ENVIRONMENT AND DEVELOPMENT

Preparing to Manage Climate Change Financing

Lessons from the failures and successes of international development should guide investment in developing-world responses to climate change.

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At the 2010 Cancun Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC), the international community agreed in principle to one of the largest development programs in history. The developed nations pledged to mobilize U.S.$100 billion per year by the year 2020 to "address the needs of developing countries" in responding to climate change (*1*). The funds, which may apply to adaptation and mitigation, are proposed to flow through multiple channels, including existing development banks, official development assistance, bilateral programs, international private investment flows (e.g., carbon markets), and other public and private mechanisms. Recommendations provided by a transitional committee for the management and operation of the proposed climate change financing will be considered by the parties to the UNFCCC at the upcoming conference in Durban, South Africa (*2*).

At the center of this climate finance system will be a new international Green Climate Fund (GCF), which is in charge of the initial U.S.$30 billion in fast-track financing, to be raised by 2012, and a "significant" yet undetermined fraction of the eventual U.S.$100 billion per year (*1*). In designing the GCF, the UNFCCC must heed the lessons of past international development failures and successes to build the capacity of the international institutions and recipient countries to mobilize and manage climate funds and to set a good precedent for other institutions involved in climate change financing.

Rapid Expansion, Radical Alteration

If realized, this new annual financing could radically alter international lending. It is equivalent to roughly 80% of all existing annual official development assistance from major donors, more than double the standard annual lending by the World Bank, and on the same scale as the gap in 2010 annual financing deemed necessary to meet the UN Millennium Development Goals (see the graph). The annual GCF financing is roughly equivalent to the cost of the entire 4-year Marshall Plan, the U.S. program to rebuild the European economy after World War II, which is often invoked as a model for addressing climate change.

This financial support is critical. Developing nations are expected to face an enormous human and economic toll from climate change, despite being the least responsible for greenhouse gas emissions (*3*). Additional financial support is needed to help countries shift to less carbon-intensive development paths and adapt to future impacts of climate change. By some estimates, the cost of adaptation alone in the developing world could be upwards of U.S.$100 billion per year (*4*).

However, the climate change financing pledge made in Cancun also represents a large expansion of an international aid system already fraught with problems. The willingness of donor nations to meet the long-term funding commitment, given political and economic constraints, may depend on successful administration of the initial fast-track financing by the GCF and faith in the long-term management plan.

Securing New and Additional Funding

Upon the insistence of developing countries, the Cancun agreement specifically states that the proposed climate change financing must be "new" and "additional" to existing development aid. There is a long history of shifting aid money or relabeling aid projects in response to new aid priorities. For example, a shift in U.S. foreign aid to countries deemed vital to security caused a relative decline in aid to the neediest countries (*5*). The "new" and "additional" terminology is included in response to concerns that funding will come at the expense of other aid priorities and the label "climate change" will be applied to existing aid proposals.

Careful consideration of what qualifies as new and additional climate financing is critical to ensuring that donors meet the actual policy goal of assisting the developing world in mitigation and adaptation, rather than the narrower political goal of demonstrating participation in climate financing. The specific definition of "new" and "additional" climate change financing is as yet unresolved by UNFCCC negotiations (*2*). Of the 20 nations that have pledged contributions to the U.S.$30 billion fast-track climate change financing intended for the 2010–2012 period, only four are thought to be providing entirely "new" or "additional" investments (*6*).

The inefficiencies of the Clean Development Mechanism (CDM) under the Kyoto Protocol serve as a cautionary tale of loopholes related to "additionality" of actions in international climate agreements. The creation of an international system for purchasing emission credits may have inspired companies in India and China to produce the coolant HFC-23, a powerful greenhouse gas, and then sell "credits" for destroying the HFC-23 before it was emitted to the atmosphere (*7*). These actions thus had no net additional impact on greenhouse gas emissions (*7*).

A solution to the additionality challenge lies in the regulatory framework under development to ensure that GCF funds are directed efficiently to climate change activities. To be effective, this framework must be adaptive: The rules and definitions need to be subject to regular assessments, as is the case with the Montreal Protocol on Substances that Deplete the Ozone Layer (*8*). The CDM experience demonstrates that failure to regularly review and adapt the regulatory framework can lead to projects that are not additional and do not serve the policy goals. Regular, ideally annual, assessments will help close loopholes that permit project relabeling or climate funding coming at the expense of other development aid.

