



**USAID**  
FROM THE AMERICAN PEOPLE



# CLIMATE CHANGE & DEVELOPMENT

Clean Resilient  
Growth

USAID  
**CLIMATE CHANGE  
& DEVELOPMENT**  
STRATEGY

JANUARY 2012



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CLIMATE CHANGE  
AND DEVELOPMENT  
STRATEGY**

2012- 2016





# MESSAGE FROM THE ADMINISTRATOR

I am pleased to share with you our Agency's new Climate Change and Development Strategy. The full title is intentional; USAID remains committed to address both the causes of climate change and its impact on the broader development of our partner countries.

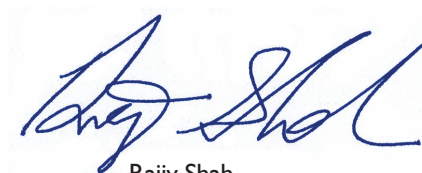
We advance prosperity in partner countries by helping create opportunities for clean development paths. We seek to ensure that prosperity is sustainable, by minimizing the damage that unavoidable climate change can do to development investments. And we work to ensure that prosperity is resilient, maximizing partner country capacities to cope with climate impacts.

The task is not an easy one. The effects of climate change, although global, vary across the world and include everything from increased drought to more damaging floods, from melting snowpack to blazing wildfires, from increased coastal erosion to extensive species and crop losses. The opportunities vary as well: wind and solar off-grid power generation, microinsurance to protect farmers from crop losses, payments for carbon storage in well-managed forests and community level disaster prevention planning.

Consideration of climate change in strategic planning, program design, and project implementation across a wide range of development sectors is essential to the success of USAID's mission. It is the responsibility of all development professionals to consider the impact climate change will have on their efforts and to search for opportunities to promote greener, cleaner, more resilient approaches to driving development results in areas as diverse as agriculture, health, energy production, tourism, and microenterprise.

To focus the Agency's efforts, this strategy outlines our goals and strategic objectives and provides guiding principles based on USAID's long history of work in related areas like disaster risk reduction, natural resources management and energy sector reform. The strategy also lays out a road map for implementation, recognizing the need to develop more detailed plans for research, monitoring, training, learning and outreach that will guide Agency officers and programming in the future.

As the strategy notes, climate change is among the greatest global challenges of our generation. We must work with partner governments and their citizens, civil society and private sectors and draw upon their collective expertise, innovative thinking and emerging science to meet this challenge. By doing so, we will help drive forward one of our most fundamental development goals: sustainable global growth.



**Rajiv Shah**

Administrator

U.S. Agency for International Development



# FOREWORD FROM USAID'S GLOBAL CLIMATE CHANGE COORDINATOR

As USAID's new Climate Change and Development Strategy is released, it is my pleasure to highlight for USAID staff and the broader development community several important themes of the strategy. Climate change is one of the greatest economic, social, and environmental challenges of our time, and USAID is working to help countries accelerate their transition to climate resilient, low emission development, advancing the global green economy.

Investments in clean energy, sustainable forestry and adaptation to climate change are all also investments in sustainable economic growth. Economic development is not an additional or peripheral activity, but rather ingrained throughout our climate change programs.

USAID is considering both how our activities affect greenhouse gas emissions and the impacts that a changing climate is already having (and will continue to have) on our globe. The strategy prioritizes development planning and programming for sustainable economic growth that is not only resilient to climate change but also reduces contributions to greenhouse gas emissions.

For example, more variable rainfall, stronger storms, and increasing temperatures have the potential to reduce agricultural productivity; warming ocean temperatures and ocean acidification are already negatively impacting fisheries. These impacts are poised to undermine the livelihoods of millions in developing countries, especially the poorest. Similarly, increased incidence of flooding and drought, saltwater intrusion into drinking water supplies, and the migration of disease vectors into new areas (such as mosquitoes carrying malaria) will affect public health by undermining access to clean water and sanitation, undercutting nutritional gains, and changing disease distribution patterns and prevalence.

Implementing practical adaptation responses to these threats is an important element of risk mitigation, both to ensure the livelihoods and health of USAID's beneficiaries and to ensure the sustainability of past, current, and future USAID development investments. Likewise, USAID's investments in clean energy and sustainable forestry drive sustainable economic growth while helping to reduce current and future greenhouse gas emissions.

USAID recognizes that public financing cannot meet this challenge alone. Under Administrator Shah's leadership, USAID has an opportunity to take our investments to a new level of success—investing in public-private partnerships at a larger scale and in a way that leverages significant additional resources to further development goals. The strategy emphasizes the importance of engaging the private sector in achieving the goals of the Global Climate Change Initiative.

This may seem a daunting challenge, but USAID is already leading the way. The strategy provides help; in the coming months and years, USAID will provide climate change training to all USAID staff, so that experts across the agency—in democracy and governance, security, gender, food security, health, and more—will have the tools they need to assess and incorporate climate change considerations into their work. Additionally, USAID is leading an effort, the US Government's Enhancing Capacity for Low Emission Development Strategies (EC-LEDS) program, in partnership with the State Department, to integrate economic growth with plans for greenhouse gas emissions reductions in 20 partner countries; USAID recently announced a competition for integration pilot projects from Missions - awards for winning proposals will be made in February 2012; and USAID continues efforts within the Feed the Future and Global Climate Change Initiatives to design food security strategies that incorporate climate change adaptation considerations and mitigation opportunities. We will be embarking on many other such efforts in the years to come.

Finally, on a more personal note, I am an ecologist by training and have spent the last seven years in DC working on integrating science into climate change policy. Therefore, I am particularly excited that the strategy recognizes the critical roles of science and technology in increasing understanding of current and future climate change impacts, designing more effective interventions, and improving monitoring and evaluation of our investments.

Thank you for your dedication and hard work on climate change—I am excited to be working with you.

**Kit Batten, Ph.D.**

USAID Global Climate Change Coordinator

# ACKNOWLEDGEMENTS

The Global Climate Change and Development Strategy was produced by the Climate Change Policy Task Team, under the leadership of Julie Kunen of the Bureau for Policy, Planning, and Learning. Upon Julie Kunen's departure from USAID, Kit Batten and Genevieve Maricle saw the Strategy Development process through to its completion. Task Team members, who went above and beyond the normal call of duty in dedicating 10 months to this effort while also fulfilling their daily responsibilities, were Tegan Blaine, William Breed, Erika Clesceri, Holly Ferrette, Genevieve Maricle, Leonardo Martinez-Diaz, Kathryn Stratos, and Gordon Weynand. These talented development professionals brought diverse backgrounds and expertise, not to mention tremendous dedication and passionate commitment to the task, engaging in spirited debate and thoughtful consideration of alternative approaches to a very complex subject.

The strategy benefited from review and insightful comments from USAID colleagues from around the Agency. Kit Batten, the Agency's Global Climate Change Coordinator, joined USAID partway through the strategy development process and accompanied the strategy to the end, contributing to its content and structure. Edward Carr contributed valuable insights on issues of governance, disaster risk reduction, and human rights. Kimberly Thompson ably managed the consultation process, carefully analyzing all comments received and ensuring they were addressed. The Task Team is especially grateful to our USAID colleagues from throughout the Agency, particularly those in the field, who took the time to review the document carefully and to offer their perspectives. We also appreciate time spent by reviewers in other U.S. Government agencies, especially the Department of State, and the feedback received from members of civil society, with whom we consulted. This was truly a team effort, as will be implementation of the strategy.



# EXECUTIVE SUMMARY

Climate change is one of the greatest challenges of our generation. USAID — as part of the broader Presidential Global Climate Change Initiative (GCCCI) — is addressing this challenge in ways that recognize both its severity and the opportunities clean economic growth presents to spur innovation and encourage investments that will have long-lasting environmental and development benefits. If we support countries to build climate resilience and move towards a “low carbon” economic growth pathway, we can help provide more stable and prosperous futures for the U.S. and for our partners, including new markets for clean technology and expansion of the green economy. Alternatively, if we are unable to meet this challenge, climate change could jeopardize many of the development gains the international community and the U.S. government have worked for decades to secure.

USAID’s work on climate change fits into a larger domestic and international policy context and is guided by Administration policy as developed in the President’s Global Development Policy, the Quadrennial Diplomacy and Development Review, USAID Forward, and the GCCCI. Additionally, USAID’s Policy Framework 2011-2015 defines the following as one of seven Core Development Objectives for the Agency: Reduce Climate Change Impacts and Promote Low Emissions Growth. USAID has a long history of programming in sectors relevant to climate change and will draw lessons learned from this history to shape efforts under this strategy.

The goal of USAID’s 2012-2016 Climate Change and Development Strategy is to ***enable countries to accelerate their transition to climate-resilient low emission sustainable economic development***. To accomplish this, USAID will pursue three strategic objectives (SOs):

- SO 1. Accelerate the transition to low emission development through investments in clean energy and sustainable landscapes**
- SO 2. Increase resilience of people, places, and livelihoods through investments in adaptation; and**
- SO 3. Strengthen development outcomes by integrating climate change in Agency programming, learning, policy dialogues and operations**

These three strategic objectives, while clear and distinct, can be divided into two discrete, complementary approaches: 1) dedicated climate change programming that tackles the unique risks and opportunities

presented by climate change; and, 2) integration of climate change within other core development programs. The first approach—dedicated programming—captures both SO1 and SO2, mitigation and adaptation. Mitigation consists of activities that reduce greenhouse gas emissions, while adaptation activities build resilience to the unavoidable impacts of climate change. The second approach—integration—captures SO3, and thus builds climate resilience and lower-emission approaches into USAID’s entire development portfolio.

In order to effectively use these resources in a budget-constrained environment, USAID is committed to focusing and concentrating climate change investments for maximum impact. This commitment means that we are unable to work in every developing country at risk from climate change impacts or with the potential for low carbon sustainable growth. To make tough decisions about where to focus resources, USAID has defined clear criteria by which it programs its dedicated climate change funds:

- **Clean Energy Criteria:** USAID prioritizes work with a mix of the existing major emitters, countries projected to significantly increase greenhouse gas emissions under business-as-usual scenarios, and partners most able and ready to demonstrate leadership in clean energy development.
- **Sustainable Landscapes Criteria:** USAID prioritizes work with partner countries with globally important forest landscapes (e.g. the Amazon basin and the Congo basin which have high current and future carbon storage potential); high demonstration potential (e.g. early movers able to demonstrate credible results-based payments for carbon storage under Reducing Emissions from Deforestation and Degradation (REDD+) programs); commitments to developing monitoring, reporting, and verification systems, and enabling policy structures such as land and resource tenure.
- **Adaptation Criteria:** USAID prioritizes work with vulnerable countries, both in terms of exposure to physical impacts of climate change and socio-economic sensitivity to those impacts. These include the likelihood of significant physical changes, dependence of population on climate-sensitive sectors, percentage of population in high-risk areas (e.g. low-lying coastal areas), and the ability of a country’s economy to respond to climate changes. Thus, USAID is prioritizing working with least developed countries (especially in sub-Saharan Africa), small island developing states (SIDS), and glacier-dependent countries.

Integrated programming will be supported through increased resources allocated to training and outreach, development of guidance for country strategies, project design, and other Agency policy instruments. In an effort to develop innovative approaches to effective integration, USAID is also pursuing a set of integration pilots selected based on criteria such as their ability to successfully integrate climate change with other top Agency objectives and their potential to generate integration lessons and tools.

USAID considers mitigation, adaptation, and integration to be equally important strategic objectives: an emphasis on all three is essential to fully realizing partner countries' ability to achieve climate-resilient low emissions growth and to ensure that USAID development investments are resilient to a changing climate and pursue emission reduction opportunities when possible. As the learning, evaluation, and research agendas embodied in this strategy yield insights into best practices and USAID's comparative advantage in climate change programming, prioritization among objectives may be necessary and justified.

By the end of the strategy period, the Agency will have implemented its Fast Start Financing<sup>1</sup> in support of these SOs (see page 8 and Annex 1 for more detail about Fast Start Financing); supported the development of Low Emission Development Strategies (LEDS) in 20 countries (see page 14 for more information); implemented pilot projects, training programs, and research strategies that help integrate climate change considerations with other top Agency priorities, including the Global Health and Feed the Future Initiatives; and learned a tremendous amount about the most effective ways to support low emission, climate resilient growth. USAID will then be in an even stronger position to program the next generation of climate change funds according to these best practices and to consider climate change more fully in the design and implementation of its broader development portfolio. For each SO, the strategy lays out both measures of expected outcomes over the life of the strategy and more aspirational, longer-term goals indicating the desired impacts of our efforts over a time period beyond the strategy. The goals and expected outcomes of this Strategy will inform a coherent evaluation and learning plan—a vital contribution to a field still working to define and measure success writ large.

The strategy also includes a roadmap for implementation. This roadmap identifies priority countries for SO1 and SO2 that have already been selected under GCCI, and also describes six key areas of focus for integration efforts under the leadership of the Agency's Global Climate Change Coordinator. The Coordinator will lead efforts to 1) award and guide Mission integration pilots; 2) develop guidance for country strategies, project design, and other Agency policy instruments; 3) develop a climate change and development research agenda; 4) implement an evaluation and learning plan; 5) create new partnerships with the private sector and other partners; and 6) conduct inreach and outreach in support of this strategy. To do this, the Global Climate Change Coordinator also will lead a process to more formally identify roles and responsibilities as well as a governance structure within the Agency for implementation of this strategy. Each of these efforts is in the spirit of and consistent with the USAID Forward reforms, launched in 2010 by Administrator Shah to unleash the Agency's potential to achieve high-impact development. This effort has an emphasis on new partnerships, innovation, and a focus on results.

