Financing Agricultural Adaptation to Climate Change

A Modest Beginning

President Obama's climate-related diplomatic capacity in Cancún will be severely limited by incoming and current members of the U.S. Congress who consider climate change science too uncertain to serve as a basis for economic policy change or simply a fraudulent conspiracy to undermine the U.S. economy. However, we

agree with President Obama that even in the absence of an agreement about climate change, short-term initiatives can benefit not just Americans, but people-and indeed, natural resourcesall over the world. These initiatives can be undertaken without an agreement about long-term financing for a Global Climate Fund, called for by the G-77 and China, and discussed in October during the U.N. Framework Convention on Climate Change (UNFCCC) negotiations in Tianjin, China. Because the terms to operationalize a Global Climate Fund are regarded by developed countries as part of a "package deal," it is very unlikely that the Global Climate Fund will be agreed upon in Cancún.2

detailed proposal for adaptation finance,4 but it tries to take into account the current state of play and developed country commitments for fast-start finance for 2010-2012.

A successful short-term finance strategy would include:

There's things (sic) we can do short-term that don't require you to perfectly agree on the science of climate change in order for you to think that it's beneficial for Americans long-term.

President Barack Obama¹

1) apportioning half of the \$30 billion promised by developed countries in fast-start funding for adaptation projects to achieve the "balanced" funding formula promised in the Copenhagen Accord; 2) allocating, at a minimum, 20 percent of the \$15 billion to the UNFCCC Adaptation Fund, to build UNFCCC operational capacity; 3) using the UNFCCC subsidiary bodies to help the Adaptation Fund target projects in the most climate-change vulnerable countries (least-developed countries, Africa and small island states), a majority of which are likely to concern agricultural adaptation; 4) ensuring that the consultations to design, implement and evaluate adaptation projects involve representatives of the populations most

A substantial increase in UNFCCC funds for "fast-start" climate vulnerable to climate change, e.g., farmer organizations, in the case of agricultural adaptation projects. If these steps are taken, adaptation benefits from many projects would be measurable, yielding a substantive basis for subsequent UNFCCC decisions about adaptation finance. Furthermore, the UNFCCC's project oversight and monitoring capacity will be enhanced to match its normative obligations.

finance for adaptation, not requiring a UNFCCC decision on long-term finance, is considerably less ambitious than what civil society organizations and developing countries are demanding.3 But "fast-start," on-the-ground successes in adaptation by 2012 could establish a strong foundation for a subsequent decision on long-term finance in which the UNFCCC would have a major operational role. This is not the first, nor certainly the most

General considerations on climate finance

For the United States to contribute to short-term initiatives in Cancún, it cannot threaten, as it did in September in Geneva, to make the developed-country release of fast-start finance in 2010–2012 conditional on developing country acquiescence to a global, best-endeavor "package deal" along the lines of the Copenhagen Accord. Rather, the U.S. and other developed countries should commit fast-start financing to projects designed with the participation of climate change—vulnerable populations and as approved by UNFCCC institutions. To do so, starting now, is in the national security interests of all developed countries.

For the United States alone, just the costs of climate change—related hurricane damage, real estate losses and disruptions to water and energy supplies under the current "business as usual scenario" have been estimated at \$271 billion (in 2006 dollars) annually by 2025, accelerating to a conservatively estimated \$1.9 trillion annually by 2100. Paying for the latter figure would combine the costs of the U.S. economic stimulus package and the bailout of the financial services industry, for every year of "business as usual." The costs of environmental migration and climate change—natural resource wars would add to this unsustainable budgetary burden.

At least three UNFCCC institutions can help developing countries identify their specific climate-change vulnerabilities, and design, fund and implement projects whose short-term results can be monitored, verified and reported (MVR) to the UNFCCC under a pilot MRV program designed by UNFCCC subsidiary bodies. A robust MRV program is necessary not only to ensure that project monies are used for their intended and project-specified purpose, but to ensure that climate-change grants do not succumb to the high transaction costs and unpredictable delays in financial transfers that plague aid programs generally.⁷

These institutions are the Adaptation Fund (AF), the Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body on Implementation. Their respective mandates have been already decided by UNFCCC parties, so no delays over debating terms of reference will slow their advice to, and review of, project proposals. They can help facilitate the realization of short-term projects even in the absence of Conference of Party (CoP) agreements on agriculture, forestry and other sectoral texts, to say nothing of a broader "one decision" agreement on finance, long-term cooperation and climate-change mitigation.

