ADDRESSING THE LINKAGES BETWEEN DEMOCRACY AND GOVERNANCE AND CLIMATE CHANGE MANAGEMENT

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Task Order: Addressing the Governance Dimensions of the Presidential Development Initiatives

CONTENTS

ACRONYMS

ADB	Asian Development Bank
AECEN	Asian Environmental Compliance and Enforcement Network
CO2	Carbon Dioxide
CAP-Scan	Capacity Scan institutional assessment tool
CCMP	Climate Change Media Partnership
CDM	Clean Development Mechanism
CEQ	Council on Environmental Quality
CH4	Methane
CSO	Civil Society Organization
DG	Democracy and Governance
DCHA	USAID's Bureau for Democracy, Conflict, and Humanitarian Assistance
DNA	Designated National Authority
DRC	Democratic Republic of the Congo
EPA	Environmental Protection Agency
FAO	Food and Agriculture Organization of the United Nations
FY	Fiscal Year
GCC	Global Climate Change
GHG	Greenhouse Gas
HFCs	Hydrofluorocarbons
IIED	International Institute for Environmental Development
IPCC	Intergovernmental Panel on Climate Change
LEDS	Low Emission Development Strategy
MfDR	Managing for Development Results
MSI	Management Systems International
N2O	Nitrous Oxide
NAC	National Adaptive Capacity Framework
NAMAs	Nationally Appropriate Mitigation Actions
NAPAs	National Adaptation Programmes of Action
NCCP	Natural Communities Conservation Act
NEPA	National Environmental Act Policy
NGOs	Non-Governmental Organizations
PES	Payment for Environmental Services
PFCs	Perfluorocarbons
RBM	Results-Based Management
REDD	Reducing Emissions from Deforestation and Forest Degradation
RL	Rule of Law
UN	United Nations
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
USCAN	US Climate Action Network
USAID	United States Agency for International Development
USCAN	US Climate Action Network
WMO	World Meteorological Organization
WRI	World Resources Institute

EXECUTIVE SUMMARY

This paper was commissioned by the United States Agency for International Development's Bureau for Democracy, Conflict, and Humanitarian Assistance (USAID/DCHA) to explore the linkages between democracy and governance (DG) and climate change programming. The paper identifies the democracy and governance linkages related to climate change programming and suggests program approaches that can be used to address the challenges.

A.   Background

Climate change will have serious consequences the world over and its effects will be severe in many developing countries. Rainfall will become more variable and water scarcity will increase, impacting agricultural production and increasing the potential for conflict over scarce resources. Sea level rise and increased storm intensity will increase coastal inundation, leading to loss of life and catastrophic infrastructural and economic damage, and developing countries will be forced to increase allocations of scarce resources to disaster response and climate change adaptation. Developing countries, many of which have a strong economic and livelihood reliance on agriculture, will be particularly hard hit.

Developing countries' poverty alleviation efforts, as well as USAID's development agenda, will be significantly affected by climate change. For well over a decade, USAID has helped partner countries mitigate greenhouse gas emissions and adapt to the impacts of climate change; however, with the declaration of climate change as one of three presidential initiatives to be pursued under the current administration, USAID's climate change program has received an unprecedented commitment of increased funding.[1] The administration's FY 2011 budget includes nearly $1.4 billion for climate change efforts, of which almost $500 million will be managed by USAID.[2]

The USAID climate change strategy divides programming emphases between adaptation and mitigation: adaptation activities are designed to address the impacts of existing and future climate changes, while mitigation actions are aimed at reducing greenhouse gas emissions to prevent further human-induced climate change. USAID's climate change program will focus on the following three broad objectives: (a) reduce vulnerability to climate change (adaptation); (b) promote a transition to low-carbon energy systems (mitigation); and (c) support sustainable land management practices (mitigation).

USAID defines democracy and governance programs as "technical assistance and other support to strengthen capacity of reform-minded governments, nongovernmental actors, and/or citizens in order to develop and support democratic states and institutions that are responsive and accountable to citizens."[3] As USAID and other bilateral and multilateral donors increase their funding to address climate change, issues of citizen involvement, policy formulation, transparency, and accountability will become paramount.

The broad governance categories used in this paper to explore the linkages between democracy and governance and climate change are as follows: (a) policy formulation and the politics of reform; (b) policy implementation; (c) rule of law; and (d) civil society and the media. Unlike the other functions, the civil society and media area is not a stand-alone function; it serves as a cross-cutting component that needs to be integrated throughout the other DG functions.

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[1] In January 2010 the US Government made a formal pledge to the IFCC to cut greenhouse-gas emissions about 17 percent by 2020.

[2] Congressional budget presentation, FY 2011

[3] *At Freedom's Frontiers*, USAID, 2005. http://pdf.usaid.gov/pdf_docs/PDACF999.pdf

B.   **Democracy and Governance Linkages with Climate Change Management**

The following is a synopsis of the DG linkages associated with climate change programming, organized by DG function. (The table on page seven provides an overview of program requirements, democracy and governance constraints, and suggested programs to address constraints.)

Policy Formulation and the Politics of Reform: Climate change programming is inherently cross-sectoral, as it affects many aspects of a country's development. An overall program management and coordination capacity will be required for the development and implementation of policies and programs. In addition, many line ministries will need to develop a capability to integrate climate change actions into their existing programs.

DG concerns related to policy development and the politics of reform will center on managerial structure and capability, the need to support strong leadership, and the passing of necessary legislation. Specific DG linkages include:

• Without well-placed and capable champions for change, reform efforts may stall or be ineffective.

• Insufficient understanding of issues, a lack of resources, and ineffective or overwhelmed organizational structures will limit the ability of governments to develop effective policy and programs.

• A climate change program lacking political clout will reduce the effectiveness of integrating policies into the work of line ministries (where implementation will occur).

• Insufficient political support for climate change action will serve as a disincentive for the approval of new policies, and entrenched interests opposed to change will thwart progress.

• Inadequate understanding and engagement by the legislature could lead to inadequate support of program funding or of executive policies.

Policy Implementation: Once policies and programs are developed, skills and organizational structures need to be built. In some cases, governments will already have capable units in place to manage mitigation and adaptation programs; however, the increasing scale and funding of the expected effort will require scaling-up existing capabilities even in cases where such capacities and programs may already exist.

DG concerns will involve the need to develop an implementation capability in line ministries and local governments, establish results-based management systems, and strengthen financial accountability. Specific DG linkages include:

• Ministries, municipalities, and local government may not have the structure, personnel, or organization to integrate issues into long-term planning, and there may be insufficient centralized guidance and information.

• The complexity and requirements of climate change programs have the potential to overwhelm existing government programs and management structures. Inefficiencies and paralysis may occur if too many committees are created, or if decision and implementation authority is unclear.

• A lack of skills and systems in results-based management will prevent effective program management and accountability.

• Inadequate accountability could lead to lack of transparency and corruption.

Rule of Law: DG concerns related to the rule of law will involve providing support for the development and implementation of improved environmental laws, and providing legal aid to citizens and communities in issues related to climate change. Specific DG challenges will include:

- Inadequate enforcement of existing and new policies and regulations will undermine the effectiveness of policies and programs.