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<sup>1</sup> Fast Start Financing refers to the U.S. pledge to join other developed countries in providing funding for adaptation and mitigation approaching \$30B over three years.

# CLIMATE CHANGE AND DEVELOPMENT: CHALLENGES AND OPPORTUNITIES

## CLIMATE CHANGE IMPACTS

In the absence of anticipatory planning, climate change is expected to exacerbate existing development pressures. The poor in developing countries will likely be the first and hardest hit by climate change impacts<sup>2</sup> because they are heavily dependent on climate-sensitive economic activities such as agriculture, fisheries, forestry, and tourism and lack the capacity to cope with economic and environmental shocks. They live in the places with the fewest resources to prepare for floods, droughts, and other environmental shocks. The impacts of climate change—both slow onset (i.e. changing precipitation patterns and rising sea level) and rapid onset

Indonesia, and India—are emerging economies<sup>4</sup>. Current investments will determine emissions trends far into the future, giving great urgency to the need for immediate action to mitigate greenhouse gas emissions. We must invest in opportunities for low emission economic growth, otherwise high-carbon development will contribute to the very climate challenges that threaten the well-being of the global poor.

Current research finds that the impacts of climate change will vary by region (see Figure 1)<sup>5</sup>. Rising sea levels will render some densely-populated coastal areas uninhabitable. Existing exposure to extreme weather events including floods, droughts, heat waves, forest fires, dust storms, and landslides, which today affect several hundred million people, is projected to increase. Agricultural productivity is projected to decline in some continents, especially Africa and South Asia, at a time of rapidly-growing demand for food, threatening the success of USAID's food security investments. By 2050, the combined climate impacts of warming and acidification on oceans is projected to result in classification of nearly all coral reefs as threatened, impacting reef fisheries and the roughly 500 million people for whom reef ecosystems provide crucial protein<sup>6</sup>.

The impacts of climate change will also affect the United States and other developed countries, even if the most severe impacts are felt in the developing world. Humanitarian crises, caused or exacerbated by climate change, will undermine the social, economic, and political stability of our allies and partners, rendering them less able to help address other global challenges. Disruptions in agricultural production, for which climate change is a stressor, can cause food prices to increase in the United States. If not well managed, climate change may exacerbate water scarcity and increase conflicts among water users; in some cases it could trigger displacement and contribute to national and regional resource governance tensions, threatening U.S. national security objectives in key regions of the world. Already, the U.S. military, USAID, and

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*The International Energy Agency reports that for the first time in 2008, aggregate emissions from developing countries were larger than those from developed countries<sup>3</sup>*

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(i.e. strong storms and floods)—are likely to be felt differently by men and women, and may disproportionately exacerbate the existing vulnerabilities of many vulnerable and marginalized populations, including women, indigenous peoples, people with disabilities, individuals who are lesbian, gay, bisexual, transgender (LGBT), and the elderly. Developing countries are critical to international mitigation efforts. Three of the five largest global emitters— China,

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<sup>2</sup> Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Core Writing Team, Pachauri, R.K. and Reisinger, A. (Eds.) IPCC, Geneva, Switzerland, 2007.

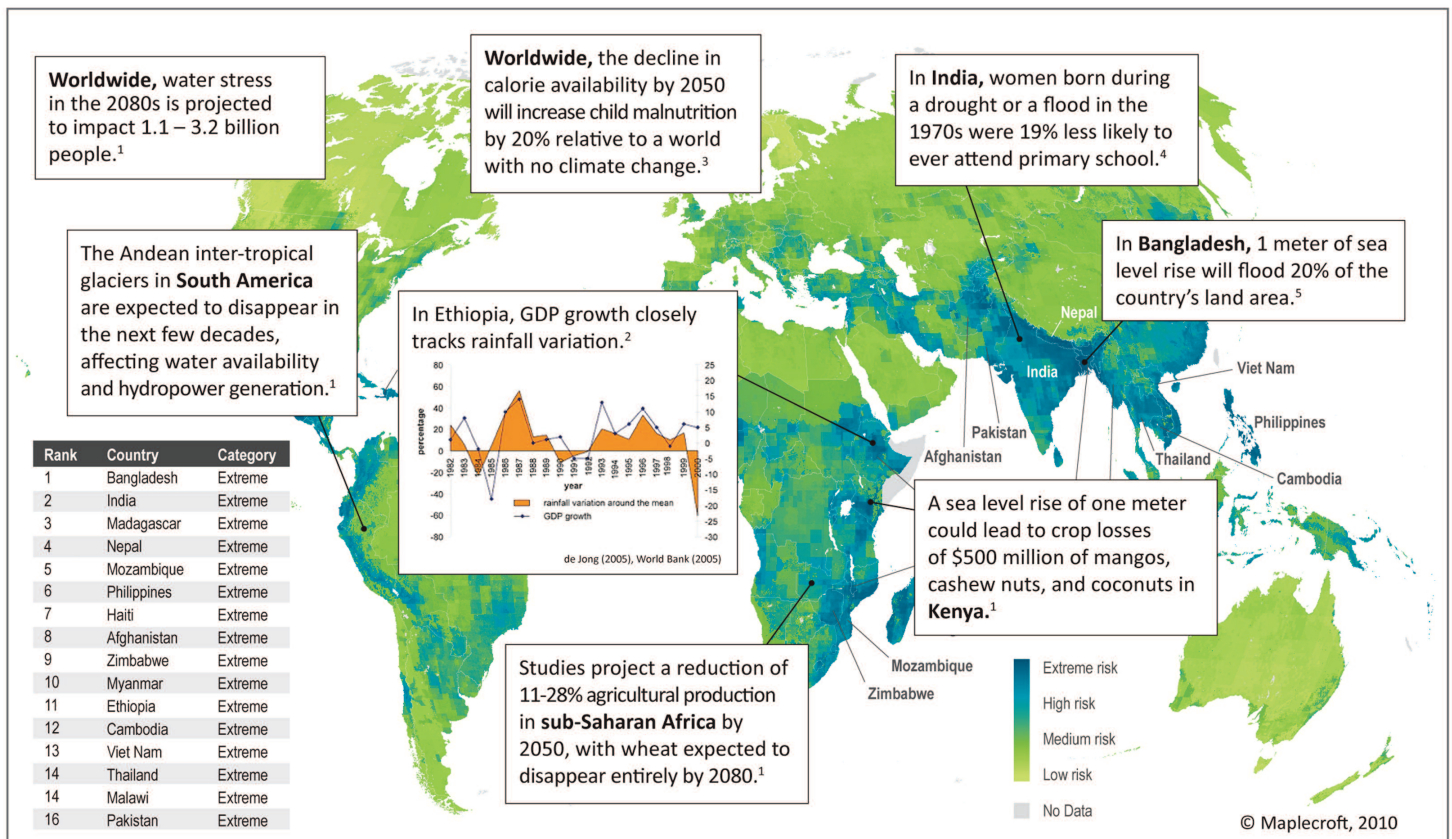
<sup>3</sup> International Energy Agency. CO<sub>2</sub> Emissions from Fuel Combustion: Highlights. OECD/IEA, Paris, 2010 (<http://www.iea.org/co2highlights/co2highlights.pdf>)

<sup>4</sup> Total GHG Emissions in 2005 (includes land use change). Climate Analysis Indicators Tool - Yearly Emissions. World Resources Institute. 2010.

<sup>5</sup> <http://cait.wri.org/cait.php?page=yearly>

<sup>6</sup> Climate Change Vulnerability Index, Maplecroft, 2011. <http://maplecroft.com/about/news/ccvi.html>. Note that Maplecroft's research is one of several efforts to analyze global vulnerability. It is cited as an illustrative example, USAID neither endorses Maplecroft's findings nor favors this analysis over comparable analyses.

<sup>6</sup> "Under the Sea, Coral Reefs in Peril", John Collins Rudolph, June 4, 2011, New York Times.



Map reference: Maplecroft, 2011: Climate change vulnerability map. Vulnerability index combines risk of exposure, degree of sensitivity, and ability of a country to adjust to stresses. <sup>1</sup>Intergovernmental Panel on Climate Change, Working Group II: *Climate Change 2007 – Impact, Adaptation and Vulnerability*. <sup>2</sup>World Bank, 2006: *Ethiopia: Managing Water Resources to Maximize Sustainable Growth*. <sup>3</sup>International Flood Policy Research Institute, 2009: *Climate Change: Impact on Agriculture and Costs of Adaptation*. <sup>4</sup>United Nations Development Program: *Human Development Report 2007/2008: Fighting Climate Change: Human solidarity in a divided world*. <sup>5</sup>World Bank, 2000: *Bangladesh: Climate Change and Sustainable Development*. Report no. 21104 BD, Dhaka.

**Figure 1. Examples of anticipated global impacts of climate change on key development measures.**

intelligence community consider climate change to be a “threat multiplier” and are actively studying how these threats would evolve under different scenarios as a matter of U.S. national security.<sup>7</sup>

Anticipating climate change impacts and making early and smart investments can reduce many of its negative impacts and offers other co-benefits. Many of these countries, which have yet to develop extensive energy and transportation infrastructures, can leapfrog old technologies by adopting less carbon-intensive systems at a lower cost (compared to sunk costs and costs of retirement or retrofitting). Speeding the development and deployment of clean and energy efficient technologies in these emerging markets

**More than 90 percent of projected growth in global energy demand will come from developing countries over the next three decades<sup>8</sup>**

<sup>7</sup>Global Trends 2025: A Transformed World. National Intelligence Council, 2008. [http://www.dni.gov/nic/PDF 2025/2025 Global Trends Final Report.pdf](http://www.dni.gov/nic/PDF%2025/2025%20Global%20Trends%20Final%20Report.pdf). USAID Conflict Management and Mitigation Issue Paper No. 1, Climate Change, Adaptation, and Conflict.

<sup>8</sup>International Energy Agency. CO2 Emissions from Fuel Combustion: Highlights. OECD/IEA, Paris, 2010 (<http://www.iea.org/co2highlights/co2highlights.pdf>)



greatly expands opportunities to export U.S. technology and creates “green” jobs<sup>9</sup>. Similarly, building resilience to the impacts of climate change can improve health, protect and enhance agricultural production, and contribute to more equitable and inclusive land use planning. Climate-sensitive disaster risk reduction programming can consolidate development gains in the face of new climate stresses, creating a stable foundation for future development efforts. For example, anticipated impacts of reductions in rainfall caused by climate variability can be mitigated by drought early warning, effective land-use planning, investing in drought-tolerant agricultural practices, and forest conservation measures. Focusing on building resilience also saves money: disaster planning efforts that reduce storm damages are cheaper than relief efforts and infrastructure reconstruction<sup>10</sup>.

## MITIGATION AND ADAPTATION

There are two kinds of responses to the climate challenge: mitigation and adaptation.

**Mitigation.** Mitigation seeks to reduce the amount of greenhouse gases released into the atmosphere and to recapture greenhouse gases currently in the atmosphere and sequester them in ecosystems. Lowering the accumulation rate of greenhouse gases in the atmosphere lowers the probability that the earth’s temperature will rise and dangerous climate change impacts will occur. There are two main sources of greenhouse gas emissions: burning of fossil fuels for energy and land use practices that release greenhouse gases into the atmosphere. Reducing the “carbon footprint” of human activity will require smarter land-use planning, greater efficiency in the ways we generate and use energy, as well as harnessing less carbon-intensive, cleaner forms of energy.

### Mitigation in Practice

In India, a USAID investment of \$9 million leveraged \$200 million in additional private sector investment in clean energy, and by 2008 had saved 26 million tons of CO<sub>2</sub> emissions. The project produces biomass energy from sugar cane waste, or bagasse. USAID funding is now no longer needed, as private sector actors have continued the work, increasing bagasse generation four-fold (from 381 MW to 1253 MW in the 5 years after USAID funding ended), and extending the effort to six additional power plants.

USAID worked with nine Indian sugar mills to support bagasse co-generation and to ensure sustainability of the effort after USAID support ended. USAID/India staff helped to transform the policy environment for co-generation and engaged several additional partners – banks, equipment suppliers, project developers and engineering firms – in this effort. They signed power purchase agreements with local state electricity boards, and slowly changed obsolete policies that discouraged private power being fed into the grid.

As a result of the bagasse co-generation, nearby rural areas had access to uninterrupted power, minimizing transmission and distribution losses. The thermal efficiency of cogeneration is significantly higher than that of centralized fossil fuel-based power plants. – the aforementioned 1253 MW of installed capacity has offset electricity generation from a coal-fired power plant.

*Globally, energy usage accounts for 80% of greenhouse gas emissions and land use 16% of emissions, while in developing countries 66% of greenhouse gases come from energy use and 28% from land use<sup>11</sup>*

Mitigation also demands that we conserve forests and other ecosystems that store large amounts of carbon, such as wetlands and peatlands, which can absorb vast volumes of carbon. If these ecosystems are destroyed, gains from clean energy and greater efficiency will be offset by the loss of these carbon reservoirs and by the release of the carbon they contain<sup>11</sup>. Protecting forests and increasing carbon storage on degraded lands are cost-effective ways to address climate change; they also conserve soil, create buffers against droughts and floods, maintain water tables, and

<sup>9</sup> For example, “[T]he Solar Energy Industries Association estimates that the solar industry has the potential to create 55,000 new US jobs through 2015.” Testimony of Mr. Mark Culpepper, SunEdison, LLC, before the U.S. Senate Committee on Environment and Public Works, “Green Jobs Created by Global Warming Initiatives” Tuesday, September 25, 2007. The US National Action Plan for Energy Efficiency estimates that if utilities were to invest roughly \$7 billion a year in energy efficiency, this would leverage another \$20-30 million in non-utility investment, yielding annual savings to consumers of some \$22 billion by 2017. These investment levels would result in the creation of about 298,000 jobs annually, according to a mid-point estimate.

