFCI, LDCF, MDG, PPCR, SREP, SCCF, SPA and UN-REDD Program.

Source: Climatefundsupdate.org.

forts. These countries also proposed a "Copenhagen Green Climate Fund," which includes a loose commitment from developed countries to "mobilize" $100 billion a year by 2020. Although this proposal clearly shows progress in international cooperation in bridging the resource gap, it is ambiguous and lacks critical detail. For example, no baseline was defined to determine what are new and additional resources; nor is it clear what sources and fund types will be made available, what entities will govern the funds, and how the funds will be prioritized and disbursed.

The quantity of resources required to combat climate change is massive, and conventional public financing alone will not be sufficient to close the resource gap. Innovative funding mechanisms and private-sector finance will also play a key role. One of the most prominent market-based mechanisms involving developing countries is the Clean Development Mechanism, one of three market-based mechanisms established under the Kyoto Protocol to mobilize mitigation efforts. The CDM allows developing countries to earn certified emissions reduction credits, each equivalent to 1 metric ton of carbon dioxide, which can be traded or sold to other countries, which can then apply them to their emissions reduction targets.

Although the CDM has been successful in mobilizing projects (so far, approximately 4,000) and in reducing emissions, it also faces critics who question its ability to function as an efficient financing mechanism. In particular, the process for project qualification has been time consuming and expensive, and there is concern that those projects in the pipeline will not really alter the current growth path. There is also the possibility of gaming the system by wrongly defining the difference between the baseline and the projects submitted. In addition, critics argue that the CDM has largely bypassed low-income countries. *World Development Report 2010* reports that 75 percent of carbon sales revenues have gone to Brazil, China and India, whereas only 3 percent have gone to low-income countries.

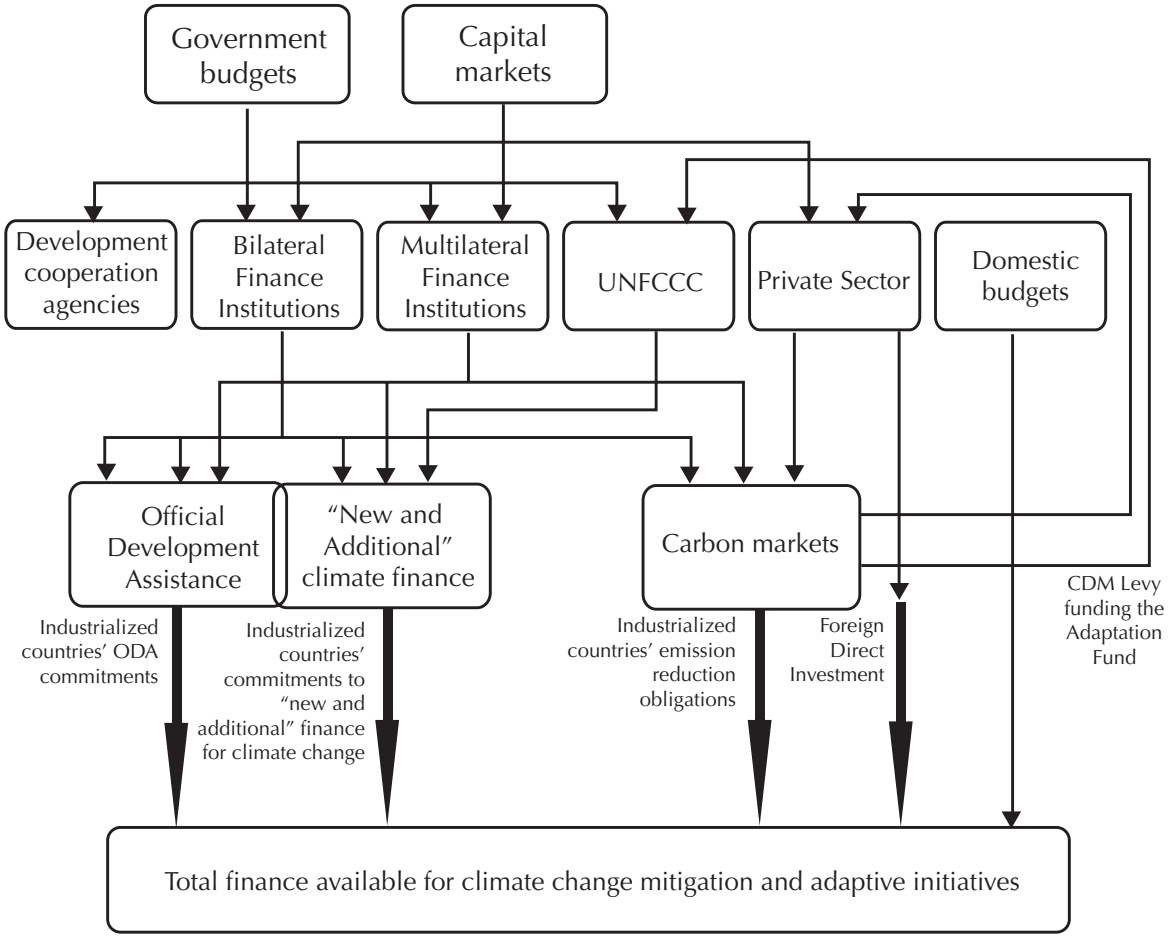
Limitations of the International Climate Change Financing Architecture