- Community interests and rights could be violated by more powerful interests, particularly concerning access to land, water, forests, and international payments for environmental services.

Civil Society and the Media: DG concerns related to civil society and the media will involve strengthening public participation, establishing public oversight, and increasing the availability of climate change information.

Specific DG linkage issues will include:

- If civil society organizations do not articulate and demand change, the government may not act.

- Civil society organizations may not be able to participate effectively in setting and overseeing agendas due to their inability to articulate needs or due to a lack of adequate information or funding.

- A lack of broad participation may bias policies to benefit one group at the expense of overall program effectiveness, or may lead to patronage-based decisions.

- There is potential for corruption and misuse or inefficient use of funds if programs are not monitored for effectiveness and accountability.

- The media will not be able to perform its role as watchdog and public educator if it does not sufficiently understand climate change issues.

C.   Recommended Program Responses

An overview of select program responses is presented here for USAID's consideration. Since many of the approaches overlap one or more governance functions, these recommendations are presented as a single set of recommendations. A more detailed set of program approaches, as per governance function, is presented in Chapter III - Climate Change and Democracy and Governance Program Approaches.

The principal program responses to democracy and governance climate change challenges are as follows:

Build government capabilities for policy development and management: Effective policy development will require outreach and interaction with a wide range of stakeholders, including government ministries, the scientific community, civil society organizations, business associations, and the private sector. Governments themselves are most likely to move forward with change if there is a strong constituency with a clear set of demands that is pushing for change. Strong policy development and managerial capacity will be required to develop effective policy and will benefit from the use of policy management and implementation tools, the establishment of results-based management systems, and stakeholder outreach and coalition building. To be effective, climate change programs will need to identify and support effective and politically connected leaders and build support for their leadership from legislatures, civil society, and from within government.

Enable public participation and build coalitions for change: Public participation will be required to build constituencies that will advocate for change, develop adaptation priorities, provide technical input into policy

and program development, and monitor the use of funds. Options for increasing public participation include supporting environmental coalitions, conducting program and policy development consultations with stakeholders, holding public events and forums, and creating advisory committees.

Develop financial systems to support the management of climate change funds: It is expected that large sums of climate change funding will become available to developing countries, especially through forest and carbon market programs such as the UN's Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (REDD). Institutions authorized to manage climate change funding may include government agencies, private foundations, trust funds or banks. Specific skills will be needed in:

- Strategic planning and project design;
- Proposal writing to match program needs with available funding;
- Creating and maintaining fiscal accounts to receive and disburse funds; and
- Conducting performance monitoring to ensure that funds are used effectively and results can be reported to citizens, donors, and the legislature.

Additional program recommendations address (a) strengthening the role of the judicial system to improve environmental law and adjudication; (b) enacting programs to increase transparency and reduce opportunities for corruption; (c) improving environmental law and integrating climate change concerns into existing legislation; and (d) strengthening the capacity of the media to provide climate change information to the public.

I. ADDRESSING THE LINKAGES BETWEEN DEMOCRACY AND GOVERNANCE AND CLIMATE CHANGE MANAGEMENT

This paper was commissioned by the United States Agency for International Development's Bureau for Democracy, Conflict, and Humanitarian Assistance (USAID/DCHA) to explore the linkages between democracy and governance (DG) and climate change programming. In particular, the paper explores the following: (a) the democracy and governance challenges related to climate change programming; (b) program approaches that can be used to address these challenges; and (c) recommendations as to how democracy and governance tools and approaches can increase the effectiveness of climate change programs. This paper also includes a chapter on using a country's democracy and governance capacity as a programming consideration, and a chapter on the impact climate change will have on democracy and governance within affected countries. The paper begins with a context overview of relevant issues; a summary of recent scientific findings on climate change; a brief overview of USAID climate change activity; and a discussion of the programming implications of the recently developed Copenhagen Accord Framework Convention on Climate Change.

A. Climate Change and Development

USAID defines democracy and governance programs as "technical assistance and other support to strengthen capacity of reform-minded governments, nongovernmental actors, and/or citizens in order to develop and support democratic states and institutions that are responsive and accountable to citizens."

Climate change poses challenges to all countries, but is particularly threatening to those most vulnerable to its effects on climate-sensitive economic sectors, such as agriculture and forestry, and those with highly exposed populations living in mega-cities, slums, coastal zones and large river deltas. Development cooperation is tasked with strengthening the capacity of and providing needed support to partner countries and communities to anticipate and understand climate-related risks, as well as to provide opportunities for environmentally clean development. Democracy and good governance has an essential role to play in developing this capacity in a way that is sustainable, is embedded within national development policy, programs and local structures, and supports national and local economic growth and social development objectives.

The climate change and democracy and governance nexus has three main components:

Democracy and good governance as part of the solution

- Democracy and good governance is an essential component of adaptive capacity. Adaptive capacity is the ability of governments, communities, and private actors to understand, anticipate, and take action to deal with the stresses posed by climate change. Informed, responsive, accountable, legitimate, and effective governance underpins countries' abilities to safeguard progress toward other development objectives.

- Democracy and good governance is critical to enable countries and private actors to move toward a climate-resilient and clean development economy. This includes taking advantage of international financing opportunities associated with climate change, for example, to participate in carbon markets and access international support for developing and financing low emissions and climate-resilient development programs. This will require the demonstration of sound financial and results-based

management, establishing effective monitoring, reporting, and verification systems, and building the capacity to formulate, enact, and enforce relevant policies. It also includes creating an enabling environment (policies, laws, regulations, and institutions) that directly supports clean energy programs and promotes the involvement of domestic stakeholders in program and policy development. Such actors may include clean energy entrepreneurs, business associations, environmental CSOs and indigenous groups.

Climate impacts on democracy and governance

- Climate change presents new challenges for democracy and governance, for example, to anticipate and prevent conflict, reexamine the assumptions of development planning, anticipate shifts in the economic viability of key sectors, and capture new opportunities that may emerge. Specific challenges will include planning for the relocation for certain populations, adjusting infrastructure standards, and revising zoning and planning laws.

As USAID and other bilateral and multilateral donors increase their funding and support to address climate change, issues of citizen involvement, policy formulation, transparency, and accountability will become paramount. Climate change impacts will disrupt economies, political systems, natural systems, and at-risk communities, and efforts to reduce greenhouse gas (GHG) emissions will require changes to existing industries, technologies, and development pathways. This paper explores the DG issues associated with managing climate change issues in developing countries and identifies programmatic approaches that USAID can consider to ensure its technical programs benefit from and complement the lessons, approaches, and expertise from the DG sector.

Climate change will have serious consequences the world over, and its effects will be severe in many developing countries. Climate change is a paramount development challenge for USAID and will complicate efforts to reduce global poverty for the following reasons:

- Many developing countries are heavily dependent on climate-sensitive economic sectors such as agriculture, fisheries, and forestry. Productivity declines in these sectors, particularly in agriculture, are anticipated in the absence of adaptation as a result of increasing rainfall variability, temperatures, and water scarcity.

- Increased funding will be required for adaptation and to respond to extreme weather events, including floods, droughts, and coastal inundation, as well as to improve and communicate climate information for development decision-making.