<sup>10</sup> “Natural Disasters: Counting the Cost”, World Bank, 2004

<sup>11</sup> Climate Analysis Indicators Tool – Yearly Emissions. World Resources Institute. 2010. <http://cait.wri.org/cait.php?page=yearly>

conserve plant and animal diversity. These changes in land use require putting into place policies, rules, monitoring and enforcement mechanisms to transform emissions patterns across these landscapes.

**Adaptation.** Greenhouse gases—once emitted—can remain in the atmosphere for thousands of years. We are already experiencing changes in climate due to increasing stocks of greenhouse gases, a trend produced by accelerating emissions-intensive human activities, particularly over the past century. Even if mitigation measures are taken now, the world's climate has already changed and will continue to change due to already-accumulated gasses. Therefore, coping responses are needed. The objective of adaptation is therefore to help societies anticipate and incorporate plans for responding to potential climate change impacts into economic and political systems to ensure a more secure future. This entails cross-sectoral planning to cope with projected changes such as higher peak temperatures, scarcer water, higher sea levels or changing weather patterns. Climate adaptation requires that we utilize science, technology, innovation, and the best available infor-

mation to understand and respond to unavoidable impacts. Many traditional practices exist to deal with climate stresses, but need to be shared broadly to be effective. Weather-modeling and monitoring technologies can be a cost-effective way to enable communities to anticipate and prepare for climate events; the World Bank and US Geological Survey calculate that every \$1 spent on disaster preparedness saves \$7 in disaster response<sup>12</sup>. Development of drought-, heat-, saline-, and submergence-tolerant crop varieties and changing planting practices can keep farms productive, even as climate patterns shift. Helping ensure that planning, decision-making and other governance processes are inclusive, transparent, and empirically-based can empower partners to implement effective solutions on the ground.

### Adaptation in Practice

USAID, in partnership with The Mountain Institute, is helping people in the highlands and lowlands of Peru reduce their vulnerability to the effects of glacial melt all along the Santa River. The Santa River supports approximately 1.6 million residents, and is fed by runoff from glaciers on the peaks of the Andean Cordillera Blanca – the White Mountains. As temperatures have risen and rainfall has become more erratic, the glaciers have been melting faster than in the past. This change threatens electricity production from hydropower, availability of water for drinking and irrigation, and development advances in health, food security, and economic development.

Through workshops and trainings, USAID has worked with community groups, mayors, and local government representatives to help identify climate change threats, and to determine what adaptation measures, such as restoration and protection of critical grasslands and forests, will reduce their vulnerability. As a result of these trainings, community groups have begun working with local governments to reduce climate vulnerability, and mayors in the region have undertaken efforts like the Three Basins Commonwealth. The Commonwealth is a legal entity dedicated to cooperation on adaptation, local economic development, and mountain ecosystem management.

Fidel Rodriguez, a former municipal council member from the community of Pampas Chico, explains: “We can see that the changing climate is affecting the local economy. People don’t know what to do about it. The local governments face a big challenge: how to be leaders in the process, how to implement the right public policies to promote the right kind of development that is needed in the context of climate change. The mayors in the Commonwealth are taking responsibility and leading the coordination of these efforts.”

<sup>12</sup> “Natural Disasters: Counting the Cost”, World Bank, 2004



## II. STRATEGY CONTEXT

Since 1990, efforts to address climate change have been an important part of USAID's development assistance program. USAID has implemented win-win solutions that provide climate change-related benefits while meeting sustainable development objectives in forest conservation and sustainable agriculture, energy, urban and industrial development, and disaster preparedness and assistance. This strategy represents a newly coordinated Agency-wide approach to climate change that builds upon these past efforts and directs appropriations towards priority climate change actions, rather than relying upon indirect climate "co-benefits" of other programs. It also ensures that, where appropriate, climate change mitigation and adaptation opportunities are considered and integrated across USAID's development portfolio.

USAID's work on climate change fits into a larger domestic and international policy context. As President Obama said in a 2009 address to the United Nations General Assembly, "[o]ur generation's response to this challenge will be judged by history, for if we fail to meet it—boldly, swiftly, and together—we risk consigning future generations to an irreversible catastrophe<sup>13</sup>." The President's 2010 National Security Strategy recognizes climate change as a "real, urgent, and severe" danger<sup>14</sup>. Through the GCCI, which was announced as part of the President's Global Development Policy, federal agencies are coordinating a whole-of-government approach to international climate change efforts. The GCCI is one of three Presidential Initiatives, along with Feed the Future and the Global Health Initiative. The 2010 Quadrennial Diplomacy and Development Review (QDDR) recognizes "the specter of irreversible climate change" and calls for focusing development efforts on six specific areas that build on existing strengths, one of which is climate change<sup>15</sup>. Finally, Executive Order 13514, and the Interagency Task Force on Adaptation formed to respond to it, specifies that each agency shall "evaluate agency climate change risks and vulnerabilities to manage the effects of climate change on the agency's operations and mission in both the short and long term<sup>16</sup>."

The international framework stems from the UN Framework Convention on Climate Change (UNFCCC). At the 17<sup>th</sup> UNFCCC Conference of the Parties (COP) in 2011, the international community came together to produce the "Durban Outcome," a package of decisions that speak to both the near- and long-term global efforts to combat climate change under the UNFCCC, and help to operationalize the principles set forth in the 2009 Copenhagen Accord and 2010 Cancun agreements. At COP 15 in Copenhagen, the U.S. Government joined developed country partners to make significant Fast Start Financing commitments (see below). Other bilateral and multilateral partners also made significant commitments to help address the challenge of climate change (see Annex 1) and discussions about effective international donor coordination continue in international dialogues.

Fast Start Financing refers to the collective commitment by developed countries to provide resources to developing countries approaching \$30 billion in the period 2010-2012. Fast Start Financing includes Congressionally appropriated climate finance for GCCI programmed by USAID, the Department of State, and the Department of Treasury, additional grant-based assistance that contributes measurable results ("co-benefits") to climate change objectives, and programs carried out by other federal agencies and federal development finance and export credit entities (see Annex 1 for details). The GCCI prioritizes support for three "pillars" of climate change action: clean energy, sustainable landscapes<sup>17</sup>, and adaptation.

USAID Forward, launched by Administrator Shah in 2010, is an Agency-wide effort focused on seven core fundamentals of development: 1) policy and strategy; 2) monitoring and evaluation; 3) science and technology; 4) innovation; 5) procurement reform; 6) budget reform; and 7) talent management. In keeping with USAID Forward, the Agency is striving to build countries' own capacities, institutions, and governance systems to address

<sup>13</sup>[http://www.whitehouse.gov/the\\_press\\_office/Remarks-by-the-President-at-UN-Secretary-General-Ban-Ki-moons-Climate-Change-Summit/](http://www.whitehouse.gov/the_press_office/Remarks-by-the-President-at-UN-Secretary-General-Ban-Ki-moons-Climate-Change-Summit/)

<sup>14</sup>National Security Strategy, 2010, p. 47. [http://www.whitehouse.gov/sites/default/files/rss\\_viewer/national\\_security\\_strategy.pdf](http://www.whitehouse.gov/sites/default/files/rss_viewer/national_security_strategy.pdf)

<sup>15</sup>Quadrennial Diplomacy and Development Review, p. 12. <http://www.state.gov/documents/organization/153108.pdf>

<sup>16</sup>Executive Order 13514, Federal Register, vol. 74, no. 194, p. 52122, October 5, 2009. <http://edocket.access.gpo.gov/2009/pdf/E9-24518.pdf>

<sup>17</sup>The goal of sustainable landscapes efforts is to assist countries to reduce greenhouse gas emissions from deforestation and land degradation and to enhance sequestration of carbon associated with sound land use and management, with a focus on forests and other priority ecosystems, such as peatlands, wetlands, and agricultural lands.

## Alignment with Administration Priorities

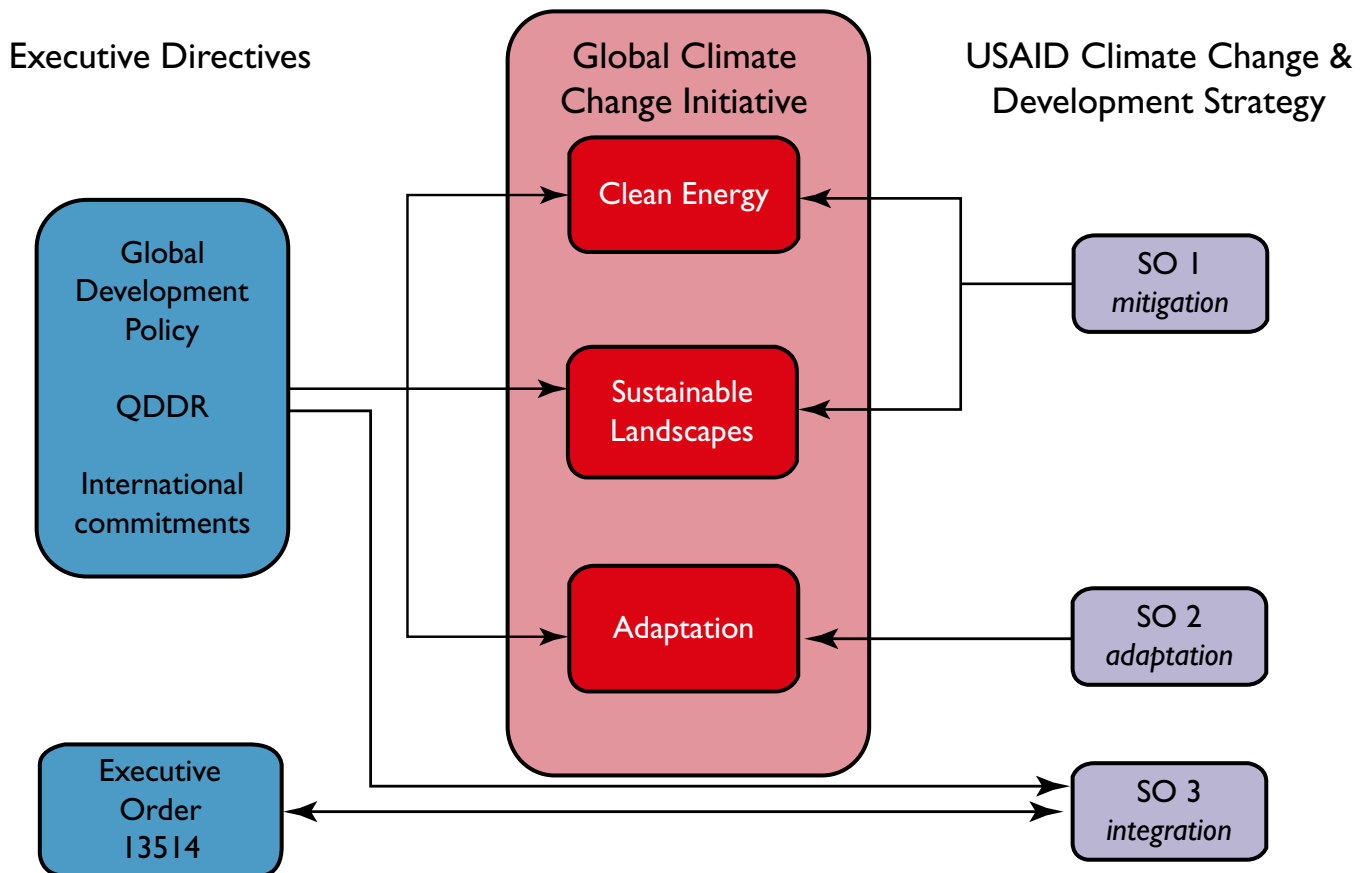


Figure 2. Alignment with Administration Policy and the President's Global Climate Change Initiative

climate change and development themselves. USAID's programming will depend heavily upon science and technology in areas ranging from new earth observations platforms and climate forecasting capabilities to improved techniques to monitor greenhouse gas emissions and will embrace innovative clean energy breakthroughs. The Agency will also respond to USAID Forward's

call for rigorous evaluation by adopting an evaluation plan and learning agenda consistent with the Agency's new evaluation policy (see roadmap, below).

# III. STRATEGIC APPROACH AND GUIDING PRINCIPLES

Climate change is a fundamental stressor that can undermine past development gains and threatens future advances. This strategy adopts two discrete, complementary approaches to climate change, incorporating both dedicated programming in mitigation and adaptation, and integration of climate change into the Agency's broader development work.

Why is a dual approach essential? Climate change presents countries with new challenges to their development that are beyond the scope of current development plans, and for which new approaches and capacities are essential. For example, countries must now understand risks like sea level rise, glacier melt, and hazards like fires, diseases, and flash floods spreading to new areas; develop methods and capacities for analyzing risks and responses, impact modeling, emissions inventories, and cost-benefit analysis; promote policy instruments to spur clean, resilient development; engage especially vulnerable stakeholders in climate change responses; and create incentives for the private sector to invest in resilient, low-emission growth.

These tasks require a new conceptualization of existing development programs. While fully aligned with USAID's development priorities, dedicated climate change activities designed to respond to these challenges will be uniquely guided by the climate change stresses and opportunities that partner countries face.