In addition to significant gaps in financial resources, the current climate change financing architecture has clear limits and inefficiencies, and it has changed dramatically in the past few years—most notably with the recent rise in the role played by the World Bank and the multilateral development banks. Funding streams are diverse and complicated, and the process of ensuring measurable, verifiable and consistent monitoring and reporting of climate change action has become a major challenge. This new architecture also poses risks of inefficiency, a lack of coordination and duplication of effort, and it raises new concerns about the governance of these funds.

Figure 2 illustrates the complexity of the current fragmented climate change financing landscape, which lacks an overarching global framework. Such a framework could help ensure coordination among resource channels, harmonize monitoring methods and fill in data gaps, increase transparency and legitimacy, minimize transaction costs, prevent duplication and streamline the distribution of funds to programs and projects. The challenge is that no single binding global treaty will work. The framework must be flexible enough to allow ample policy space for national policy implementation, but it must also provide consistent measurement and monitoring methods to ensure the transparent verification that is critical for garnering international trust and cooperation. In this way, climate change assistance is just like broader development assistance.

With this surge in international climate change financing instruments, new concerns have been raised regarding governance. Some developing countries, worried about high administrative fees and overly prescriptive conditions, have challenged the principle that climate change finance mechanisms should be housed in the World Bank and the multilateral development banks (MDBs). Instead, some argue, such funds should be consolidated under a "Global Climate Fund" that is administered by the United Nations Framework Convention on Climate Change (UNFCCC), where developing countries feel they are more fairly represented. Yet there are specific advantages to increasing the MDBs' involvement in international climate finance, particularly their strong project experience and ability to leverage additional funds. Moreover, it is entirely possible to put in place specific governance arrangements, separate from the

Figure 2. Financial and Investment Flows to Developing Countries for Climate Change Adaptation and Mitigation Efforts



Source: World Bank 2010b, figure 1.

overall governance of the MDBs, that would apply to climate change finance.

Difficulties in Defining "Additionality" in Resources and Incremental Costs

One of the biggest debates underlying the international climate change negotiations is the concept of additionality. In 2007, the parties to the UNFCCC agreed in the Bali Action Plan that the financing used to manage and control climate change should be "new and additional." However, there is no clear agreement on the definition of what should be considered "new and additional" resources—specifically, new and additional to *what* benchmark? Without a baseline that is universally acknowledged, the concept of new and additional becomes almost irrelevant.

In this context, most developing countries are understandably concerned about "aid diversion"—the situation that without a clear definition of additionality, previously promised development assistance commitments will simply be diverted to climate change finance.

On one hand, to ensure additionality, almost all the developing countries (and some developed countries, that is, Norway and the Netherlands) agree that this baseline should be defined as a commitment of 0.7 percent of a nation's gross national income (GNI) to official development assistance (ODA)—a benchmark to which most wealthy nations recommitted in 2002 in the Monterrey Consensus on Financing for Development. Under this scenario, only the portion of climate change finance that is above and beyond the commitment of 0.7 percent GNI would be classified as climate change aid (IIED 2010). Though this seems arithmetically straightforward, there are challenges to using the 0.7 percent benchmark. Many OECD countries have not met this target, notably the U.S., which has not even committed itself to it. Therefore, it will be quite difficult to determine whether the climate change financing provided by these countries is actually rerouted ODA contributions or is truly additional. In particular, the U.S., by not having committed itself to the target of 0.7 percent of GNI, would find problems with this approach. Also, because the 0.7 percent target will not become effective until 2015, this baseline would not be appropriate for another five years (World Bank 2010b).