- Developing countries' generally insufficient financial and technical resources, poor access to information, and inadequate early warning systems, in combination with governance and management constraints, contribute to high vulnerability and make adaptation to climate change particularly challenging.

Without adaptation, climate change is expected to stall or reverse progress toward the achievement of the Millennium Development Goals, reduce incomes, and lead to an increase in poverty rates in developing countries—particularly among the most vulnerable populations. Climate change also presents the potential of creating or exacerbating conflict situations, and presents increasing challenges in urban and peri-urban areas due to seasonal or longer-term migration of the poor. At a country level, climate change may cut revenue in critical sectors, hamper productivity, place increased spending demands on emergency response and food security needs, strain trans-boundary resources, and generally have a negative effect on public finance.

USAID's effort to reduce poverty will be impacted by climate change, and resources will be required to address the effects of climate change.

The Intergovernmental Panel on Climate Change (IPCC) is the scientific intergovernmental body tasked with evaluating the risk of climate change caused by human activity.[4] The IPCC's reports are regarded as the principal authoritative set of findings and analysis on climate change.[5] The IIPCC's conclusions in its fourth and most recent assessment report from 2007 include the following:[6]

- Warming of the climate system is unequivocal and the impacts of climate change are occurring now; a key IPCC conclusion is that temperature increases are very likely the result of anthropogenic emissions of GHGs. Observable changes include an increase in glacial lakes, changes in Arctic and Antarctic ecosystems, earlier timing of spring events, and an "upward" shift in the range of plant and animal species.

- Global atmospheric concentrations of carbon dioxide, methane, and nitrous oxide have increased markedly as a result of human activities since 1750 and now far exceed pre-industrial levels. Both past and future anthropogenic carbon dioxide emissions will continue to contribute to warming and sea level rise for more than a millennium.

- Some large-scale climate events have the potential to create very large impacts, especially after the 21st century. For example, the melting of the Antarctic ice sheet would cause sea level to rise by five meters, resulting in a widespread inundation of low-lying areas that would affect hundreds of millions of people. Even the partial melting of the polar ice caps will cause sea level to rise and exacerbate the effects of storm surges from severe wind storms.

- The overall effect of climate change will be negative, but in locations with high exposure to climate change and/or low ability to adapt, these effects and their associated costs will be more significant than in other areas and will include reduced rainfall reliability, water availability, and agricultural productivity, and the inundation of coastal areas.

- Regardless of how effective the world is at mitigating further increases in GHG emissions, people and nations will need to adapt to the inevitable and potentially significant warming that will occur as a result of past emissions.

- By enhancing adaptive capacity and increasing resilience, sustainable development may reduce vulnerability to climate change; however, the effects of climate change may impede nations' abilities to achieve sustainable development goals. At present, few plans for promoting sustainability have explicitly included climate change adaptation.

B. Climate Change Policy

The UN Framework Convention on Climate Change (UNFCCC) convenes all nations to set an overall framework for international efforts to tackle the challenges posed by climate change. Negotiations are focused on the pillars of mitigation, adaptation, technology, and financing. The United States, among 192 other parties, has ratified the UNFCCC.

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[4] The panel was established in 1988 by the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP), two organizations of the United Nations. In 2007 the IPCC published its fourth assessment report on climate change.The IPCC does not carry out its own original research, nor does it do the work of monitoring climate or related phenomena itself. The IPCC bases its assessment on peer reviewed published scientific literature.

[5] Sample, Ian (2007–02–02). "Scientists offered cash to dispute climate study." London: Guardian. http://www.guardian.co.uk/frontpage/story/0,,2004399,00.html. Retrieved 2007–07–24. "Lord Rees of Ludlow, the president of the Royal Society, Britain's most prestigious scientific institute, said: "The IPCC is the world's leading authority on climate change."

[6] Key IPCC conclusions on climate change impacts and adaptations, by Martin Parry, Osvaldo Canziani and Jean Palutikof, members of IPCC Working Group, April 2008

In December 2009, the UNFCCC's annual Conference of the Parties took place in Copenhagen, Denmark. While the parties did not reach a legally binding agreement, the Copenhagen Accord resulted from this meeting, for the first time bringing India and China to agree to take action. The Accord contains the following key elements:

- An aspiration goal to limit the global temperature increase to 2 degrees Celsius (3.6 degrees Fahrenheit)

- A process for countries to draft and submit specific GHG mitigation pledges (as of January 31, 2010, 55 countries had submitted GHG emission targets to the UNFCCC)

- Broad terms for the reporting and verification of countries' actions

- A collective commitment among developed countries of $30 billion in "new and additional" resources over 2010–2012 to help developing countries reduce emissions, preserve forests, and adapt to climate change

- A goal of mobilizing $100 billion a year in public and private finance by 2020 to address developing country needs. [7]

The Copenhagen Accord has a number of important implications for USAID's climate change cooperation in developing countries:

- **Development of Low Emission Development Strategies (LEDS):** The Copenhagen Accord states that "a low-emission development strategy is indispensable to sustainable development." A number of countries are involved with the US government and other development partners to develop these strategies.

- **Securing and managing significant financial resources:** The Accord states, "we agree that developed countries shall provide adequate, predictable, and sustainable financial resources, technology and capacity-building to support the implementation of adaptation action in developing countries." Accessing, monitoring, and managing this scale of funds, particularly if funding flows are substantial and predictable, will require significant management system improvements in many countries.

- **National carbon emission monitoring, reporting, and verification systems established and operational:** The Accord requires developing countries to track and report on the actions they are taking to address climate change as well as to produce GHG emission inventory reports every two years.

- **The protection and management of tropical forests will feature prominently as a way to mitigate future temperature increases:** Tropical forests play an important role in storing global carbon and there are a number of plans being discussed as to how to compensate developing countries for the management of this environmental service. Tropical forestry conservation is seen as having the potential to generate many billions of dollars in financial transfers from developed to developing countries.

The above-mentioned aspects of the Copenhagen Accord will shape how developing countries respond to climate change and how international development cooperation plays a role in supporting adaptation and mitigation responses in developing countries.

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[7] The PEW Center for Global Climate Change, Summary: Copenhagen Climate Summit.

C. USAID's Climate Change Program

For well over a decade, USAID has helped partner countries mitigate GHG emissions and adapt to the impacts of climate change. Prominent program elements have included promoting energy efficiency and improved forestry management as well as providing support for disaster mitigation and early warning systems. However, there has been little emphasis to date on supporting governments to address climate change as a national priority—for example, by developing country-level adaptation strategies or by providing assistance to establish and support national climate change management offices.

Following the United States' January 2010 pledge of Fast Start Financing accompanying the Copenhagen Accord, USAID will deliver an unprecedented level of funding for climate change under the Presidential Climate Change Initiative.[8]

Climate change programming includes both adaptation and mitigation activities: adaptation activities are designed to address the impacts of existing and future climate changes, while mitigation actions are aimed at reducing the level of future GHG emissions to prevent further human-induced climate changes. USAID's climate change program will focuses on the following three broad objectives:

- Reducing vulnerability to climate change (adaptation): Efforts under this objective will include reducing the effect of climate change on food production, economic activity, and on those populations likely to be most adversely affected. A component of this objective will include helping partner countries to develop adaptation strategies. Aspects of this objective will involve strengthening the relations between government, civil society, and the private sector around adaptation planning and implementation.