Integrating climate change across Agency programming, policy, and operations will also be necessary to fully address the climate challenge. It is essential to recognize that the Agency must consider the effects of climate change on its portfolio and opportunities to reduce greenhouse gas emissions *in order to achieve its goals across all its development programs*. To fully understand this point, consider a hypothetical development activity that does not consider climate change: construction of a bridge that does not anticipate higher than usual water levels and more extreme flooding episodes may fail, ruining the infrastructure, disrupting commerce, and wasting the investment.

For example, USAID is completing an analysis of the role of energy usage in agricultural systems, especially as it relates to availability, pricing, productivity, and greenhouse gas emissions resulting from agricultural processes in the region. As a result of this analysis, the Agency will identify program interventions where clean and

renewable energy technologies can be integrated into food security programming with the mutually reinforcing goals of increasing agricultural productivity and reducing greenhouse gas emissions from agricultural systems.

*Throughout the life of this strategy, USAID will utilize its climate change funding for both dedicated climate change programming and to implement integration efforts, including introducing institutional changes through pilots, evaluation, research, and "inreach" described below.*

## GUIDING PRINCIPLES

USAID has a long history of programming in sectors relevant to climate change. Based on this experience, the following guiding principles will inform climate change programs:

**Invest in policy reforms.** Development assistance that focuses on policy, regulatory, and financial reforms can create an enabling environment that offers a greater return on investment in the long term. For example, lessons from the energy sector demonstrate that investing in sector-wide reforms encourages the successful adoption of clean energy systems. Actions should reduce perverse energy subsidies, ensure energy prices are reflective of costs, build capacity for regulators, planners and system operators to work with clean fuels, and enhance the performance of power distribution entities. USAID's investments in climate change should seek such systemic change—where it is possible—in the countries where it works by supporting these analytical, planning and implementation capacities.

**Engage at multiple levels of government.** Many nations are devolving responsibility for natural resources management, land use planning, and economic zoning to regional or municipal governments. At the same time, climate change is inherently global in nature and therefore some issues may be best dealt with at the multinational or transboundary level. Good practices in democratic governance emphasize the importance of working at the level where relevant decisions are made. Often countries have strong regulations that could help reduce climate impacts, but lack the ability or political will to enforce those regulations. USAID should invest in social analysis, capacity building and the development of robust institutions at the appropriate governance level.

**Strengthen civil society and engage the full range of stakeholders.**

The success of adaptation and mitigation measures depends on partner country political support and citizen commitment. Programming should adhere to the tenets of democratic governance and respect for human rights, which calls for inclusive and transparent decision-making and planning processes that involve a range of stakeholders, including women, indigenous peoples and other vulnerable and marginalized populations such as people with disabilities, individuals who are lesbian, gay, bisexual, transgender (LGBT), and elderly. Experience suggests that encouraging the engagement of civil society and ensuring access to information, opportunities for public participation and access to redress can enhance capacity to enforce existing rules and regulations. Informed and empowered civil society can help ensure compliance and fill the capacity gap between policy and practice.

**Respond to partner country priorities, needs, and capabilities.**

USAID should be responsive to each country's development path, in accordance with the principle of country-led development. Programs should, to the extent feasible, seek out and support partner country leaders and institutions that can help inform climate policies and programs in those countries. USAID investments should build on existing climate change efforts, assessments, and programs that partner countries have already undertaken, including National Communications, National Adaptation Programs of Action, climate change policies and action plans, multilateral climate change projects, and other ongoing programs.

**Leverage private sector investments to the maximum extent possible.**

The private sector is an engine for growth, and USAID's resources should be seen as catalytic of private flows, which are many orders of magnitude greater than public resources. For example, USAID's Clean Energy policy sector reform work provides opportunities for significant private sector investment (see India biofuel text box). USAID programming should actively seek private sector partners that engage the firm's core business and commercial interests, not only their corporate social responsibility concerns. The Agency should also actively seek opportunities to leverage other public funding channeled through multilateral development banks, as well as credit authority mechanisms such as USAID's Development Credit Authority (DCA), the Export-Import Bank (EXIM) and the Overseas Private Investment Corporation (OPIC).

**Partner and coordinate with other donors.** As the donor community's interest in climate change continues to grow, successful USAID climate change programs will adhere to aid effectiveness principles. In this spirit, USAID should actively communicate and coordinate with other donors in each of its priority countries and at headquarters level to harmonize efforts to reduce burdens on partner countries, support country-led processes, and create an effective donor division of labor.

**Make choices to minimize climate impacts while maximizing development benefits.**

Development assistance has the potential to alter—either negatively or positively—climate change impacts. For instance, agricultural projects in coastal areas that do not take into account climate-induced sea level rise and the resulting salinization of the soil when choosing a seed variety may unwittingly expose farmers to greater climate impacts. USAID should analyze new and existing investments and prioritize choices that do not exacerbate climate change impacts and wherever possible should seek to ensure that actions that benefit certain populations do not unduly increase the vulnerability of others.

**Promote conflict-sensitive programming.** Conflict analysis should inform the design and implementation of climate-related programs, policies and financing in conflict-affected areas and fragile states. Climate-related activities should not inadvertently exacerbate or create conflict and should actively seek to capitalize on opportunities to reduce conflict and promote stability. Specifically, these activities should be designed and implemented with a view toward reducing underlying sources of grievance and promoting sources of social and institutional resilience. This approach could include addressing problems of government ineffectiveness and illegitimacy, increasing social cohesion and encouraging participation, accountability and transparency.

**Utilize gender-sensitive approaches across climate programming and engage youth.**

Women often possess special skills and experiences relevant to climate change, especially knowledge of local ecosystems, agriculture and natural resources management. They hold great potential as entrepreneurs in clean technology and eco-friendly enterprises. Women are also disproportionately vulnerable to the effects of climate change and are often left out of technological development. Climate change interventions are unlikely to be successful without the support and involvement of women. USAID's efforts in both adaptation and mitigation must therefore be inclusive and gender-sensitive. Numbering about 1.5 billion worldwide, youth represent a global force for change and are increasingly on the frontlines of global change. USAID will reach out to engage youth at home and abroad as thought partners and will build a dialogue with youth constituencies regarding climate change.

**Value ecosystem services.** Well-managed ecosystems provide myriad services such as food, water supply and filtration, carbon storage, erosion control, flood protection and biological diversity. Although these services are critical to development, they are often not valued appropriately in the marketplace. For example, forests offer more than just timber for harvest and their role in storing carbon; they also protect biodiversity, reduce erosion, improve the quantity and quality of water, and provide an array of non-timber forest products. Strategic investments in ecosystem services can mitigate the impacts of climate change.

# IV. STRATEGIC OBJECTIVES 2012-2015

**T**he goal of this strategy is to enable partner countries to accelerate their transition to climate resilient, low emission economic growth and development.

To accomplish this, USAID will pursue three strategic objectives (SOs):

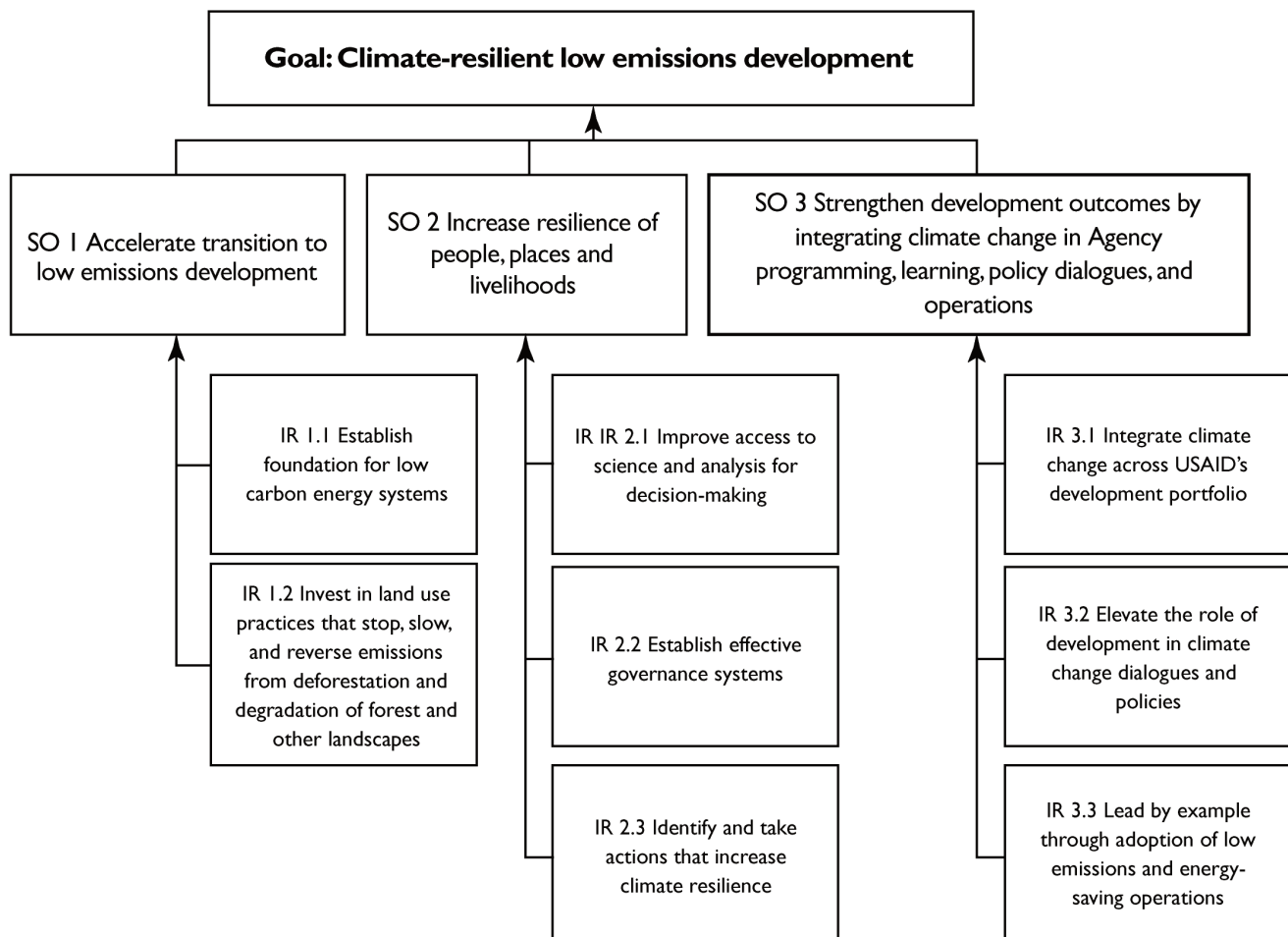
**SO 1. Accelerate the transition to low emission development through investments in clean energy and sustainable landscapes**

**SO 2. Increase resilience of people, places, and livelihoods through investments in adaptation; and**

**SO 3. Strengthen development outcomes by integrating climate change in Agency programming, learning, policy dialogues and operations**

USAID considers mitigation, adaptation and integration to be equally important and has expertise with which to achieve impact in each of these SOs. As the learning, evaluation, and research agendas described

## USAID Climate Change and Development Results Framework



below yield insights into best practices and USAID's comparative advantage in climate change programming, it is anticipated that emphasis of intermediate results within these objectives and between objectives may evolve.

## **STRATEGIC OBJECTIVE 1:**

### **Accelerate the transition to low emission development through investments in clean energy and sustainable landscapes**

USAID's mitigation activities focus on accelerating countries' transition to low emission, sustainable economic development. Public funds pale in comparison to the magnitude of the climate change and development problem, so official development assistance must be used to address market barriers and create the enabling environments conducive to private investment.

#### **What is low emission development?**

A country pursuing a low emission development path will grow their economy and improve the lives of their people in a way that achieves economy-wide reduction in net greenhouse gas emissions compared to a business-as-usual trajectory. Changes at this scale will be seen over the long term, but will be achieved by sector-specific improvements in key areas, such as energy, forests, agriculture, and transportation. Countries that pursue low emission development will be the best positioned to benefit from a new global low carbon future and to access climate change financing from the public and private sectors.

A key component of such efforts is effective governance, which requires inclusive, transparent, and empirically-based decision-making and planning processes. Attention must also be paid at all stages of planning, implementation, monitoring and evaluation to respecting the human rights of those affected by climate change-related activities. USAID's support will enhance governments' capacity to promote low emission development through policy, regulatory and market reforms in the clean energy and land use sectors.

Underpinning the transition to low emission development must be sound strategic planning, so that countries can better analyze tradeoffs and choose the most cost-effective investments as they transition to low emission economies; they also need the capability to create sustainable greenhouse gas inventory systems and monitor changes in emissions against baselines. USAID will invest significantly at this planning level in both clean energy and sustainable landscapes. USAID has been and will continue to be a leader among donors in the implementation of energy and forest management actions on

the ground, demonstrating technologies and practices that reduce greenhouse gas emissions in the near term.

A flagship initiative to promote low emission development is the U.S. Government Enhancing Capacity for Low Emission Development Strategies (EC-LEDS) program. USAID and State Department take a leadership role in this initiative, partnering with other agencies such as the Department of Energy, the Department of Agriculture, the US Forest Service, and the Environmental Protection Agency. EC-LEDS takes a forward-looking approach to development, with the objective of providing technical assistance and capacity building to support partner countries' efforts to create or improve their own long-term, economy-wide LEDS. A LEDS incorporates analytical, strategic planning, and policy formulation processes aimed at advancing robust economic growth while achieving significant, long-term greenhouse gas emissions reductions in key sectors. (see page 14 for more information).