The long-term Cooperation Agreement chair's focus on developed-country party commitments to reduce greenhouse gases (mitigation) is understandable, given the role of the chair in synthesizing consultations with parties on the LCA agenda items. However, it does not follow that "in order for Cancún to deliver an outcome," a decision on mitigation must be agreed. Even in the near certain case that the United States is unable to make substantial political

or financial commitments in Cancún, parties can begin to achieve aggregate benefits by agreeing to greatly expand and coordinate adaptation projects within the National Adaptation Programs of Action (NAPAs) established by developing countries to prioritize the most urgent and immediate actions to adapt to climate change.

The UNFCCC challenge of amplifying adaptation fund projects

In the Copenhagen Accord, developed countries stated their "collective commitment to provide new and additional resources" of \$30 billion in 2010-2012 "with balanced allocation between adaptation and mitigation."9 What is "balanced" is very much in the mind of the donor country. According to a just-released study, "Adaptation funding represents just 11 to 15.9 percent of fast-start finance pledges to date."10 As of July, 19 European Union member countries and the European Commission had allocated about two thirds of the aggregate EU pledge of about \$10.5 billion. About 63 percent of the allocated funds will go to mitigation projects, with just 37 percent going to adaptation. $^{\mbox{\tiny 11}}$ The EU preference for mitigation is likely the result of the belief that an eventual UNFCCC deal will allow EU industry to buy the carbon-offset credits from these developing-country mitigation projects at a market price determined under the EU's Emissions Trading Scheme. This is a high-stakes gamble, given that the billions of dollars of public subsidies in the form of free carbon credits given to sustain "private" carbon trading markets will be unsustainable in public budgets, even if carbon markets do not collapse under the weight of a rising incidence of carbon accounting and marketing fraud.12

But what is perhaps more alarming about the EU's fast-start allocation is its preference for bilateral (61 percent)—rather than multilateral (39 percent)—channeling of fast-start funds. Under this allocation plan, the UNFCCC remains charged with vital normative obligations but without the financial means to ensure that projects designed to meet those obligations can be monitored, verified and reported in a uniform fashion.

Even a small part of the promised fast-start finance could greatly amplify the number and variety of adaptation projects beyond the 16 AF projects currently budgeted at about \$52 million. Is it is likely that U.S. Congressional climate change deniers will impede the immediate allocation of the U.S. commitment in Copenhagen of \$3.2 billion to fast-start financing. However, if other developed countries allocated to the UNFCCC 20 percent of a balanced fast-start commitment to adaptation—yielding about \$2.7 billion—the number and variety of projects could increase as rapidly as they could be designed and approved by the AF Board. AF project progress reports could provide a substantial record of achievement

from which parties and nongovernmental organizations involved in implementation could learn at subsequent CoPs. But what kind of projects should these funds finance?

Currently, there are two kinds of AF projects, direct and nondirect country access to funds. The former projects are implemented by national institutions, the latter by U.N. agencies, for the most part the United Nations Development Program. According to Germanwatch, which carefully monitors the AF, civil society organization participation in the party consultations that design adaptation projects has not yet been established.14 We believe that to achieve broader adaptation impacts, at least two further steps are needed. First, the project terms

of reference should ensure that financial transfers, in the form of grants, for projects occur only after parties can demonstrate that substantive adaptation proposals from nongovernmental stakeholders were evaluated in a transparent consultation process. Second, to the extent that non-governmental stakeholders have operational responsibility for implementing adaptation projects, project proposals should outline an implementation budget and timeline for those stakeholders within the NAPAs and their budgets. Farmer organizations, for example, have demanded design, implementation and review of all climate-related policies, including national adaptation plans of action."15

Vulnerabilities to climate change depend considerably on relatively specific geographical and sectoral contexts (high confidence). They are not reliably that they "play a central role in the estimated by large-scale" climate-smart" some existing praction in the estimated by large-scale "climate-smart" some existing practical existing p (aggregate) modeling

> International Panel on Climate Change, Fourth Assessment Report (2007)¹⁸

and estimation.

in response to climate modeling out to 2050 involve technology and resource management assumptions that can be called into question, if only because of the many uncertainties in climate change and agricultural production modeling. The Consultative Group on International Agricultural Research (CIGAR) and the Earth System Science Partnership (ESSP) background paper for The Hague conference emphasizes these modeling uncertainties and adds: "These uncertainties are compounded by the paucity and unreliability of basic data related to agricultural production. Land-based observation and data-collection systems in parts of the world have been in decline for decades." Attempts to compensate for this lack of on-the-ground data by satellite

FAO projections of agricultural production needs for food security

imaging produce highly variable results, depending on the satellite employed.17

However, the weakened state of global agricultural production factor data should not be used as a reason to delay action to design and finance adaptation projects now, however desirable it is to strengthen on-the-ground datacollection systems. Just as agricultural production is a site-specific enterprise, so is agricultural adaptation to climate change. Proven adaptation practices cited in the FAO and other case studies can and should be funded to increase resilience now. FAO has rebranded as tices to increase food security, with relatively few new tools designed specifically in response to climate change. This rebranding should not be faulted if the expansion of such practices help to achieve the NAPAs' objectives, as defined through party

consultations with a broad array of national stakeholders, as well as with U.N. agencies and the AF Board.