On the other hand, many donor countries claim that this baseline or any baseline is unreasonable, considering the close link between adaptation and development. Take, for example, the resources provided for the construction of climate-resilient roads, heat-resilient crops and more efficient irrigation systems. These projects both reduce poverty and assist countries in adapting to changing climates. For this reason, most donor countries argue that all concessional aid should be considered ODA and counted toward the commitment of 0.7 percent of GNI, without a particular distinction between adaptation and other forms of poverty reduction. However, even if one were to accept this position, the global public goods provision through mitigation surely cannot be classified as traditional ODA. It is clear that the financing of incremental mitigation costs must be classified under a different heading. Climate change assistance that directly benefits the citizens of developed countries cannot be defined as ODA.

Another complicated task associated with climate change financing is determining the *incremental* costs of climate change projects. The UNFCCC defines these as the "costs required to equalize the costs

of a project having global environmental benefits with those of a project designed to achieve the same developmental benefits but without the global environmental benefits"—for example, the difference in cost between a coal-fired power plant using standard technology and the cost of the "cleanest available coal-based technology." Conceptually, the distinction is clear. In practice, however, past experience shows that it is often difficult to quantify the actual incremental costs.

Differing Perceptions, Expectations and Levels of Commitment among Developed and Developing Countries

A major underlying tension within the international climate change negotiations is how to reconcile differing perceptions among developed and developing countries on what is considered to be *equitable* climate change financing. Most developing countries feel that climate change financing (particularly for adaptation) is an entitlement rather than aid, because the developed countries are responsible for the bulk of historic GHG emissions. And therefore, these countries feel that assistance should be structured as grants rather than loans (albeit under concessional terms) or foreign aid. Under current rules, most climate change financing is ODA-eligible. A new Oxfam report argues that public finance for adaptation efforts should be entirely in the form of grants and that at least two-thirds of financing for mitigation should be in the form of grants (Oxfam 2010). This distinction, in a conceptually accurate way, differentiates financing for adaptation from financing for incremental mitigation costs. But this view contrasts with the positions of many OECD countries, which feel that the close link between climate change finance and development finance makes it difficult to separate the two, and that all concessional aid should be recorded as part of their "traditional" ODA.

These tensions surrounding climate change finance are embedded in the broader challenge of overcoming the "trust deficit" that has plagued climate change negotiations and has grown considerably since the drafting of the Copenhagen Accord, a nonbinding political agreement, in December 2009. Many countries consider the accord to have been driven by just a handful of countries, with most countries excluded from the last-minute closed-door discussions to draft the text. Furthermore, the failure of the developed countries—the historic major emitters of GHGs—to produce sufficiently ambitious, binding emissions targets and to deliver on their climate change finance pledges has exacerbated suspicion and mistrust among the developing countries. The recent breakdown of climate change legislation in the U.S. Congress has further added to this trust deficit.

Beyond the challenge of rebuilding trust is the underlying global issue of apathy among the general public, a mood reflected in many nations' policies toward the potential severity of climate change and the global imperative to act now. Climate change is a complicated science that is extremely technical and difficult to narrate; its effects are slow, long term, global and uncertain. The mood has become all the more somber in the aftermath of the Copenhagen meeting, where the inflated expectations for a bold, binding and comprehensive international agreement were met with disappointment. It is crucial to establish a new narrative about the challenge of climate change—one that effectively depicts the economic and security interests at stake, and is able to stress both the uncertainties we face and the threat's potential magnitude.

From Copenhagen to Cancún: Steps toward Progress

"The Copenhagen meeting may have postponed an outcome for last year, but it did not postpone the impacts of climate change" noted the newly retired UNFCCC executive director, Yvo de Boer, at the opening session of the climate change talks in Bonn in June 2010. The challenges outlined above are complex and cannot realistically be overcome in the lead-up to the next UNFCCC meeting in Cancún in December 2010. However, as de Boer explains, the climate change challenge continues despite these obstacles, and we must push forward in our efforts to respond to its immediate effects and to implement policies that will ensure a sustainable future. To best pursue these efforts, we can take at least four major steps.

The first step is to manage expectations through a two-track process. The perceived failure in Copenhagen has been detrimental to climate change action, and this is in large part due to the inflated expectations leading up to the conference, which, for many, included a "universal grand coalition" for collective climate change action willing to sign off on a "grand deal," similar to what is called a "single undertaking" in WTO language. Such a grand deal is unrealistic in the near term—it would require, among other things, the simultaneous implementation of a worldwide price for carbon accompanied by side payments to distribute the burden fairly among all countries; a complex and harmonious system for measurement, reporting and verification; enforcement mechanisms to discourage free riding; and an international governance system capable of overseeing this grand international framework. Even if this grand global coalition could be formed, it would take many years for each member country to receive approval from its national government, years during which the climate change challenge would intensify and the costs to react would grow exponentially.