USAID's investments will seek to leverage private investment in low emission development through innovative partnerships and investor matchmaking. The Agency will provide targeted financial support needed to unlock the private flows that will ultimately drive scale-up and economic transformation. Such support will seek to mobilize public and private sector participation by partnering with governments, investors, and financial intermediaries from the partner country and the United States to encourage them to undertake projects that they otherwise would not (see text box on mobilizing private finance).

USAID will emphasize two intermediate results that together contribute to the acceleration of the transition to low emission development. These intermediate results correspond to two of the "pillars" of the GCC: clean energy and sustainable landscapes:

#### **IR 1.1 Establish a foundation for low carbon energy systems**

#### **IR 1.2 Invest in land use practices that stop, slow, and reverse emissions from deforestation and degradation of forest and other landscapes**

#### **IR 1.1 Establish a foundation for low carbon energy systems**

Successful low carbon energy systems include 1) increased incorporation of renewable energy and lower-carbon fuels as part of the overall energy supply; 2) improved energy efficiency; and 3) adoption and dissemination of proven and new clean technologies at scale. As a component of the EC-LEDS initiative, USAID is working to strengthen countries' ability to use indigenous or regional clean energy resources at both small and large scales, including wind, solar, biomass, and hydropower; and will support improvements in efficiency of buildings, appliances, and industrial applications, all of which can reduce greenhouse gas emissions from the energy sector.

These measures depend on efficient and financially stable energy sectors that can attract private sector investment. USAID will



invest in policy reform efforts that draw attention to damages from pollution, negative economic impacts of energy imports, adverse effects of subsidies and import tariffs, and that create opportunities to maximize use of domestic energy resources and expand investment possibilities. USAID will also support governments in mastering the technical elements required to bring private sector clean energy and efficiency projects to financial closure.

### **IR 1.2 Invest in land use practices that stop, slow, and reverse emissions from deforestation and degradation of forests and other landscapes**

Reducing emissions from deforestation and forest degradation and enhancing carbon storage in forests and other landscapes are essential aspects of global efforts to mitigate climate change and another essential component of the EC-LEDS initiative. In support of the U.S. commitment to REDD+, during the Fast Start Funding period (FY 2010-FY 2012) sustainable landscapes work is focusing primarily on forests and drivers of deforestation and will be guided by the USG REDD+ strategy. In subsequent years, the Agency will

#### **What is REDD+?**

REDD+ stands for reducing emissions from deforestation and forest degradation including conservation and sustainable management of forests and enhancing carbon storage in forests and other landscapes. Deforestation and forest degradation are the second largest source of greenhouse gas emissions (after fossil fuel consumption), accounting for about 15% of annual global emissions, which makes the loss and depletion of forests a major issue for climate change. Reducing emissions from forest destruction has also been identified as one of the potentially most cost-effective ways to reduce the rate of increase of atmospheric greenhouse gasses.

While the details of how to implement REDD+ are still being worked out, REDD+ creates new financial incentives to improve policies and implement programs —such as improved infrastructure planning, implementing best practices for timber practices or providing financial compensation to communities for protecting local forests — in order to sustainably reduce emissions from deforestation and degradation across a landscape for the long term. In order for REDD+ to succeed, developing countries will need to put in place systems to implement REDD+ programs, including the ability to measure and monitor emissions from deforestation and forest degradation; improve natural resource management to address the major drivers of deforestation; establish financial mechanisms and programs for incentivizing activities that reduce deforestation; and incorporate appropriate social and environmental safeguards and stakeholder consultation.

#### **REDD+ in Practice**

The Forest, Climate, and Community Alliance (FCCA) project supported by USAID and by the Rainforest Alliance helps communities manage forest landscapes sustainably and respond to the rapidly developing marketplace for forest-based carbon offsets, through REDD+.

In Ghana and Honduras, FCCA is promoting the certification of community-based natural resource management and the development of small enterprises as the platform for successful REDD+ projects. FCCA helps local enterprises improve production, market forest products, and adopt new agroforestry practices. With these efforts, USAID will help:

- Establish REDD+ projects on 185,000 acres,
- Bring 370,000 acres under formal step-wise verification and certification processes, in accordance with the Forest Stewardship Council certification criteria,
- Increase incomes for 1,000 forest-dependent families,
- Strengthen 30 forest enterprises with the capacity to engage in sustainable forestry and REDD+ activities, and
- Engage 20 private sector companies in alliances with community groups.

expand these activities to include mitigation opportunities in non-forested landscapes such as peatlands, wetlands, grasslands, and agricultural lands.

USAID is working to support the USG REDD+ strategy by strengthening the international policy architecture for REDD+, but the major focus will be support of the strategy's goal of increasing the readiness of developing countries to implement REDD+. In order for REDD+ to function as a pay for performance mechanism it will be essential that adequate monitoring, verification and reporting (MRV) systems are in place. Successful REDD+ efforts will also require national policy frameworks that link to sub-national planning and implementation. USAID will strengthen partner country capacity to develop systems for forest carbon measurement and monitoring, as well as conduct greenhouse gas inventories, and support the application of science and technology for improved and more cost efficient management and monitoring systems. USAID will also help to improve tools and capacity for land use planning that reduces deforestation while also ensuring the rights and engagement of local and indigenous communities. USAID will support large-scale demonstration activities to test approaches to forest-related emissions reductions and sequestration from which countries and the Agency can learn.

### **Working Across Mitigation IRs: Low Emission Development Strategies in Practice**

A major focus within the clean energy and sustainable landscapes pillars is a whole-of-government program, Enhancing Capacity for Low Emission Development Strategies (EC-LEDS). EC-LEDS is currently partnering with 11 developing countries, with a goal to partner with 20 countries by the end of 2013. To date, the U.S. has established agreed work programs with five countries – Bangladesh, Costa Rica, Colombia, Mexico, and the Philippines – to chart a shared path forward to advance LEDS-related work, describing the efforts that the U.S. and partners will jointly undertake in key sectors across the economy to promote low emission development in a partner country. For example, USAID, together with other U.S. government agencies, is supporting Colombia's Environment Ministry and National Planning Department to plan across all sectors of the country's economy – including power generation, transport, industry, agriculture and forestry. USAID will provide support for climate change experts within the Colombian government who work as climate change focal points in their ministries, such as Environment and Transport, and coordinate actively with their colleagues from other ministries and private sectors. In Bangladesh, as part of the work program, the U.S. is providing support to map and measure wind resources in the country. The initial steps of this support include selecting sites for the first round of wind measurement and identifying local technical agencies to partner in the wind mapping effort.

To realize the significant opportunities associated with REDD+ programs, partner countries must ensure that the financial and environmental benefits of these efforts are distributed efficiently and equitably. The long-term success of sustainable landscapes programs depends on stakeholders and local communities buying-in and receiving economic benefits. USAID is working to develop social and environmental safeguard guidelines and standards around REDD+ programs by drawing upon lessons from current efforts by partner organizations and agencies. The Agency will develop and apply practical methods for their implementation, and for incorporating and monitoring measures of social and environmental soundness at the project level. These actions should result

in improved quality and depth of engagement with indigenous and community organizations to facilitate their participation in climate change development and implementation in their countries.

In subsequent years, USAID will explore opportunities to take advantage of opportunities for reducing emissions and increasing carbon storage in non-forest landscapes, including improvements in measurement and verification of net changes in greenhouse gas emissions over time.

### **Mobilizing Private Finance**

USAID's climate change efforts will actively seek to mobilize private investment in low emission development. Examples of ongoing efforts include:

- USAID is coordinating with other donors to provide training and transaction assistance to sub-Saharan governments and private companies in more than 10 African countries. The clean energy projects developed through this effort represent over 1800 megawatts of new, clean energy generation capacity valued at \$3-\$4 billion.
- USAID is an active member in the Climate Technology Initiative-Private Financing Advisory Network (CTI-PFAN), which focuses on bridging the gap for micro-, small-, and medium-sized clean energy project developers to reach private financiers. CTI-PFAN is a multilateral, public-private partnership in cooperation with the UN Framework Convention on Climate Change's Expert Group on Technology Transfer. In total, CTI-PFAN has successfully closed 22 projects with a total investment volume of \$264m, representing an annual greenhouse gas reduction potential of 1.6 million tons. The current pipeline includes more than 100 projects with a total investment value of \$2.4b and an annual reduction potential of 4.6m tons of CO<sub>2</sub> equivalent gases.
- USAID's public-private partnership to reduce illegal logging in Indonesia leveraged more than \$50 million from companies such as the Home Depot, Carrefour, and Caterpillar as well as Indonesian enterprises, other donors such as DFID, and philanthropists from 2002 to the present. It contributed to reducing the amount of illegal wood in Indonesia's timber supplies by about 40% and improving forest management in approximately 2.5 million hectares of tropical forest.

## SO 1 ILLUSTRATIVE MEASURES OF SUCCESS (2012-2016)

- Greenhouse gas emissions reduced or sequestered through expanded use of clean energy or improved ecosystem management
- Partner countries implement laws, policies, or regulations addressing climate change mitigation
- Increased number of institutions with improved capacity to address climate change mitigation
- Public or private resources leveraged for climate change
- Low Emission Development Strategies supported in 20 partner countries

## SO 1 LONG TERM GOALS (BEYOND 2016)

- Positive change in greenhouse gas emissions trends in partner countries
- Increased private sector investment in low emission development
- Increased partner country capabilities to analyze, prioritize and implement long-term low emission growth strategies
- Partner countries develop verifiable greenhouse gas emission inventories that allow them to track their emissions and access carbon markets

### **STRATEGIC OBJECTIVE 2:** **Increase resilience of people, places, and livelihoods through investments in adaptation**

USAID's adaptation activities will focus on increasing resilience of partner countries, communities, individuals, and natural assets to climate change and variability. Adaptation efforts help protect existing investments from climate impacts, maintaining development gains and contributing to economic security. By addressing long-term vulnerabilities to climate change, societies around the world can reduce the risks of economic losses and the toll on human development. Adapting to the effects of climate change requires new, more comprehensive and resilient paths to economic growth and social development, but embracing these alternatives often entails difficult tradeoffs (such as choosing to invest in economic growth paths that are cheaper in the long term but more expensive in the short term). Investing where climate stresses affect critical inputs to priority economic growth sectors helps ensure sustainable development.

USAID will help countries that are most vulnerable to climate change address challenges in areas including infrastructure, basic health and water services, agricultural systems, urban planning, and natural resources management. Underpinning these interventions must be a thorough assessment of which aspects of a country's development goals are most vulnerable to climate variability and change; this will enable countries to prioritize their investments to build climate resilience. Local and traditional knowledge that in many parts of the world helps communities deal with climate stressors should be incorporated into adaptation planning. The Agency's focus will be on three intermediate results, which together contribute to the third GCCI pillar, adaptation:

#### **IR 2.1 Improve access to science and analysis for decision making**

#### **IR 2.2 Establish effective governance systems**

#### **IR 2.3 Identify and take actions that increase climate resilience**

#### **IR 2.1 Improve access to science and analysis for decision-making**

Societies at various levels—national, regional, and local—need good scientific data and sound technical analysis to inform their actions in response to climate change. Information and tools helps nations and communities estimate the probability of different kinds of climate effects and project their likely impacts, identify technologies and innovations to reduce that impact, assess the relative costs of different interventions and weigh them against expected benefits, and find ways of encouraging adoption of the most cost-effective innovations. USAID is investing in partner country scientific capacity and improving access to and use of climate information and evidence-based analysis to help societies identify vulnerabilities and evaluate the costs and benefits of potential adaptation strategies. The more comprehensive and accessible the data and analysis, the better the choices decision-makers can make in reducing vulnerability to climate change “decision-makers” including government policymakers at all levels, communities, farmers, firms and entrepreneurs, and households.

### Examples of USAID investments in science and analysis for decision making

- FEWS NET uses national datasets (rainfall, temperature, etc.) and regional climate outlooks to identify actual local and regional trends and patterns in weather and climate, identifies which global models explain this reality and extends the patterns forward in time. FEWS NET improves the accuracy of famine prediction systems in part by refining and applying climate data to the prediction and monitoring of food insecurity through a field-based presence in 20 countries on three continents, with additional remote monitoring in nine countries. FEWSNET provides an example of effectively integrated scientific analysis of food security and climate change.
- SERVIR is a network of regional centers offering earth observation, monitoring and visualization tools. A collaborative effort with NASA, SERVIR provided 8 countries in Central America and 14 countries in East Africa with satellite imagery and useable weather and climate information, informing decision-making in health, environmental management, and disaster preparedness. SERVIR expanded to an additional hub in 2010 to cover the Hindu Kush/Himalaya region from Afghanistan and Pakistan to China. With this expansion 12 of the Agency's 31 priority adaptation countries are served by the SERVIR network.

climate-related policies and projects. This work will also emphasize the provision of accessible and timely mechanisms for redress of grievances and engagement with civil society on advocacy, monitoring, and community-based participation in decision-making on climate-related policies and programs.

### Climate Change and National Security

As global discourse increasingly turns attention to the links between climate change and conflict, USAID is investing in research to better understand this complex relationship

The Agency's Office of Conflict Management and Mitigation (CMM) research efforts address how specific climate factors contribute to the risk of conflict and affect the resilience of social structures and institutions. This effort has identified three general scenarios in which climate change could combine with other stressors and potentially lead to conflict. First, climate change could intensify existing environmental or resource problems. Second, climate change could create new environmental or resource problems that contribute to instability. Third, where climate-related financing, policies, and programs have not adequately considered local conflict dynamics and context, they could produce serious if unintended negative impacts. This evidence-based work will enable USAID and its partners to respond most effectively to climate-related stress, reduce the risk of violent outcomes, and maximize the potential for U.S. foreign assistance to prevent conflict and promote stability. This knowledge will help USAID to produce better strategies and make wise investments by improving the Agency's ability to differentiate and prioritize policy and program interventions in both the conflict and climate change realms.