Agricultural adaptation projects

The U.N. Food and Agriculture Organization (FAO) has coined the term "climate-smart agriculture" to denote a broad array of practices that both enable developing countries to adapt production systems to climate change and to reduce greenhouse gas emissions, particularly those resulting from agricultural practices and land-clearing for agriculture.16 FAO's report on The Hague Conference on Agriculture, Food Security and Climate Change illustrates "climate-smart" agriculture with case studies of practices, e.g., farmer seed production systems, water harvesting and soil building techniques that have enabled adaptation to climate change consequences, such as prolonged droughts and rapidly evolving plant diseases. (IATP's Shiney Varghese further describes some of these practices in a profile of the Tamilnado Women's Collective in India. See "Women at the Center of Climate-Friendly Approaches to Agriculture and Water Use" in IATP's Climate and Agriculture, Cancún 2010 series.)

"Market-based" mitigation: a poor candidate for UNFCCC fast-start climate finance

The best agricultural practices both adapt to climate change and reduce greenhouse gases. However, methodological disagreements and the aforementioned modeling uncertainties over measuring reduced or removed carbon emissions equivalents make market-based mitigation a poor candidate for fast-start projects. The projection of revenues generated from the auctioning of carbon emissions permits and sale by developing countries of carbon offset credits has depended on policy scenarios that are unduly optimistic and even utopian. The U.N. Secretary General's High-level Advisory Group on

Climate Change Finance (AGF) foresees up to half of the \$100 billion annual funding by 2020 announced in the Copenhagen Accord coming from a percentage of carbon-credit auctions. ¹⁹ These auctions set a per carbon ton price apparently derived from U.S. legislation that had been stymied prior to the fall 2010 elections. However, thus far, emitting companies have demanded and received carbon credits worth tens of billions of dollars for free, both in the European Union and in the stalled U.S. legislation. ²⁰

The recent demise of voluntary U.S. carbon trading markets at the Chicago Climate Exchange (CCX) only confirms that the AGF report's estimate of a contribution of carbon derivatives market revenue to emissions-reduction projects is utterly dependent on the creation of a publicly subsidized underlying asset.²¹ It is unlikely the majority of UNFCCC parties will support mitigation projects designed largely to help developed countries meet their Copenhagen Accord obligations through these publicly subsidized private markets.

Conclusion

The UNFCCC is crippled by the "single undertaking" paralysis that afflicts the World Trade Organization Doha Round, where, because nothing is agreed until everything is agreed, nothing is agreed, again and again. But whereas bilateral trade continues for better or worse despite the Doha Round deadlock, UNFCCC impasse on all issues just makes life under climate change go from bad to worse. A Cancún CoP decision to immediately apportion ten percent of promised fast-start finance, i.e., about \$3 billion, for the UNFCCC Adaptation Fund will support the agricultural adaptation projects identified by the most climate-change vulnerable countries. Such a decision would be a small but significant achievement. From such small steps, the political will and confidence necessary to resolve longer-term and larger-scale differences can be built.

We are motivated to offer this proposal in part by the prospect of ever more ominous climate science forecasts, together with the likelihood that an acceleration of climate change will make such forecasting increasingly difficult. We are also compelled by the aforementioned deadlock and by the spectacle of a publicly bailed-out financial services industry fighting regulation²² while proposing to finance developing-country mitigation through the creation of new debt (See "The New Climate Debt," part of IATP's Climate and Agriculture, Cancún 2010 series). We must not wait for another market failure or cascade of extreme climate events to decide to commit to fund the UNFCCC to fulfill party obligations among its most climate change-vulnerable parties. We can decide now to finance projects that will build resilience in agriculture and rural communities to the changing climate that is making us all increasingly vulnerable under "business as usual."