- Promoting a transition to low-carbon energy systems (mitigation): This objective will involve both increasing the portion of electrical power generated from carbon-friendly sources, such as solar and hydrological power, and increasing the efficiency of energy use. Increased energy efficiency will result from the adoption of improved technology in the transmission, transportation, business, and household sectors.

- Sustainable land management practices (mitigation): The land practices with the greatest influence on climate change are those related to forestry, since tropical forests play an important and significant role in carbon storage; and agriculture, because the sector is a significant user of water, requires vast of amounts of land to be cleared for use, and employs petroleum-based fertilizers that release significant amounts of nitrous oxide (a GHG).

USAID's strategy will seek to direct resources to geographic areas where there is the most potential for benefit. For example, low-lying coastal areas will be those most prone to coastal inundation; central dry land tropical areas will be prone to rainfall variability, water shortages, declines in agricultural productivity and erosion; and, as major consumers and producers of electrical power, rapidly industrializing countries will be significant producers of GHGs emissions. Specific criteria for focusing country support are still being developed.

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[8] In January 2010 the US Government made a formal pledge to the IFCC to cut greenhouse-gas emissions about 17 percent by 2020.

II. DEMOCRACY AND GOVERNANCE LINKAGES ASSOCIATED WITH CLIMATE CHANGE

This section presents the democracy and governance linkages that countries will need to address as they move forward with climate change adaptation and mitigation programs, particularly within the context of the issues presented in the previous section. By investing in effective coordination and response to climate change, improved public communication and education, and strengthened community, civil society, media and private sector engagement on climate change, USAID will build more sustainable systems of climate planning, innovation and response.

A. Democracy and Governance Functions

The broad democracy and governance categories used in this paper are framed within the following institutional areas and governance functions:

- **Policy Formulation:** Establish rules, distribute or redistribute benefits, and regulate behavior;

- **Policy Implementation:** Implement policy, manage programs, pass laws, and provide funding and oversight;

- **Rule of Law:** Ensure equitable benefits, enforce regulations and adjudicate disputes, including working with traditional legal systems to clarify land tenure and property rights; and

- **Civil Society and Media:** Inform citizens and enable citizen involvement.

The civil society and media area is not a stand-alone function, as per the other functions, but serves as a cross-cutting component that needs to be integrated throughout the other democracy and governance functions. For example, policy formulation, policy implementation, and the rule of law functions will all require full and effective public participation and civic education.

Each of these democracy and governance functions will be useful to review and consider as USAID determines how to effectively support partner countries in managing climate change. New sets of policies will need to be developed, requiring public support and input; new government structures and programs will need to be established; and civil society will need to participate in a multitude of roles, including advocacy, information sharing and oversight.

B. Mapping Program Requirements, Democracy and Governance Constraints, and Program Approaches

This section presents a table that aligns climate change program implementation requirements (taken from Section I), democracy and governance constraints, and democracy and governance program approaches. The chapter following this section provides further discussion of the democracy and governance challenges and recommends programs that can be implemented to address these challenges.

Climate Change Program Requirements	Associated Democracy and Governance Constraints	Democracy and Governance Program Approaches
Policy Formulation and the Politics of Reform		
Support a national policy development and coordination capability: Skills will be required to lead the development of the country's climate change agenda and required supporting policies. **Note:** This requirement overlaps with policy implementation and delivery of services.	Insufficient understanding of issues and a lack of resources or an effective organizational structure will limit the ability to develop effective programs. A climate change program lacking sufficient resources and political clout will reduce the effectiveness of integrating policies into the work of line ministries (where implementation will occur).	Expertise in strategic planning and change management as well as familiarity with technical issues will be required. Skill in policy development, stakeholder analysis, workshop design and delivery, strategic planning, and climatic and economic data analysis will be required.
Support the development of strong leadership: Confronting climate change will threaten entrenched political and private sector interests and will also be hampered by bureaucratic inertia. **Note:** Policy agenda development will require: strong and politically well-placed leadership; outreach and coalition building by government; and advocacy by civil society organizations.	Without well-placed and capable "champions" for change, reform efforts may stall or be ineffective. Insufficient political support for climate change action will serve as a disincentive for the approval of new policies; entrenched interests opposed to change will thwart progress.	Identify and support strong and politically connected leadership. Build coalitions with respected civil society leaders and support champions for change. Build diverse partnerships, including government advisory committees. Introduce policy change tools and processes. Use workshops and forums to build climate change program agendas and identify priorities.
Pass laws: Laws need to be developed and approved by the legislature, and the legislature will need to provide funding and program oversight, for example to enable clean energy and energy efficiency, to improve the investment environment, and to avoid adverse impacts of development in high risk areas.	Inadequate understanding and engagement by the legislature could lead to inadequate support of program funding or of executive policies; inadequate oversight could lead to corruption or ineffective implementation.	Provide support for environmental legislative committees, including study trips to understand program issues and legislative requirements, e.g. the need for information sharing, transparency, and accountability. Conduct a review of existing environmental legislation and update with climate change concerns. Support open hearings, legislative working groups, or other efforts to engage civil society in the process. Require responsible government entities to produce publically available reports on progress and funding use.

Climate Change Program Requirements	Associated Democracy and Governance Constraints	Democracy and Governance Program Approaches
Policy Implementation and Delivery of Services		
Create national, ministerial and local level capacity to implement policies and provide services: Policy implementation will require strategic planning, management, and public engagement skills to integrate policies into the work and structure of existing ministries, plans and programs, including coordinating vertically and horizontally, linking climate change management to decentralization processes and ensuring that local and informal governance institutions are engaged in solutions.	Ministries (and municipalities and local government) may not have the structure, personnel, or organization to integrate issues into long-term planning, and there may be insufficient centralized guidance and information. Inefficiencies and paralysis may occur if too many committees are created, or if decision and implementation authority is unclear.	Establish climate change coordination capability and focal points in key ministries and local government institutions and ensure they have the necessary policy, planning, and program development skills. Review government climate change management structures to reduce inefficiency and clarify decision and implementation processes. Develop a capacity assessment framework to define and assess necessary management capacities. Provide support for decentralized management, including integration of climate change issues into local and municipal plans. Design and implement pilot projects that can provide valuable lessons and be scaled up for national reform.
Develop results-based management (RBM) capacity: Required functions will include strategic planning, annual work plans and budget development, information coordination, e.g. to produce reporting on Nationally Appropriate Mitigation Actions (NAMAs), adaptation assessments and actions, GHG emissions inventories, and overall program results.	A lack of skills and systems in results-based management will prevent effective program management and accountability and may affect donor confidence to provide adequate support and funds.	Provide RBM training and technical assistance to climate change coordination entities, beginning with strategic planning and results analysis and reporting. Build policy development capacity. Provide support for think tanks and public policy civil society organizations (CSOs) to conduct research, propose policy solutions, and inform policy-makers.