We cannot afford to set ourselves up for failure again at the upcoming climate change meetings in Cancún and Cape Town. Thus, a two-track approach should be pursued to manage expectations and increase the likelihood of making short-term progress. The first track might consist of more manageable agreements of a sectoral, functional or regional nature in which smaller coalitions of actors might reach mutually beneficial arrangements that also provide the global public good of reducing GHG emissions. These agreements would likely be much more politically palatable than a grand overarching treaty and would increase the chances of making near-term progress on adapting to and mitigating climate change. Such arrangements could be appropriate for sectors such as forestry, motor vehicle manufacturing, aviation and steel and aluminum production (Bradley and others 2007). Though individually these sectors, with forestry as the exception, are a relatively small slice of the GHG emissions pie, together they would considerably curb aggregate emissions released into the atmosphere and extend our window of opportunity to reach the 2 degrees Celsius stabilization target.

However, such a sector-only approach would not be sufficient and would likely result in duplication of effort, coordination failures, higher transaction costs and other inefficiencies. So a second track is also needed. This track, which would run in parallel with the first, would consist of the annual international meetings—but meetings with a new mission to bring all the parties together to review data, to evaluate progress, to exchange views on distributional issues and resource flows and to develop a dynamic framework within which the more limited agreements could fit. There would no longer be the expectation of reaching a grand universal deal, but each annual

meeting could help improve the sectoral agreements and enlarge the coalitions participating in these more limited deals.

This two-track approach would be second best to the theoretically optimal approach of a "grand deal," because there would admittedly be some loss of efficiency and equity by only having sectoral agreements. The marginal costs of mitigation would not be equalized across all sectors and countries. Yet compared with doing nothing, partial cooperation in the near term—along with continued efforts toward more inclusive global action for the medium to long terms—could be the path forward that would bring tangible progress and allow momentum to build for increasingly more ambitious steps.

The second step is for the developed countries to deliver on their fast-start finance pledges. Since Copenhagen, 17 developed countries have pledged a total of $27.9 billion for fast-start financing—though it is not clear whether all pledges consist of "new and additional" resources for climate change action, and all pledges have not gone through the national budget appropriation process. It is essential that these pledges be above and beyond previous commitments and be delivered as quickly as possible in a transparent and coordinated manner. This will not only allow the developing countries to adapt to the potentially devastating effects of a changing climate but will also help build the mutual trust that is currently missing in the international negotiation process and may facilitate more cooperation at the upcoming UNFCCC meeting in Cancún.

In addition to short-term fast-start financing, the developed countries have also pledged long-term financing efforts to mobilize $100 billion a year by 2020 to address the needs of the developing countries. Yet is unclear how these funds are to be mobilized. The High-Level Advisory Group of the UN Secretary-General on Climate Change Financing has been tasked with identifying potential sources to meet this goal, and its recommendations should play an important part in the discussions at the meetings in Cancún.

The third step is to resuscitate the innovative climate change finance discussions that began before Copenhagen. The lead-up to Copenhagen was full of creative and innovative intellectual work on how to maximize the available resources, such as auctioning assigned amount units, international emissions levies on marine and aviation, offset levies, swapping debt for clean energy, carbon taxes and special drawing rights. However, many delegations, academics, civil society and thought leaders are still recovering from their "Copenhagen hangovers," for that meeting fell far short of inflated expectations. It is essential that we reinvigorate these efforts with a renewed sense of urgency in the lead-up to the next round of negotiations, where climate change finance is surely to be one of the key obstructions.

Finally, the fourth step is to create a new narrative for climate change action. In the wake of the 2008–9 global financial and economic crisis, continuing high unemployment, budget deficits and the immediate threat of economic instability have pushed the climate change imperative to the back burner for many people. The complexity of the climate change challenge, its long-term threats and the uncertainty still surrounding the process have resulted in a lull in support from the general public. Moreover, considerable political capital was expended in Copenhagen relative to the small amount of progress that was made, and thus there is burnout in both the public and private sectors.

A new narrative that better connects national interests with climate change action is crucial. There are environmental, national security, economic, political and humanitarian rationales for fighting climate change that currently are not registering with people. For instance, the Pentagon's February 2010 *Quadrennial Defense Review* says that climate change may act as "an accelerant of instability or conflict, placing a burden to respond on civilian institutions and militaries around the world." Many countries, such as China and Germany, have already attracted serious foreign investment to their clean energy markets, and other countries have a vested interest in positioning themselves to compete (Diringer 2010). A new narrative on these issues as well as the more flexible and realistic two-track approach proposed in this brief may help revive public support for climate change action and allow both the 2010 Cancún and 2011 Cape Town meetings to make real progress rather than fuel frustration. And achieving real progress is becoming more urgent with every year that passes.

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