## IR 2.2 Establish effective governance systems

Information alone is not enough. The Agency will also work with partner countries to create the conditions in which good scientific and socio-economic data can lead to more effective actions that reduce vulnerability to climate change. This requires sound regulations and policies, as well as effective institutions and processes to draft, implement, monitor and enforce them. Therefore, the Agency will support efforts to integrate climate information and analysis into inclusive, transparent decision-making processes that respect the rights of and provide adequate remedies to those potentially negatively affected by those decisions. USAID will promote improved public communication and education, and strengthened advocacy at the community, civil society, and private sector levels to influence climate change decision-making. The Agency will support processes that include a broad range of partner-country stakeholders in consultation and in decision-making, including women, vulnerable populations, indigenous peoples and other ethnic minorities. This will include working with government ministries and agencies concerned with climate change to ensure that they engage in adequate and broad-ranging consultation at the planning stage and during implementation of

## IR 2.3 Identify and take actions that increase climate resilience

The global community has not had the benefit of decades of experience to learn from activities explicitly designed to reduce climate change vulnerability. Yet despite the fact that this field is a relatively new one, actions can build on USAID's work in climate-related fields. For example, USAID's experience in disaster risk reduction provides a solid foundation for expanded efforts to build resiliency by helping the most vulnerable populations adapt to and avoid climate change impacts, and to quantify the costs associated with increasing climate change risks (see text box below). Many years of leadership in biodiversity conservation and natural resources management inform climate-sensitive approaches to land use planning and sustainable use of natural resources such as

### Climate Vulnerability and Disaster Risk Reduction

Floods, droughts, cyclones, and extreme temperatures constitute over 75% of all natural disasters globally and affect over 200 million people annually. These types of disasters are expected to intensify with climate change. Although fatalities due to these types of disasters have decreased significantly due to disaster risk reduction (DRR) efforts, economic losses and number of people affected adversely have increased sharply during the last decades due to both non-climatic and climatic factors. Climate change is expected to change the frequency, intensity and duration of extreme events, exacerbating current vulnerability and potential exposure to disasters when combined with other stressors including population growth, rapid and unplanned urbanization, environmental degradation, natural resource depletion, lack of governance, and limited opportunities for economic development. USAID will support activities to link DRR activities (addressing vulnerability in the short term) with climate change adaptation activities (building resiliency in the long term).<sup>18</sup>

forests and water. Recognizing that this is an emerging field and that adaptation needs will vary considerably with local circumstances, USAID will support site-specific on-the-ground actions to reduce climate vulnerability. Among actions that could be supported are assistance to communities to prepare climate change adaptation plans; support for economic alternatives where livelihood activities are affected by climate change; development and dissemination of socially and culturally appropriate adaptation measures; and strengthening of environmental conservation actions that protect natural ecosystems on which human development depends. In all cases, such actions will be predicated upon a vulner-

ability assessment that provides the analytical basis for taking action, including cost-benefit analyses of tradeoffs.

Evaluation of these investments will consider potential for replication and scaling up and the sharing of lessons more broadly. USAID will support vulnerability assessments both as sector-specific analysis (for example, in food security) and as part of country-wide planning processes (such as by consideration in country development cooperation strategies to help identify where USAID should focus investments).

### SO 2 ILLUSTRATIVE MEASURES OF SUCCESS (2012-2016)

- Increased number of institutions with improved capacity for adaptation planning and response
- Decision makers develop greater access to and improved capability to utilize climate data and forecasting
- Number of partner country scientists working in climate change-related fields increased
- Increased engagement of vulnerable stakeholders in climate change responses
- All USAID missions address priority climate vulnerabilities in country development cooperation strategies

### SO 2 LONG TERM GOALS (BEYOND 2016)

- Increased partner country investments in climate-resilient development in key economic sectors
- Reduced economic and social losses from climate variability and change
- Climate change planning and decision making in partner countries is inclusive and transparent and responds to the needs of its citizens
- Actions to build climate resilience scaled up from pilot efforts to systemic adoptions
- Private sector incentivized to invest in climate resilient growth

<sup>18</sup> World Disasters Report: focus on information in disasters. International Federation of Red Cross and Red Crescent Societies, London, Eurospan, 2005.



### **STRATEGIC OBJECTIVE 3:** **Strengthen development outcomes by integrating climate change in Agency programming, learning, policy dialogues, and operations.**

The main focus of the first two SOs of this strategy is to help partner countries better address the challenges and opportunities of climate change. In order to most effectively support these efforts, USAID itself must undergo a parallel effort to improve its own capacity to better address climate change and development. The three intermediate results under this SO will help USAID undertake the institutional reforms that are essential to strengthening core competencies and achieving the goal of supporting climate resilient, low emission development. These actions are in keeping with the guidance of the Interagency Climate Change Task Force, convened under the authority of Executive Order 13514, which explicitly calls for the integration of climate change considerations into programming by all federal agencies.

#### **IR 3.1 Integrate climate change across USAID's development portfolio**

#### **IR 3.2 Elevate the role of development in climate change dialogues and policies.**

#### **IR 3.3 Lead by example through adoption of low emission and energy-saving operations**

#### **IR 3.1 Integrate climate change across USAID's development portfolio**

Climate change is a stressor that can affect the development outcomes of all Agency programs. With its potential impact on food and water availability, population movement, conflict, economic growth, international trade, and human health, climate change creates the imperative for a new operating environment for development assistance and requires broad issue ownership within USAID. It also provides compelling justification for moving beyond short-term planning, implementation, and monitoring and evaluation horizons to those that take a longer-term view.

Integration of climate change into USAID's development portfolio will not happen organically; rather, it requires leadership, knowledge and incentives to encourage Agency employees to seek innovative ways to integrate climate change into programs with other goals and to become more flexible in use of funding streams and administrative processes. USAID has experience relevant to the climate change and development nexus, in such areas as democracy and governance, stakeholder participation, education, health, gender equity, food security, micro-enterprise, clean energy, economic growth and natural resources management.

This experience, combined with the Agency's strong field presence, makes USAID well-qualified to test and refine approaches to integrating climate change mitigation and adaptation across sectors.

Agency field missions' relationship with local stakeholders and nuanced understanding of partner country development challenges allows staff to appreciate the complex relationships between a particular development challenge and the potential obstacles to success posed by climate change.

Significant benefits also accrue from integrating other sectoral skills and knowledge, such as from disaster risk reduction (DRR) and democracy, human rights and governance (DRG), into climate change programming. In the past, successful integration has happened where there were champions who recognized that they could increase impact and achieve sustainable, resilient development solutions that addressed inter-related issues simultaneously. These champions found ways, in spite of bureaucratic and administrative hurdles, to make the integration happen.

With the release of this strategy, and the provision of tools, technical support and incentive funding described below, USAID will work to include climate change considerations into its broader decision-making, planning, and programming.

USAID is supporting pilot activities that will deepen USAID experience with integration of climate change into other development sectors. For example, the first integration pilots proposed by missions will be funded early in 2012. These efforts seek to increase impact, effectiveness, and sustainability of development interventions by addressing climate-related risks, vulnerabilities, and opportunities in sectoral programs. These efforts will also test new ways of doing business that put an emphasis on longer-term integrated planning and that reduce "stove-piped" programming through sharing of financial resources, staff, implementing mechanisms, or outcomes (see implementation roadmap for further information). Technical support and training will be made available to field missions to support integration (see implementation roadmap below for more information).

### **ILLUSTRATIVE EXAMPLES: OPPORTUNITIES FOR IMPROVED INTEGRATION**

#### ***Climate Change and Food Security***

Agricultural activities designed to improve productivity should incorporate programming around adaptation to climate change impacts such as altered temperature or rainfall regimes. Likewise, agricultural activities can simultaneously be designed to reduce greenhouse gas emissions through changes in energy usage, tillage, irrigation, and fertilizer application. Such interventions can save farmers costs for irrigation and fertilizer; reduce land clearing; increase per-animal productivity through attention to feed efficiency; and improved productivity and efficiency through on-farm energy production. These gains may also allow women and children more time for education and income-producing activities. Activities to support the integration of food security and climate change efforts may include collection of data such as changes in water table and soil carbon content, analytical tools, and technical assistance for partner country scientists and farmers to develop climate-resilient and low-emission agricultural planning. Areas for learning include expanded monitoring



of climate vulnerability and resilience indicators, and evaluation of climate-resilient and low emission methods and systems. The GCCI will work with the Feed the Future Initiative on a research agenda as it relates to climate change, including research on adaptation of crops to climate impacts and mitigating impacts of agriculture on greenhouse gas emissions.

### **Democracy, Human Rights, and Governance (DRG) and Climate Change**

Democracy and good governance are critical to enable countries and private actors to move toward a climate-resilient, low-emission development trajectory. Effective governance of natural resources lies at the heart of sustainable landscapes programming; large-scale investment in clean energy will require an enabling environment that includes appropriate policies, laws, regulations, and institutions; and successful adaptation efforts have long been rooted in participatory, stakeholder-driven processes. To address these challenges, the Agency's DRG and climate change experts will work together on a range of activities. For example, efforts to foster the effective governance and climate resilience of natural resources and the use of clean energy could include activities that support public awareness, the development of a free press, engagement with advocacy by civil society groups, the demonstration of sound financial and results-based management and the adoption, enforcement and oversight of laws and policies. Further, because climate change presents new challenges for the DRG sector (e.g., see box on Climate Change and National Security), we expect activities to include innovative integration efforts to address emerging problems and evidence summits to identify the state of the art in DRG thinking with regard to climate change. Potential areas for learning include the incorporation of DRG programming into flood and drought disaster risk reduction programs, decision support for governments designing national adaptation plans, and the development of effective, transparent governance regimes for forest resources in the context of REDD+ programs.

### **Climate Change and Disaster Risk Reduction**

Effective disaster risk reduction is a critical means of protecting vulnerable populations from the effects of a changing climate. USAID's years of experience reducing vulnerability to climate extremes, for example by working on climate prediction and applications such as early warning systems, (e.g., see box "Examples of USAID investments in science and analysis for decision making") will be integrated with longer-term adaptation planning to create sustainable interventions that address acute disaster risks and serve as a foundation for robust sustainable development. USAID has effectively supported this work in the context of food security and drought risk management. For example, through the Intergovernmental Authority on Development (IGAD) Climate Prediction and Applications Center (ICPAC), the Agency supports the development of consensus regional climate outlooks for a 3 to 6 month timeframe. Integration efforts could extend such activities to long-range adaptation planning in other disaster-sensitive areas such as hydropower planning or health. Potential opportunities for learning include integrating new Agency efforts to better organize and present climate information for decision-makers to inform adaptation decision-making with existing Agency-supported early warning climate data initiatives and expertise.

### **Climate Change and Water Supply, Sanitation, and Hygiene (WASH)**

The effective planning and management of water and sanitation systems requires anticipating the potential effects of both climate-related stressors, such as less predictable rainfall and water flows, and non-climate stressors such as population growth, pollution, and conflict on the quality, quantity, and predictability of water resources. Climate and water experts are working to incorporate change information into the risk management process and identify opportunities and priorities for better climate resilience in the WASH portfolio. Potential analyses include risks of extreme weather events (e.g., storms, floods, drought), saltwater intrusion into drinking water supplies, and decreasing water availability from melting snowpack and glaciers on water and sewage infrastructure, water supplies, and water storage. Areas for learning include alternatives for climate-sensitive design of water storage systems, best practices for incorporating weather and climate information into water and sanitation utility operations and management systems, water use efficiency measures, and opportunities to identify populations most in need of water/sanitation services given a changing climate.

### **Climate Change and Health**

Healthy communities and populations are key to adapting to climate change; at the same time it is important to ensure that USAID's health investments are resilient to climate impacts. Health decision-makers in developing countries need knowledge and skills to understand and anticipate health-related climate impacts on key sectors such as health systems strengthening, malaria and other infectious diseases, and community health, particularly the health of vulnerable populations including women and children. Potential areas for USAID learning include capacity-building of key health stakeholders to understand and anticipate climate change impacts and develop climate-resilient health policies and plans in key sectors such as maternal and child health and malaria prevention. This work could assist policymakers to implement climate-resilient health plans for the most vulnerable communities to demonstrate how to build adaptation into health sector planning and implementation.

### **Climate change and Biodiversity**

Biodiversity conservation and climate change mitigation can be mutually reinforcing if strategically designed. Programs to conserve biodiverse forests help to create core refuges for important tree species and ecological processes that help sustain broader landscape functioning and ecosystem services such as clean water, pollinators, and carbon sequestration. However, highly biodiverse areas may not always be the locations with the greatest potential to enhance carbon sequestration or potential to prevent large greenhouse gas emissions to the atmosphere (e.g., from deforestation). USAID will demonstrate an approach in selected countries that uses climate change funds to add emissions accounting to existing biodiversity conservation programs so that the climate change impacts of Agency biodiversity work are better understood. The Agency is also focusing on activities that lead to an overall enhancement of tree cover—and therefore carbon sequestration—across the landscape, including increasing understanding of the drivers of land use change and associated greenhouse gas emissions and promoting economic

growth and livelihoods that reduce pressure on forests. A particular focus of this effort will be piloting integration with other donor efforts in the REDD+ arena. USAID will actively seek to integrate its programs into partner government efforts at national REDD+ readiness, and will demonstrate how to leverage other multilateral financing like the Forest Investment Fund and the Forest Carbon Partnership Facility.