Climate Change Program Requirements	Associated Democracy and Governance Constraints	Democracy and Governance Program Approaches
Strengthen financial accountability: Significant funding for climate change programs from donors, trust funds, and carbon trading will require accounting and oversight systems to manage and track the funds received.	Inadequate accountability could lead to a lack of transparency and corruption.	Build the capacity of financial institutions to manage climate change programs and funds (including proposal development, management and accountability systems). Require public disclosure of programs and funding. Strengthen transparency and reduce opportunities for corruption. Establish independent accountability mechanisms for funds used by government, indigenous groups, and trust funds. Create, or strengthen, independent oversight offices. Institute a system of sanctions for ethics and fraud violations.
Rule of Law		
Support improved environmental law: Judges and lawyers will need to understand the issues and laws pertaining to climate change issues in order to be effective adjudicators, laws will need to be updated to incorporate climate change concerns, and compliance with and enforcement of laws will be critical. In many cases this will require significant criminal/commercial justice reform and development.	Inadequate enforcement of new policies and regulations will undermine the effectiveness of climate change policies and programs. Unclear rules may cause the private sector to wane on its commitment to implement needed changes.	Ensure adequate compliance and enforcement with existing and future laws. Provide legal training to judges and legal associations on rights issues related to climate change. Create environmental law and case histories to build an understanding of environmental law precedents and interpretations.
Ensure equitable benefits and provide legal aid: Communities and individuals will need legal support to protect their rights under climate change programs, e.g. rights relating to land tenure and resource usage and remuneration in exchange for environmental services, such as forestry and watershed management.	Community interests and rights could be violated by more powerful interests, for example access to land, water, forests, international funds and other resources.	Provide funding and technical support to environmental legal aid CSOs to protect citizens' rights with respect to climate change resource use and financial issues. Clarify land tenure and property rights, including access to resources and traditional rights.

Climate Change Program Requirements	Associated Democracy and Governance Constraints	Democracy and Governance Program Approaches
Civil Society and Media		
Strengthen public participation: Civil society will need to engage public constituencies to share information and solicit policy input (by sector and geographically). Assessment, planning and program delivery will need to use participatory methods and respond to the needs of vulnerable populations and high risk sectors.	If CSOs do not articulate and demand change, the government may not act. CSOs may not be able to participate effectively due to their inability to articulate agendas or a lack of adequate information or funding. A lack of broad participation may bias policies to benefit one group at the expense of overall program effectiveness, or may lead to patronage-based decisions.	Develop forums for government-public interaction around climate change issues, including partnerships and advisory committees. Provide support for CSO research institutes and CSOs to provide outreach to constituents, and to advocate on behalf of constituents, e.g. develop adaptation priorities. Ensure there is adequate representation of women in the design and management of programs. This is especially the case for programs that effect livelihood activities for which women have a prominent role, including agriculture and water.
Establish public oversight: Large sums of funds are expected to be received by governments and CSOs, and watchdog groups should monitor program effectiveness and the usage of funds.	There is potential for corruption and misuse or inefficient use of funds if programs are not monitored for effectiveness and accountability.	Promote public access to government information. Fund CSO watchdogs to analyze and comment on government programs, conduct advocacy, participate in program development and monitor climate change-related voting positions of election candidates.
Increase the availability of objective information: The media will have a critical role to play in raising awareness of climate change impacts and actions and reporting on government programs and the use of funds. Also essential is information management for climate change decision-making, including the development and availability of climate trend and impact models.	The media will not be able to perform its role as watchdog and public educator if it does not sufficiently understand the issues.	Train journalists in environmental and investigative journalism to increase informed coverage on climate change issues. Support CSOs to conduct public awareness and information campaigns. Link civic education initiatives on climate change with basic literacy development for children and adults.

III. CLIMATE CHANGE AND DEMOCRACY AND GOVERNANCE PROGRAM APPROACHES

This section identifies climate change management issues related to the following democracy and governance functions: policy formulation and the politics of reform, policy implementation and the delivery of services, rule of law, and civil society and the media. For each of these democracy and governance functions, a set of issues and programmatic interventions is presented. This section provides a fuller discussion on the democracy and governance program approaches noted in the table in the previous section.

A. Policy Formulation and the Politics of Reform

Climate change programming is inherently cross-sectoral, since it affects many aspects of a country's development. A program management and coordination capability will need to be established for the development and implementation of policies and programs. Management focal points may be within environmental ministries, special coordination units associated with a prime minister's or president's office, or in a stand-alone, cross-sectoral unit.

i. Support the Development of Strong Leadership

Climate change mitigation and adaptation will cause significant changes in how development is managed, and will include production and consumption changes in key economic sectors such as transportation, agriculture, water, energy, and construction. Some of these changes are likely to require a substantial investment of scarce resources and will be disruptive to existing industries. In order to build political support for societal transformation, strong leadership will be required. Strong leadership will be critical in building a constituency for change both within and outside the government so that natural tendencies toward bureaucratic inertia can be overcome and to enable policies and programs to move forward. In addition, private sector interests threatened by policy changes can be expected to mount determined efforts to resist change and this resistance will need to be countered by effective advocacy and policy development. If sufficient political will for change cannot be created then necessary organizational, policy and technological solutions may be stifled.

> **Building Coalitions for Change - The World Resources Institute's (WRI) use of environmental coalitions to develop and advocate for climate adaptation priorities:** In several countries, WRI is piloting an effort to use existing environmental networks (some formal and some informal) to hold workshops and meetings to develop adaptation priorities, which may be national, regional or topical as per a group's choosing. Experience to date indicates that this is a promising approach for identifying adaptation priority actions and encouraging governments to adopt these priorities as national policy. For example, in Bolivia, an existing environmental coalition was able to develop a specific set of adaptation priorities that the government eventually adopted as official policy. Participants said this process worked well because it had broad support, identified specific implementation actions and included the government as a partner. The process was completed more quickly than would have been possible had it been left solely to the government to manage. www.wri.org

- **Build coalitions for change.** Effective policy development will require outreach and interaction with a wide range of stakeholders, including government ministries, the scientific community, CSOs, business associations, and the private sector. Governments themselves are most likely to move forward with change if there is a strong constituency with a clear set of demands that is pushing for change to happen. This change can come from donors, from the government itself, or from organized advocacy groups or networks. USAID can support this process by supporting the scientific and environmental community to organize workshops, develop climate change priorities, and coordinate with the government for the adoption of those priorities. Existing and broad-based coalitions are appropriate mechanisms for undertaking this task. Coalitions may be formal or

informal, but should draw on the participation of active and credible organizations that have subject matter expertise and represent broad and influential constituencies.

- **Build partnerships.** Climate change involves complex issues and by nature is multi-sectoral. The demands of addressing climate change will challenge governments and have the potential to overwhelm the availability of existing resources and personnel. For this reason, it will be particularly important to build partnerships between government, universities, the scientific community, NGOs, and the business community. This will help government to access required expertise, build support for change, and accomplish the level of work necessary – work that would not be possible for a government to accomplish in isolation.