Avoiding Waste and Misappropriation

Introducing a large amount of aid into a program or country in a short period of time often leads to waste and misappropriation by both donors and recipients. For example, the unprecedented scale of donations to international relief agencies after the 2004 Indian Ocean tsunami overwhelmed local capacity and led to those agencies wasting funds on publicity stunts aimed at showing the international audience that the agencies were "taking action" (*9*). In recipient countries with poor

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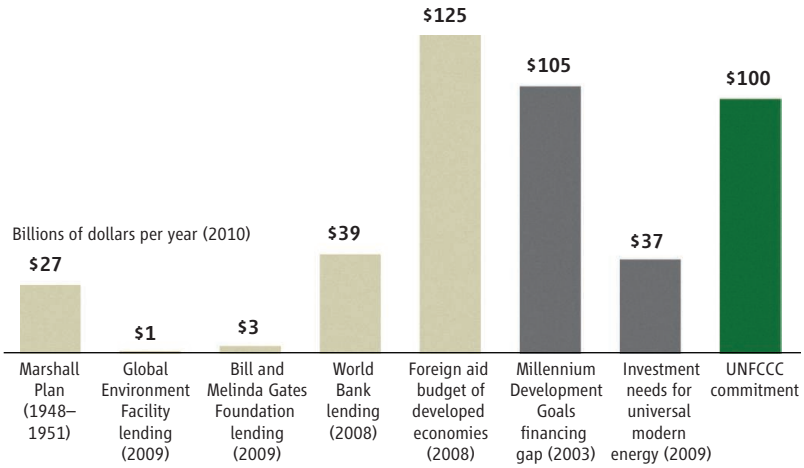
governance, aid can even set a country back by co-opting the best public servants to fulfill donor needs rather than meet the other demands of their jobs (*10*). Furthermore, a substantial fraction of aid money is recycled back to the donor nation through rules and norms surrounding hiring of consultants and procurement of equipment from the donor nation. This "tied aid" represents over 60% of all aid provided by countries that are members of the Organisation for Economic Co-operation and Development (OECD) (*11*).



Annual expenditures and estimated needs for various major programs and international aid. The year(s) of the programs and aid are shown in parentheses. The values for actual expenditures (gray shading) and estimated needs (dark shading) were all adjusted to 2010 U.S. dollars using the U.S. Bureau of Labor Statistics Consumer Price Index inflation calculator. See the supporting online material for details.

One tool for minimizing waste, misappropriation, and tied aid is for the GCF to use a third-party auditor, similar to the U.S. Government Accountability Office (GAO) or Canada's Auditor General, to evaluate all spending programs. Estimates suggest that every dollar spent by the GAO on monitoring U.S. government spending results in savings of $114 (*12*). There is no specific mention of a third-party auditor in UNFCCC materials, although the transitional committee for the design of the GCF has proposed using an "independent evaluation unit" (*2*).

To ensure transparency and avoid conflict of interest, the agency that serves as the GCF trustee cannot also be the auditor and evaluation unit. Internal evaluation departments, common with aid agencies and development banks, rarely find failure, even in the face of strong evidence (*13*). If the World Bank, the trustee of the fast-track financing, becomes the permanent GCF trustee, then auditing should be conducted by third parties rather than by the World Bank's existing internal auditor, the Independent Evaluation Group. The auditor should be a decentralized and loose network of independent evaluators rather than a bureaucracy that could develop a clientelist relationship with the funding agency (*13*). For example, since its inception in 2004, the U.S.-funded Millennium Challenge Corporation (MCC) has hired independent researchers to conduct studies assessing the impact of its spending programs (*14*).

Ensuring Results on the Ground

The history of development aid suggests that preconceived notions of the methods of aid delivery that are most effective heavily influence aid programs (*15*). A number of economists have become skeptical about the ability of "top-down," large-scale aid efforts to make a difference to the lives of the poor (*16*). Mechanisms must be created such that the GCF, a body conceived under a UN convention by government representatives, is not biased toward top-down projects.

A scientific approach to decision-making, based on specific and measurable outcomes of individual projects, can help increase aid effectiveness and avoid a bias toward preconceived notions of aid delivery. In some cases, rigorous, randomized control trials can test specific hypotheses about aid initiatives and policies (*16*). For example, recent experiments in Kenya found that providing free malaria bednets could save more lives than cost-sharing programs, thus overturning previously held assumptions about how to finance such basic interventions (*17*).

A portion of the GCF should be used to create a research and scientific analysis program like Innovations for Poverty Action or the Poverty Action Lab, both international nonprofit organizations that use randomized evaluations to test which programs are most effective. Proactive research and analysis can provide data for the GCF Board to consider in funding decisions. This approach is one way to ensure that community-based and lower-technology measures for adapting to climate change, like mangrove planting to reduce coastal erosion in low-lying islands, are fairly evaluated alongside large infrastructure projects traditionally favored by the major development banks, like construction of sea walls (*18*). It can also set an important precedent for the other institutions expected to contribute to climate change financing.

Conclusion

The $100 billion per year pledge was a major victory in the UNFCCC negotiations. Now it is up to those tasked with designing the Green Climate Fund, and the other actors in this emerging climate change finance regime, to develop mechanisms to use the money wisely. Effective administration in the near term will help build the public and political confidence in the international aid system necessary to ensure that climate change funding is sustained through political cycles in donor countries.

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Supporting Online Material

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