### **Joint mitigation-adaptation pilots**

It is important to recognize that all countries will experience both mitigation and adaptation challenges to varying degrees and that in many situations there are opportunities to address both together. For example, efforts to develop hydropower in Critical Priority Countries (CPCs) could incorporate attention to water availability and quality, thus addressing an important climate vulnerability in these countries. Food security pilots could incorporate attention to mitigation by considering effective methods to reduce water and energy usage in agricultural production.

## **IR 3.2 Elevate the role of development in climate change dialogues and policies.**

The current U.S. National Security Strategy recognizes that development is a core pillar; together with defense and diplomacy, of national security policy. It is therefore imperative to ensure a strong development voice in the debates and dialogues that shape that policy. The President's Global Development Policy recognized this when it called for the rebuilding of USAID into the world's preeminent development Agency and gave USAID a seat at the interagency table to ensure that development expertise is fully considered in foreign policy-making. This gives the Agency opportunities to incorporate a development perspective into foreign policy debates and international dialogues related to climate change.

USAID's participation in these dialogues is meant to ensure that development considerations are given due attention in climate change deliberations and that international discussions are shaped in ways that provide support to developing countries facing climate change challenges. The development perspective that USAID brings is informed by the lessons learned and evidence gathered from activities the Agency implements in the field as well as by best available knowledge from the global scientific and technological community. There is thus a cyclical relationship, in which international commitments around climate change help shape USAID's priorities, while the Agency's field experiences and technical expertise help shape international decision-making processes.

USAID will continue to play an active role in the whole-of-government management of the GCCI. The Agency will also work with partners to give climate change drivers and impacts due consideration in other development policy dialogues, including the investment policies of the multilateral development banks, the export credit agencies (OPIC, EXIM), and the Millennium Challenge Corpo-

ration, so that issues of sustainability, mitigation of emissions, climate change resilience, and reduced vulnerability are fully addressed. While USAID plays a supporting role in the UNFCCC negotiations, the Agency will seek to engage more actively in other international processes and with other international partners, such as the Organization for Economic Cooperation and Development (OECD), the international Group on Earth Observations (GEO) and the World Meteorological Organization (WMO). Both in Washington and at the field level, USAID has already increased outreach with the broader community of climate change and development stakeholders, including NGOs, advocacy groups, private sector entities, and university partners, demonstrating intellectual leadership on subjects including low-emissions development strategies, adaptation and disaster risk reduction, and REDD+. The Agency will continue to share its technical excellence broadly by engaging with both US-based and overseas organizations that are eager to sustain a dialogue with USAID on issues at the leading edge of climate change and development.

In particular, USAID will prioritize its work on the intersection of climate change and development within four policy arenas:

1. **Within the Agency**, so that USAID speaks with a coherent and informed voice.
2. **Within the U.S. Government**, as US foreign policy is established.
3. **In international processes**, to ensure that the development agenda is incorporated into all relevant climate change forums.
4. **Within the broader community of climate change and development stakeholders**, including NGOs, advocacy groups, private sector entities, and university partners.

## **IR 3.3 Lead by example through adoption of low emission and energy-saving operations**

USAID can demonstrate the advantages of adopting low emission practices by making adjustments to its operations domestically and internationally. Doing so would help send a signal of commitment to partner countries that addressing global climate change is a shared challenge. Through the 2009 Presidential Executive Order (EO) 13514 promoting "Federal Leadership in Environmental, Energy and Economic Performance," the President has asked the Federal government to lead by example by taking actions to decrease its environmental footprint. The EO makes reductions of greenhouse gas emissions a priority of the Federal government. In response, the Agency has submitted a sustainability plan<sup>19</sup> to reduce emissions from employee air travel and commuting, improve water use efficiency, enhance recycling and reduce power use by electronic equipment in its DC operations. While the EO mandates that the Agency address the climate impacts of its Washington-based operations, additional steps have been taken voluntarily by USAID missions to reduce the environmental footprint of overseas operations.

<sup>19</sup> <http://www.usaid.gov/sustainability/>

<sup>20</sup> Agency Environmental Procedures [http://www.usaid.gov/our\\_work/environment/compliance/22cfr216.htm](http://www.usaid.gov/our_work/environment/compliance/22cfr216.htm)

### Mission leadership on environmental design

The Regional Development Mission for Asia (RDMA) has been awarded a Leadership in Energy and Environmental Design (LEED) silver certification for its new facility. The Commercial Interiors certification, from the U.S. Green Building Council, certifies that this office meets the world's highest environmental standards in energy savings, water efficiency, indoor air quality, and reduction of greenhouse gas emissions. USAID/ RDMA is the first LEED silver certified commercial interior in Thailand. Construction was conducted by partnering with Thai companies to develop local expertise in LEED certification and technologies, serving as a model for the country's designers, suppliers and contractors.

### Integration pilot: climate smart missions

USAID will solicit interest from operating units interested in becoming climate smart missions. These missions will receive funding and technical support to integrate climate change across Mission activities and operations. Integration requires analysis and adjustment throughout the planning, implementation, monitoring and evaluation of programs and activities. Therefore, joint ownership of the climate smart pilot by all Mission employees, not just the Mission's environment staff, is essential to success. All Mission programs and operations will be screened for their sensitivity to climate change impacts, their potential to contribute to emissions reductions and carbon sequestration; and opportunities to minimize USAID's environmental footprint in the partner country. Lessons about necessary changes to Agency regulations and methods to motivate staff to achieve these goals will inform efforts to bring this model to scale at the Agency level.

## SO 3 ILLUSTRATIVE MEASURES OF SUCCESS (2012-2016)

- Best practices, tools, and methods captured from pilots are shared broadly within USAID
- Strategies, programs, and initiatives across USAID's portfolio incorporate climate change considerations into planning and program implementation
- Officers across a wide variety of backstops are trained in integration of climate change into their programs
- 22 CFR 216, FAA 118-119<sup>21</sup>, and other planning and analytical requirements incorporate climate change considerations as appropriate
- USAID staff actively participate in and influence national and international climate change and development dialogues
- USAID's carbon footprint is reduced in selected operating units
- USAID's emissions from business air travel (against a FY2009 baseline) are reduced by 7% from 2010-2012
- USAID/Washington has replaced fluorescent light tubes in the Ronald Reagan Building (RRB) from the current 33 watt models to 25 watt ultra-low mercury models
- Motion sensors on light switches installed throughout the USAID RRB space
- Increased opportunities for telecommuting and alternative work schedules

## SO 3 LONG TERM GOALS (BEYOND 2016)

- Impact, effectiveness, and long-term sustainability of USAID's development interventions enhanced through consideration of climate change
- Improved resilience to climate risks and vulnerabilities in targeted sectors
- Sectoral programs and initiatives allocate their own resources to ensure climate considerations are incorporated into the design, implementation, and evaluation of their activities
- Relevant mission staff in priority countries have climate change-related work objectives and/or performance measures

<sup>21</sup> Tropical Forestry and Biodiversity Analyses required by Foreign Assistance Act of 1961, as amended by Sections 118 and 119  
[http://www.usaid.gov/our\\_work/environment/biodiversity/118\\_119\\_analyses.html](http://www.usaid.gov/our_work/environment/biodiversity/118_119_analyses.html)

# V. A ROADMAP FOR IMPLEMENTATION

The GCCI has already identified priority missions and regional programs for mitigation and adaptation activities (SO 1 and SO 2) funded with direct climate funding. Priorities were identified according to criteria for each of the three “pillars” of GCCI – clean energy, sustainable landscapes, and adaptation (see Annex 1 for details). Reflecting these priorities, the following are countries where the GCCI focused its efforts, during Fiscal Year 2011:

## **Clean Energy:**

**Missions:** Armenia, Bangladesh, Brazil, Colombia, Georgia, India, Indonesia, Kenya, Mexico, Philippines, South Africa, Ukraine, Vietnam

**Regional platforms:** East Africa, Southern Africa, West Africa, Regional Development Mission-Asia, Regional Development Mission – Pacific, Eurasia, Europe, South Asia, Central Asia

## **Sustainable Landscapes:**

**Missions:** Brazil, Cambodia, Colombia, Ecuador, Ghana, Guatemala, Honduras, India, Indonesia, Malawi, Mexico, Nepal, Peru, Philippines, Vietnam, Zambia

**Regional platforms:** Central Africa, West Africa, Regional Development Mission-Asia, Central America, South America

## **Adaptation:**

**Missions:** Bangladesh, Barbados and the Eastern Caribbean, Cambodia, Colombia, Dominican Republic, Ethiopia, Guatemala, India, Indonesia, Jamaica, Kenya, Malawi, Maldives, Mali, Mozambique, Nepal, Peru, Philippines, Rwanda, Senegal, Tanzania, Timor-Leste, Uganda, Vietnam

**Regional platforms:** East Africa, Southern Africa, West Africa, Regional Development Mission-Asia, Regional Development Mission – Pacific.

USAID expects all operating units, regardless of whether they program direct climate change activities, to integrate climate resilient, low emission development into their portfolios. The Agency will make climate change funding, training, and/or technical assistance available for this effort, since lessons learned from past integrated programming efforts demonstrates the need for additional resources, staff time, incentives, and training. The Agency also intends to scale up from lessons learned from its climate change activities in the above-mentioned countries to improve programs in the rest of the Agency’s partner countries.

The following roadmap for implementation highlights the most critical steps necessary for integration. The Agency Global Climate Change Coordinator will work closely with technical experts and

Agency leadership across the pillar and regional bureaus and missions to address the following issues: 1) awarding integration pilot activities; 2) implementing guidance for country development cooperation strategies and project design; 3) developing a research agenda, 4) implementing an evaluation and learning plan, 5) creating new partnerships, and 6) conducting more robust inreach and outreach. To do this, the Global Climate Change Coordinator will lead a process to more formally identify roles and responsibilities as well as a governance structure within the Agency for implementation of this strategy. While this process will clarify roles and responsibilities of relevant bureaus, the implementation roadmap below indicates the actors who will lead in each case.

## **I) SELECT AND DESIGN PILOT ACTIVITIES FOR INTEGRATION**

The Climate Change Coordinator is coordinating with technical experts throughout the Agency as well as relevant bureau leadership to solicit proposals from Missions for pilot programs to test new approaches to climate change integration. Selected pilots will emphasize integration with other top Agency priorities such as the two other Presidential Initiatives (Feed the Future and the Global Health Initiative), sustainable economic growth, water, gender, democracy and governance, youth, and security. Pilots will be selected for funding by an internal panel of experts from regional and functional bureaus with expertise in climate change integration across the Agency’s development portfolio. Selected proposals will focus on integration of top priorities in the Agency’s portfolio, garner regional bureau, functional bureau and Mission interest and leadership, and demonstrate potential to generate integration lessons and tools over the next one to four years. Their results will inform the priorities of USAID’s climate change and development strategy after 2016. Evaluation plans for these integration pilots will comply with the Agency’s new evaluation policy and will test the validity of the development hypothesis underpinning pilot design and ensure that lessons learned are shared for adaptive management. Awards for the winning proposals will be made in early 2012.

## 2) DEVELOP GUIDANCE FOR COUNTRY STRATEGIES, PROJECT DESIGN, AND OTHER AGENCY POLICY INSTRUMENTS

For integration to be successful, climate change considerations must be incorporated at key points in the programming cycle, especially strategic planning and project design. Countries formulating country development cooperation strategies (CDCS), regardless of whether or not they receive direct funding for climate change, should consider the potential impacts of and opportunities provided by climate change in their portfolio. Similarly, projects in climate-sensitive sectors, including agriculture, health, water management, disaster risk reduction, natural resources management, and infrastructure, should incorporate climate change considerations into the design and implementation of activities. PPL is consulting with the Global Climate Change Coordinator, technical experts and program offices to develop guidance on climate change that will be incorporated into the broader CDCS guidance and project design guidance and training.

To support integration efforts, comprehensive thinking about Agency environmental requirements is required. In consultation with the Agency Environment Coordinator, Bureau Environmental Officers from across the Agency will review core Agency environmental procedures under the National Environmental Policy Act (NEPA, such as 22 CFR 216) to make recommendations as to whether and how required environmental impact assessments should be altered to explicitly address climate change. The Council on Environmental Quality (CEQ) supports a flexible approach that defers implementation to individual agency discretion adhering to NEPA's "rule of reason."

USAID is committed to transparency in its climate change programming and to reporting its investments and results to the American public and the international community. In accordance with the principles of streamlining, the Agency will work closely with the Streamlining committee to ensure that all reporting requirements related to this strategy can be met through planning and reporting systems utilized by the Agency.

## 3) DEVELOP A CLIMATE CHANGE AND DEVELOPMENT RESEARCH AGENDA

It is imperative that Agency investments in climate change be evidence-based, but given that climate change programming is a relatively new area of action, there are many data gaps. EGAT's climate change team will develop a rapid survey of perceived needs for applied research on climate change and development within the Agency and among USG partners and key external stakeholders (including other donors and civil society partners). Based on these findings, EGAT will work in consultation with the Global Climate Change Coordinator, technical experts from throughout the Agency, and PPL's Office of Science and Technology to develop a research strategy that will identify a set of core

questions and identify financial resources, either centrally managed or country-based, to address these questions. The strategy will include a plan for leveraging the resources of the U.S. federal science community.