> **Climate change partnership approach in Madagascar:** In Madagascar, the government has developed a climate change committee that includes NGOs/CSOs, foundations, universities, technical sector representatives and donors. The committee provides a platform to share experience and information for decision-making and policy development; provides technical assistance to the government; and organizes workshops and training programs. The committee is co-lead by a government representative and a NGO or donor. Through this system, all climate change actors are able to develop a common vision and influence government policy decisions.
> www.usaid.gov/our_work/environment /climate/country_nar/madagascar.html

- **Introduce policy change tools and processes.** USAID can support policy formulation and reform by introducing tools similar to the Implementing Policy Change Project. In the 1990s, USAID provided ten years of support to the Implementing Policy Change Project, which produced a number of lessons and tools to help governments manage policy reform. These tools include:

  - Stakeholder Analysis:[9] The purpose of stakeholder analysis is to identify key stakeholders who can influence policy decision-making; determine their support or opposition to change; and assess the level of influence they are likely to have over the process. This analysis can help policy change managers (and donors) determine who needs to be included in the policy change process and the levels of resources and influence they may bring to bear on influencing the outcome of the reform effort.

  - Strategic Planning and Management:[10] Strategic management is a nine-step process that can systematically guide a manager through the developing, instituting, and managing of a policy change process. The process begins with a clarification of its objectives and includes an analysis of the operating and policy environment, identification of key issues, design and selection of alternative strategies, implementation, and performance monitoring. This approach goes beyond strategic planning to include an iterative review and redesign process and requires assessing the roles and views of stakeholders.

  - Workshops for Strategic Management of Policy Reform:[11] Workshops can be used to bring together stakeholders and constituents, clarify objectives, and build momentum for reform. In the policy reform arena, workshops have proven particularly effective in enabling stakeholder participation and building consensus. They also serve as useful mechanisms to integrate technical/scientific data with political and programmatic challenges.

- **Build formal or informal government advisory committees.** Advisory committees may be either formal or informal and may include knowledgeable experts who advise the government on the development of specific policies. For a climate change program, such committees may include

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[9] Crosby, Benjamin, Stakeholder Analysis: A Vital Tool for Strategic Managers, Management Systems International Implementing Policy Change Publication, 1991.

[10] Crosby, Benjamin, Strategic Planning and Strategic Management: What are they and how are they different?, Management Systems International Implementing Policy Change Publication, 1991

[11] Brinkerhoff, Derick, Using Workshops for Strategic Management of Policy Reform, Management Systems International Implementing Policy Change Publication, 1994.

representatives of the scientific community (from academia, NGOs and government) and include private sector and CSO interests, such as environmental NGO representatives. Using an independent committee to develop science-based climate program recommendations can help to mitigate the influence of politics on decision-making and potentially offset the influence of entrenched special interest groups resistant to change. Such committees could be chaired by the government or housed in existing institutions. In California, for example, the establishment of scientific advisory committees is required for environmental processes that have implications for large-scale public and private land use (see California Natural Communities Conservation Act—NCCP). An advisory committee can also be an effective means to produce work that may be difficult for governments to complete on their own due to personnel, time, and budget constraints.

ii. Pass Laws

Legislatures will need to approve new polices, codify laws for program enactment, and provide funding to allow programs to be implemented. In addition, legislatures will have to play an oversight role to ensure programs are being implemented and are effective. Legislatures may also be required to approve changes to the policies and procedures of line ministries to ensure climate change concerns are integrated into existing law as, for example, by requiring that climate change criteria be included in planning and permitting processes.

Support Options:

- **Provide support for environmental legislative committees to become familiar with climate change issues and programs.** Support in this area may include study tours to neighboring countries to become familiar with existing policies and legislation; bringing in experts to provide briefings on legislation and lessons learned from other countries; or sending key committee members on tailored participant training exercises.

> **Integration of climate change science into existing environmental legislation:** In February 2010, the White House's Council on Environmental Quality issued draft guidance on the need for consideration of climate change in all National Environmental Act Policy (NEPA) reviews. The NEPA process consists of an evaluation of the relevant environmental effects of any federal project or action. In addition, the CEQ has authorized a review of ways to integrate climate change impacts into water resource adaptation, fish and wildlife management, and coastal resource use and permitting.

- **Conduct a review of existing environmental and development legislation to identify opportunities to integrate climate change concerns and amendments.** In virtually all countries laws exist to protect the environment, and such laws often mandate environmental reviews of development projects prior to the issuing of permits and approvals. For example, in the United States, an environmental impact assessment must be conducted before development can move forward in a coastal area. One way to strengthen attention to climate change adaptation is to conduct an environmental law and regulatory review to identify opportunities to integrate climate change considerations into existing laws and practices. (See CEQ textbox example[12]—and also support recommendation dealing with Rule of Law section.)

B. Policy Implementation and Delivery of Services

Once policies and programs are developed, skills and organizational structures need to be built. In some cases, governments will already have capable units in place to manage mitigation and adaptation programs; however, the increasing scale and funding of the expected effort will require scaling-up existing capabilities

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[12] The Council on Environmental Quality, the U.S. White House's public website—Climate Change Adaptation Taskforce, September 2010

even in cases where such capabilities and programs may already exist. This effort is likely to include project development and fundraising, implementation, results management, and the establishment and staffing of new climate change units/departments.

Specific democracy and governance and capacity issues that will need to be addressed include:

i. Create Climate Change National, Ministerial and Local Level Policy Development and Coordination Capability

A wide range of policies will need to be developed as countries begin to address climate change issues. Many of the policies will be sector-specific, such as agricultural and energy policies, but others, such as risk reduction and adaptation policies, will be cross-sectoral in nature. Because so many sectors will be affected simultaneously, a concerted policy development and analysis capability will be required. Adaptation policies, for example, will require the analysis and integration of a wide range of data, including weather and climate forecasting data, water availability and use, population vulnerability, and economic development. There will be a pressing need for management units to produce proposals that match plans with funding, are strategically sound, and adequately account for the funds they receive. These new demands and requirements have the potential to overwhelm existing administrative structures and further strain ministries already challenged by insufficient personnel, skills and resources. It will be imperative that management structures created to integrate climate change concerns across ministries be created with an eye toward efficiency and minimize the creation of new requirements.

The development of an overarching and coordinated set of climate change policies will benefit from an authority that is politically well-placed and able to simultaneously move initiatives forward across multiple ministries. Strong strategic planning and management skills will be required, including skills to work across sectors, conduct vigorous outreach and information campaigns, and build constituencies for change. Efforts across ministries will need to be coordinated to enable the collection of program-wide data and to maximize program efficiency.

Support Options:

- **Provide support for the development of an effective, central policy-development and coordination capability.** There are various approaches countries can adopt in structuring a central climate change policy-development office. The most common to date appears to be granting the ministry of environment overall authority in leading the policy development and coordination effort. Alternative models include establishing a climate change authority that is either independent (such as a secretariat or agency) or linked to a president's or prime minister's office, or to charge another senior ministry, such as a ministry of energy, with leading these efforts. The latter structure may work well for those countries whose climate change focus is in clean energy and efficiency programs. It is also possible to structure a hybrid effort where, for example, a secretariat coordinates and oversees overall climate change efforts but lead responsibility for particular efforts may be dispersed among various ministries, such as the ministries of environment, agriculture and energy. A World Bank report on climate change governance concludes that "at present, it is still too early to say whether any of these models has a decisive advantage over the others. The key is that, wherever it is located, the lead climate agency must enjoy appropriate resources, political support from the top, and authority to engage with other groups working in climate change across the whole of government."[13]

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[13] Meadowcroft, James, Climate Change Governance (background Paper to the 2010 World Development Report), The World Bank, May 2009.