References

- 1. Ron Fournier and Ronald Brownstein, October 19, 2010 Interview with President Barack Obama, published October 25, 2010, National Journal. Available at http://nationaljournal.com/whitehouse/complete-transcript-of-obama-interview-20101024.
- 2. Benito Mueller, "Climate Finance after Tianjin: How to reach a deal at Cancún? European Capacity Building Initiative, November 2010 at iv. Available at http://www.euroca-pacity.org
- 3. "Fair and Effective Climate Finance: An assessment of finance in global climate negotiations," Climate Finance Ministerial, September 2–3, 2010, Geneva.
- 4. See Ilana Solomon, "Equitable Adaptation Finance: The Case for an Enhanced Funding Mechanism Under the UN Framework Convention on Climate Change," Action Aid, September 2009.
- 5. "Geneva meeting pushes climate finance to top of Cancun agenda," Bridges Trade Bio Res, International Centre for Trade and Sustainable Development, September 10, 2010, http://ictsd.org/i/news/biores/84558.
- 6. Frank Ackerman et al, "The Cost of Climate Change: What We'll Pay If Climate Change Goes Unchecked," National Resources Defense Council, May 2008, at v. Available at http://www.nrdc.org/globalwarming/cost/cost.pdf.
- 7. Alec Wilks, "Aid and Development Effectiveness: Towards Human Rights, Social Justice and Democracy," The Reality of Aid 2010 Report, Web-abridged edition, IBON Books, October 2010, 9
- 8. Margaret Mukahanana-Sangarwe, AWG-CA Chair, "Elements for a balanced outcome," AOSIS Ministerial Meeting, November 1–2, 2010, St. George's, Grenada, Eastern Caribbean, 3.
- 9. UNFCCC, Decision 2/CP.15, Copenhagen Accord, December 18, 2009. Available at http://unfccc.int/resource/docs/2009/cop15/eng/11a01.pdf#page=4.
- 10. David Ciplet et al, "Fast-start adaptation funding: keeping promises from Copenhagen," International Institute for Environment and Development, November 2010 at 1. http://www.iied.org/pubs/display.php?o=17088IIED
- 11. Heinrich Boell Foundation and Overseas Development Institute "Fast start finance: pledges made by countries," Climate Finance Update, August 2010, http://www.climate-fundsupdate.org/fast-start-finance.
- 12. E.g. Michelle Chan, "Ten Ways to Game the Carbon Market," Friends of the Earth, May 2010; and Carbon Market Europe "Hedegaard doubts integrity of HFC offsets,", October 29, 2010.
- 13. Alpha O. Kalaga and Sven Harmeling, "The Adaptation Fund: Fully Operational," German Watch, October 2010, Table 1, Germanwatch Adaptation Fund Project Tracker, as of September 17, 2010.
- 14. lbid., p. 10.
- 15. Pan African Climate Justice Alliance and East Africa Farmers Federation, "Joint Statement by Farmers and Civil Society Organizations to the Preparatory Conference on Agriculture, Food Security and Climate Change," September 6–8, 2010, Addis Ababa, Ethiopia, 2. Available at http://www.iatp.org/climate/index.php?q=document/joint-statement-by-farmers-and-civil-society-organi.
- 16. "agriculture that sustainably increases productivity, resilience (adaptation), reduces/ removes GHGs (mitigation) and enhances achievement of national food security and development goals." "Climate-smart" agriculture: Policies, Practices and Financing for Food Security, Adaptation and Mitigation," UN Food and Agriculture Organization, The Hague Conference on Agriculture, Food Security and Climate Change, October 2010, footnote 1, 11. http://www.afcconference.com/conference-papers.
- 17. Consultative Group on International Agricultural Research and the Earth System Science Partnership "Agriculture, Food Security and Climate Change: Outlook for Knowledge, Tools and Action," The Hague Conference on Agriculture, Food Security and Climate Change, October 2010, 4. Available at http://repository.uneca.org/drupal/sites/default/files/Hague_Conference_Agriculture_Food_Security_and_Climate_Change_background_paper.pdf.
- 18. Martin Parry (UK), Osvaldo Canziani (Argentina) and Jean Palutikof (UK), Technical Summary accepted by Working Group II, IPCC, 43. Available at http://www.ipcc.ch/pdf/assessment-report/ar4/wg2/ar4-wg2-ts.pdf.
- 19. AGF, "Report of the Secretary General's High-level Advisory Group on Climate Change Financing," Office of the United Nations Secretary General, November 5, 2010, 7. Available at http://www.un.org/wcm/webdav/site/climatechange/shared/Documents/AGF_reports/AGF_Final_Report.pdf.
- 20. Jutta Kill et al, "Trading Carbon: How it works and why it is controversial," FERN, August 2010, 21.
- 21. Hal Weitzman, "End looms for carbon trading in US," Financial Times, November 2, 2010.
- 22. E.g., "Wall Street Lobbyists Besiege CFTC to Shape Rewrite of Derivatives Rules," Bloomberg News, October 14, 2010.