## 4) IMPLEMENT AN EVALUATION AND LEARNING PLAN

USAID has a responsibility to use its climate change funds to achieve the greatest impact per dollar spent. EGAT will work closely with PPL's Learning, Evaluation, and Research Office and in consultation with the Agency Global Climate Change Coordinator and other bureaus to design a monitoring and evaluation plan consistent with USAID's new evaluation policy to assess success, scalability, and replicability of direct climate change programming and integration activities. To the extent possible, the evaluation plan will incorporate impact evaluations of the largest investments, including a significant subset of countries selected for LEDS and REDD+ investments. USAID will identify and if necessary design indicators to monitor program performance over time. The evaluation plan will not only ensure accountability for the results achieved with USAID's climate change investments, but will also serve as a principal input into a broader learning agenda, to be developed by EGAT in consultation with the Agency Global Climate Change Coordinator, PPL and the Agency's technical experts:

- evaluation of past climate change programs and other relevant examples of integrated programming to glean lessons that will inform USAID's next generation of programming
- a series of workshops around critical topics, such as best practices for vulnerability assessments, index measures of climate vulnerability, and tools for the assessing the economic impacts of climate change and climate change programs
- exchange of lessons learned with other major actors in the climate change space,
- development of new curricula to train development professionals from a variety of disciplines to understand climate change, its potential impacts on development gains, and opportunities to spur low emission, climate resilient development

## 5) CREATE NEW PARTNERSHIPS

USAID's resources for climate change are limited relative to the scope of the overall need, to those of other donors (see Annex 1), and to potential investments by the private sector. Partnerships are therefore critical to success, and all operating units are encouraged to engage proactively in diverse partnerships around climate change, with other federal agencies, with the private sector, and with other donors. The Agency already has robust interagency partnerships that tap into the research and technical expertise of many agencies, such as the Department of Energy, US Environmental Protection Agency, US Department of Agriculture, National Oceanographic and Atmospheric Administration, and US Forest



Service. These agencies can provide targeted technical assistance for field programs and contribute in important ways to the Agency's climate change research agenda.

USAID has also entered into several partnerships with private sector organizations, including alliances with important energy utilities and trade associations, who offer valuable peer-to-peer relationships with counterparts in developing countries where USAID works. Operating units should actively seek out private sector alliances that offer opportunities to leverage public funds and to support innovation in areas such as clean energy technology, insurance, and information technologies towards the goals of significant greenhouse gas emission reductions and significant adaptation investments.

According to the World Youth Report<sup>22</sup>, "addressing and adjusting to the challenge of climate change is certain to be a defining feature of the future of today's youth", who are key stakeholders in the response. Recognizing the active manner in which this constituency is already engaging in such international forums as the UNFCCC and the Rio 2012 conference on sustainable development, USAID's climate and youth experts will work together to partner with youth organizations to bring awareness to the impacts of climate change on youth and the opportunities it poses for young entrepreneurs, advocates, students, and others.

Finally, in collaboration with the Department of State and National Security Staff, PPL will work with the Bureau's Office of Donor Engagement and in consultation with the Agency Global Climate Change Coordinator and technical experts to develop a plan for more proactive coordination with other donors to work, as the Global Development Policy calls for, towards a more effective division of labor among those working on climate change.

## **6) CONDUCT ROBUST INREACH AND OUTREACH**

Success of this strategy depends both upon projecting USAID intellectual leadership externally and on expanding understanding of the importance of climate change to development goals internally.

To ensure USAID is a strong intellectual presence in climate change discussions, the Agency will expand its efforts to convene diverse groups with an interest in climate change and development issues; hosting seminars, evidence summits, and other events to exchange information about lessons learned and best practices; and participating actively in national and international dialogues, negotiations and other forums. Devoting staff time to such outreach will require support from Agency leadership throughout the organization and may require additional program-funded staff in various bureaus.

USAID, represented by the Agency Global Climate Change Coordinator and PPL's climate policy advisor, will continue to play an active role in the interagency policy committee leading the GCCI and will work closely with the Departments of State and Treasury to more closely coordinate bilateral efforts with diplomatic and multilateral efforts. USAID will utilize expertise within the Democracy, Conflict and Humanitarian Assistance (DCHA) Bureau on security, conflict and military affairs to seek out effective ways to enhance relations with the Department of Defense and the intelligence community, which are focusing greater attention on climate change impacts that may contribute to instability or conflict as well as intensify impacts of natural disasters that may lead to expensive military intervention.

Internally, EGAT's climate change team, in consultation with technical experts from throughout the Agency, will continue to lead efforts to incorporate modules on climate change into training of new foreign service officers and other employees across a wide range of backstops, and will continue to provide on-line resources, publications, methodologies, and tools for use throughout the Agency. With support from the Bureau of Legislative and Public Affairs (LPA), this effort will also include implementation of a communications strategy that includes speeches, publications, and public appearances by the Agency Global Climate Change Coordinator and other Agency climate change experts.

EGAT will help the Management (M) Bureau to develop an education campaign, including methods to disseminate the experiences of trail-blazing USAID missions such as the Regional Development Mission for Asia (RDMA) to educate staff and external audiences about the best practices derived from these efforts. EGAT, together with PPL's Science and Technology Office will support M Bureau in its actions in response to Executive Order 13514 on sustainability of federal agencies, such as analyzing Agency emissions and identifying the most important mitigation opportunities. EGAT will support the M Bureau to design incentives or rewards for operating units that demonstrate leadership in this area.

<sup>22</sup> <http://www.un.org/esa/socdev/unyin/documents/WYR2010Final%20online%20version.pdf>



# ANNEX I

## POLICY CONTEXT

The United States has joined 139 other countries in agreeing to the 2-page Copenhagen Accord, negotiated at the 15th Conference of the Parties (COP) to the UN Framework Convention on Climate Change (UNFCCC), and made a significant financial commitment (“Fast Start Funding”, described in more detail below) at the COP in support of both mitigation and adaptation. Thus far, 81 Parties have inscribed commitments or actions to limit or reduce greenhouse gases, representing more than 80 percent of global greenhouse gas emissions; the U.S. inscribed a commitment to reduce domestic emissions by 17 percent by 2020. The Copenhagen Accord emphasized a “strong political will to urgently combat climate change in accordance with the principle of common but differentiated responsibilities and respective capabilities” including actions for both developed and developing countries. It recognized the need for deep cuts in greenhouse gas emissions by all and the need to help vulnerable countries build resilience to climate change, especially least developed countries and small-island developing states. The Accord also stated that “a low emission development strategy is indispensable to sustainable development” showing a major shift in political will at the highest levels.

The international community took an even more significant step at the 16th climate change COP in Cancun in December 2010. During COP-16, the advances of the two-page Copenhagen Accord were expanded into a detailed 29-page formal decision under the UNFCCC. The Cancun agreements set out a work program to guide progress toward a new global agreement, anchored mitigation targets pledged by developed countries and mitigation actions pledged by developing countries, launched the establishment of a new green climate fund to help developing countries address climate change, created a framework to reduce emissions from deforestation in developing countries, established an important mechanism to promote environmentally sound technologies, and set up a framework to promote international cooperation on climate adaptation.

At the 17th UNFCCC COP in 2011, the international community came together to produce the “Durban Outcome,” a package of decisions that speak to both the near- and long-term global efforts to combat climate change under the UNFCCC, and help to operationalize the principles set forth in the 2009 Copenhagen Accord and 2010 Cancun agreements.

Other bilateral and multilateral partners have made significant commitments in terms of development assistance to help address the challenge of climate change, although types of finance provided and rates of disbursement vary among donors:

- The European Union has pledged \$3.36 billion per year over 2010-2012, much of it for adaptation for small island developing states, and the rest for mitigation-related efforts in developing countries around the world including monitoring, reporting, and verification; REDD+; low emission development strategies (LEDS); carbon market mechanisms; and technical cooperation.
- The UK Department for International Development (DfID) has announced an Advocacy Fund to help poor countries participate in international climate change negotiations. The UK is working on two new public-private partnerships that will target low-carbon and adaptation investments in Asia and large-scale renewable energy in Africa. DfID has also called on all of its country offices to carry out a climate change strategic review of its entire portfolio.
- The Swedish International Development Cooperation Agency (SIDA) has pledged \$168 million over four years for climate change adaptation efforts.
- Japan has made commitments of \$15 billion over three years, including concessional loans; much of that money will be channeled into mitigation efforts, with smaller amounts going to REDD+ and adaptation efforts.
- Norway’s International Climate and Forest Initiative seeks cost-effective and verifiable GHG emissions reductions from deforestation and forest degradation in developing countries, and is partnering with countries such as Indonesia (\$1 billion alone), Brazil, Mexico, and Guyana, and with existing funds such as the Congo Basin Forest Fund and Forest Carbon Partnership Facility in these efforts.
- The Department of Treasury is the primary vehicle by which the U.S. government provides contributions through multi-lateral delivery channels, many of which are trust funds managed by the World Bank. These funds include the Global Environment Facility (GEF), the Climate Investment Funds (CIFs) (consisting of the Clean Technology Fund, the Program for Scaling-up Renewable Energy in Low Income Countries, the Forest Investment Program, and the Pilot Program for Climate Resilience); and the State Department allocates funding to the Least Developed Countries and Special Climate Change Funds.

- Together the Department of Treasury, Department of State and USAID lead the whole-of-government implementation of the United States' Tropical Forest Conservation Act (TFCA) debt relief program, which supports REDD+ efforts.

Fast Start Financing refers to the collective commitment by developed countries to provide resources to developing countries approaching \$30 billion in the period 2010-2012.. The US committed to join other developed countries in providing funding for adaptation and mitigation approaching \$30 billion over three years (FY10-FY12). Fast Start Financing includes direct appropriations received by USAID, other grant-based assistance that contribute measurable results to climate change objectives and are reported as such, and funding contributed by other USG Agencies including Department of Treasury, Department of State, OPIC, EXIM, and others.

USAID has worked to develop a strategic approach to the allocation of its climate appropriations in keeping with the President's imperative as expressed in the Global Development Policy to focus and concentrate development investments for maximum impact. For example, USAID has established "floors" or minimum funding levels for adaptation and mitigation. With limited exceptions, missions receiving Fast Start funding will receive no less than \$3m/fiscal year in adaptation funding and no less than \$5m/fiscal year in combined clean energy or sustainable landscapes (mitigation) funding. USAID has also established partner country commitment to low emission, climate resilient growth as a criterion for investment. The Agency will not invest climate change funds in the absence of clear partner country willingness to make the changes necessary to achieve this goal and to invest its own financial and human resources in doing so.

Selection criteria used to guide funding decisions included the following:

## Clean Energy

### ■ Emission Reduction Potential

- Energy- or carbon - intensive economies, measured by high emission levels
- Economic growth trajectory indicative of potential future high emissions levels
- Renewable energy potential and commitment to implementing clean energy programs

### ■ Enabling Environment

- Substantial national resources available to fund their own clean energy programming (predominantly through the private sector, but with complementary public investment)
- Partner country ability to demonstrate leadership in large-scale deployment of clean energy

- Partner country willingness to reform energy regulatory frameworks to include renewable energy sources and to support energy efficiency
- Partner country interest in partnering with the US to enhance capacity for low emission development.
- Harmonization and alignment with other donors
- Diplomatic and geographic considerations

Using these criteria, USAID will work in a mix of major emitters and countries with the commitment to reducing emissions through energy efficiency and development and deployment of renewable energy sources. The Agency will also invest more heavily in regional clean energy programs to take advantage of the opportunity for larger-scale impacts provided by activities that address regional energy interconnections.

## Sustainable landscapes

- Mitigation potential: The extent to which the country has high forest-related emissions, could potentially have high emissions in the future, or has a large potential for increased carbon storage in forests and degraded lands.
- Market potential: The extent to which the country or sub-national location has near- or medium-term potential to participate in REDD+ carbon markets.
- Enabling Environment: The extent to which the country has appropriate policy structures in place, such as land and resource tenure and efforts to stem corruption.
- Political will: The extent to which the country is demonstrating political will to address climate change challenges.
- Coordination with other donors and multilateral efforts: Funding decisions are informed by an assessment of where other donors and multilateral efforts are focusing their investments.
- Demonstration potential: The extent to which successful pilot activities can be implemented in the country to generate best practices and test scalable models for achieving significant reductions in net emissions.
- Diplomatic and geographic considerations

Based on these criteria, REDD+ efforts are focused on countries with globally important forest landscapes (such as the Amazon basin, the Congo basin, and Southeast Asian forests), on high demonstration value activities (e.g. early movers able to demonstrate that results-based payments can be credible), and on monitoring, reporting, and verification (MRV) systems for forest emissions and market readiness. As noted above, in order to help meet the USG commitment to funding of REDD+, all sustainable landscapes funding is currently directed towards forested landscapes.

## Adaptation

- High exposure to physical climate change impacts
- Sensitivity to physical impacts because of socio-economic factors, such as high dependence on rain-fed agriculture or large populations in low-lying coastal areas
- Partner country capacity to respond to climate change or willingness to build core capabilities needed
- Partner country willingness to partner with the USG and/or potential to play a strategic role in shaping international climate change policy
- Harmonization and alignment with other donors
- Diplomatic and geographic considerations

Based on these criteria, USAID's direct investments in climate adaptation prioritize small island developing states (SIDS), least developed countries (LDCs), especially in sub-Saharan Africa, and glacier-dependent countries.

USAID is moving quickly to disburse climate finance in order to help address the urgent and immediate needs of the most vulnerable developing countries, as well as to help developing countries lay the groundwork for long-term, low-emission development. As investments made today will drive emissions trends for the next 20-40 years, we are working to make critical investments today that have short- and long-term transformative impacts and to scale up resources quickly by delivering assistance through existing funding channels and institutions, even as we work internationally to establish future climate finance arrangements.

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