- **Support the mapping and development of an efficient and effective management and coordination structure.** USAID could support the establishment of effective climate change programs by defining the key managerial and political functions required of such an office. It might also be beneficial to conduct process management studies to map out organizational relationships and clarify implementation responsibilities. As an example, the USAID Food Security program in Bangladesh will integrate climate change concerns into its food security program; in reviewing the plan for this program, it appears that eight or more ministries will be involved and multiple coordination committees will be established. In the absence of efforts to streamline coordination and decision-making, and clarify roles and responsibilities, this structure could easily become unwieldy and ineffective. It would be useful to map out the management structure and decision process to minimize additional work and time requirements and clarify functions such as decision authority, information sharing, joint decision-making, resource sharing, and oversight. This should be done with a view toward minimizing the disruptive effects of new climate change requirements on existing program structures and organizations.

    USAID could also conduct comparative studies of various organizational structures and their relative benefits and identify best practices in managing climate change policy development and coordination.

Climate Change Management: In most countries, no single government agency can fully control climate-change policy; relevant mandates, responsibilities, and constituencies are dispersed over a range of ministries. However, few governments have an agency capable of enforcing carbon budgets, and the timeframes of climate impacts and required responses go well beyond those of any elected administration.

Government effectiveness will be critical to leveraging the impact of adaptation funding. [M]ost adaptation activities today are implemented through stand-alone and disconnected projects. Fragmented adaptation finance hampers mainstreaming and scaling up in planning and development processes, increases transaction costs for recipients and donors, and diverts the time and attention of politicians and government officials from domestic priorities to manage aid-related activities. The tens of billions of dollars required for adaptation may put additional pressure on developing countries' already limited absorptive capacity. Many of the developing countries most in need of adaptation support are those with weak capacity to manage and absorb funding.

Assigning responsibility for climate policy. In most countries climate change is still the preserve of the environment ministry. But climate policy spills over into domains that transcend the boundaries of environmental protection and include trade, energy, transport, and fiscal policy. Environmental agencies are normally weaker than departments such as those responsible for treasury, commerce, or economic development. They tend to have fewer resources and to be represented in cabinets by junior politicians.

Although there is no single recipe for assigning the climate remit, reconsolidating responsibility is key. Bureaucratic consolidation—based on budgetary independence, expert personnel, and the authority to propose and enforce legislation—concentrates authority and avoids diffusion of responsibility that can lead to failures to act. The creation of ministerial-level agencies led by senior cabinet ministers or the inclusion of climate policy on the agenda of already-established key agencies is both signs of a trend toward bureaucratic consolidation.

New coordination bodies—a cabinet committee on climate change, one explicitly linking climate with an already recognized and critical issue area such as energy, or an intra-governmental coordinating committee chaired by the lead agency—can bring together officials working on climate change across government. Coordination of climate policy can also be the prime minister's remit—say, by creating an advisory function directly within the prime minister's office.[14]

- **Develop a capacity assessment framework to guide and assess organizational capability to manage climate change adaptation.** There are several management capacity indexes that are used for USAID projects to assess and monitor organizational development, including MSI's Institutional

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[14] World Development Report 2010: Development and Climate Change, The World Bank, Washington, D.C., 2010

Development Framework and PACT's Organizational Development Capacity Tool. These tools have been developed to provide a snapshot assessment of organizational strengths and weaknesses for key management areas, such as the role and functioning of the board of directors, strategic planning capability, project reporting, and financial management, among others. The CAP-Scan tool, currently being applied by the World Bank, is a capacity assessment tool specifically designed to measure the organizational and managerial effectiveness of ministries or particular units within a ministry (see associated text box). These capacity assessment processes serve multiple functions, including helping the organization being assessed to understand and discuss it own managerial strengths and weaknesses, provide a monitoring tool for documenting institutional development strengthening over time, and for creating institutional development plans to improve performance. With some modification, existing capacity assessment tools can be modified and adapted to identify and assess the organizational and managerial requirements necessary to manage climate change programs. This tool would include standard management elements such as oversight, coordination, planning, and reporting functions, but would add program-specific measures, such as access to climate data, the ability to analyze sector impacts of climate change, and the ability to conduct outreach and engage with advocacy coalitions.

Management units will also require basic business management skills, including financial management, accounting, and budget-tracking, especially given that developing countries may likely be inundated with new funding and that those countries with low governance capacity may not be able to effectively manage these new funds without increased capacity. A capacity-assessment process can be used to analyze current business management capabilities and identify areas for priority assistance.

One suggested process is to develop a climate-change specific capacity framework and pilot it in a few countries to validate and refine the process. If this were to be applied in a few additional countries, a set of lessons could be generated on best practices in structuring climate change management systems.

> **Use of capacity assessment frameworks:** CAP-Scan provides an analysis of the following systems: leadership, evaluation and monitoring, accountability and partners, planning and budgeting, and statistics. This tool is particularly useful for conducting an institutional assessment of units within ministries and was developed and pilot tested under a World Bank initiative, the Joint Venture on Managing for Development Results. CAP-Scan provides an analytic framework and participatory process for leaders in management units within governments to assess their unit's progress in developing a culture, behaviors, and systems to manage for development results (MfDR), and it helps them to prioritize concrete steps for MfDR improvement. This process has been pilot tested in a number of countries. (Additional information is available at www.mfdr.org)

- **Support a decentralized management and implementation capability.** Particularly for adaptation, planning and implementation will occur at provincial, municipal and local levels. As such, capabilities should be put in place to identify local needs and capabilities, integrate climate change adaptation actions into local plans, and work with local organizations on implementation. USAID can support this by providing needs assessment and planning capabilities to local government and support the establishment of local coalitions to participate in the process.

ii. Develop Results-Based Management Capacity

Governments will need a management system to track progress toward objectives, generate information for management decision-making, and produce reports for legislatures, committees and donors. This will require strong skills in results-based management and the creation of information management and reporting systems. In addition, donors and constituents groups, including CSOs, will expect progress reports on the use of funds as well as assessments of program effectiveness.

A country's climate change program will benefit from a strong program development and policy analysis capability. The participation of an outside and independent entity may lend the analysis a higher level of public credibility, which could be useful for making difficult political decisions. CSOs interested in climate change are likely to play a role in monitoring government data to assess funding allocations and program effectiveness.

Support Options:

- **Develop a country-led results-based management system.** RBM systems may vary from organization to organization, but generally include the following elements: strategic planning to clarify objectives and the hierarchical relationship between activities, outputs, outcomes, and objectives or goals; performance measurement to track progress toward the achievement of objectives; and operational results management to integrate performance data into management and planning.[15] Given USAID's commitment to the Accra Accord, emphasis should be placed on building host-country management and data collection systems.

- **Provide policy development skills and technical assistance.** Skill in policy development, stakeholder analysis, workshop design and delivery, strategic planning, and climate and economic data analysis will be required. (See section titled "Create Political Will" for a discussion of specific tools and approaches to support the policy management process.)

Phases of RBM	Steps Involved in Building a RBM System
Strategic Planning	Identify clear and measurable objectives
	Select performance indicators
	Set explicit targets
Performance Measurement	Develop performance monitoring systems
	Review, analyze, and report actual results vis-à-vis targets
Operational Results Management	Use monitoring analysis and evaluation findings to provide complementary information and explanation
	Use performance information for internal management accountability, learning, resource allocation decisions, and reporting to stakeholders and partners.

iii. Strengthen Financial and Program Accountability

Developing countries will have an opportunity to receive large sums of funding from carbon market transfers and donor support; total support could reach hundreds of billions of dollars. To take advantage of this opportunity, robust and transparent financial management and accountability systems will be required. Entities managing these funds may be governments, financial institutions, or special trust funds. Responsibilities will include: tracking the receipt and disbursement of funds; funds management and investment; maintaining integrity of fund use, through audits and transparent reporting; and ensuring that funds are effectively used to support development.

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[15] Callihan, David; Background Paper on Results-Based Management in Development Organizations (produced for UNDP); Management Systems International, 2006.

Support Options:

- **Build the business capacity of a country's financial institutions to manage climate change funds.** It is expected that large sums of climate change funds may be available to developing countries, especially through forest and carbon program transfer programs such as the UN's Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (REDD). Capacity will be needed to manage, account for and program funds (e.g. through grants). Specific skills will be needed in proposal writing, creating and maintaining fiscal accounts to receive and disburse funds, conducting performance monitoring to ensure that funds are used effectively, and reporting results to citizens, donors and others. Institutions that manage funds may include government agencies, private foundations, trust funds or banks through which climate change funds will be channeled. USAID can support the development of needed capacity through training and technical assistance in institutional development.

- **Require public disclosure of programs and funding.** Creating and publishing public budgets for climate change programs can help to make information available and accessible for scrutiny and review. A step in this process would be to make sure the budget process is automated and that the information is available to the public on a regular basis, for example, through public websites. Participatory presentation and review of proposed budgets can also serve to increase transparency and public participation, particularly to ensure that allocations match public priorities. Legislatures can also take actions to ensure program oversight, such as requiring that annual climate change action reports be formally and publically available on a periodic basis, for example annually or biannually.

- **Strengthen transparency and reduce opportunities for corruption.** Steps available to increase program transparency and reduce opportunities for corruption include (a) simplifying licensing and negotiation processes; (b) increasing the clarity of rules and permits and minimizing discretionary decision-making; (c) instituting electronic payment systems, which help to centralize the system, reduce the use of cash, and provide better accountability; and (d) ensuring that hiring and promotion are based on clear criteria and performance metrics.

> **CSOs combat illegal logging in Indonesia.** In an effort to combat illegal logging in Indonesia, two NGOs, the Environmental Investigation Agency (EIA) and Talapak, are helping local communities monitor crimes in their forests. EAI and Talapak are providing training to local communities and NGOs in camera use, GPS and film editing. They are also providing communities with communal video surveillance equipment and editing software. Armed with these tools and skills, local communities are gathering footage of illegal acts and using it to garner media coverage and demand political action against corrupt activities that are taking place in their forest. Increased visibility of these corrupt acts has helped move corrupt and illegal logging activities to the top of the Indonesian government's priority list.

- **Create independent program oversight offices or emphasize climate change related issues within existing offices.** Government accountability offices, such as an internal inspector general function, can be established and supported. These offices can be tasked with undertaking periodic financial and program reviews. To be effective, such offices should be independent and adequately staffed and funded, and the results of their work should be publically available.

- **Institute a system of sanctions for ethics and fraud violations:** An example of such a system would be to introduce fines or to deny licenses or participation to firms found to be in violation of rules. For example, if a company is found guilty of kick-backs or bribes its right to secure public timber concessions could be revoked for a given period of time.

C. Rule of Law

Climate change adaptation and mitigation programs will impact access to natural resources, including changes in water availability for agriculture use, for example. Climate change programs will also affect access to and use of forest products, including restrictions on land use and the receipt of payments in exchange for providing environmental services, such as forest or watershed management. Many of these issues will directly affect the livelihoods of significant numbers of people and are likely to raise complex legal issues with regard to user rights and resource access, compensation, and entitlement to payments for environmental services. As such, it will be imperative that affected groups have access to legal advice and counsel.

i. Support Improved Environmental Law

The legal system will need to deal with the issues and laws pertaining to climate change to have competence in providing effective adjudication. The court system will face a myriad of new issues relating to land use, claims to financial payments, and displaced communities (from inundation, flooding, and water storage). To ensure that such issues can be consistently and fairly adjudicated, it will be useful to work with the state legal system and legal associations to increase their knowledge of these and related climate change issues.

Support Options:

- **Ensure adequate compliance with and enforcement of current and future laws related to natural resources management, the environment, and climate change**. Review compliance and enforcement rates for critical environmental laws, such as those that prevent illegal logging. Develop education programs to help critical groups comply with laws and strengthen law enforcement's capacity to enforce laws. Lack of compliance with and enforcement of existing laws is as important as developing new policies and laws, which will have no effect if not enforced.

- **Provide judicial training.** Program support can be provided to increase the capacity of judges and courts to effectively understand and apply environmental law. Environmental law cases are often contentious and involve interpreting law with an eye toward balancing conservation, resource use, and economic development. In recent years, numerous countries have established environmental courts that are used specifically for environmental law cases. In other countries, systems have been introduced to certify judges as "environmental judges" and to stipulate that all environmental cases be handled by such individuals.

- **Create environmental law case histories and hold symposia.** Review and develop case histories of environmental law rulings. An outcome of this process could be the identification of a set of best

> **Environmental Law Capacity Building:** The Asian Development Bank (ADB) has undertaken considerable work in building the capacity of judiciaries to adjudicate environmental law cases. In 2002, and again in 2003, ADB published a compendium on Capacity Building for Environmental Law in the Asian and Pacific Region. This compendium reproduced a set of materials that had been used for "train the trainers" workshops for academics and members of the legal profession in the region (not directed at or limited exclusively to judges).
>
> In 2005, ADB partnered with the United States Agency for International Development (USAID) to launch the Asian Environmental Compliance and Enforcement Network (AECEN). AECEN addresses the need for increased enforcement and compliance with environmental law in Asia and the Pacific. Among other activities, AECEN has been supporting environmental agencies to improve environmental compliance and enforcement, create environmental courts and court divisions, and train judges to adjudicate in these courts.[16]

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[16] Donna G, Craig, Nicholas Robinson, and Koh Kheng-Lian, eds. 2003. *Capacity Building for Environmental Law in the Asian and Pacific Region: Approaches and Resources.* V01.1, Second Edition. Manila: ADB.

practices on environmental law development, implementation, compliance, and enforcement. This literature could be useful for environmental law training for law schools, bar associations and judicial personnel. Symposia can be held to disseminate and discuss findings to build a better-informed judicial process.

ii. Ensure Equitable Benefits and Provide Legal Aid

Communities and individuals will need legal support to protect their rights under climate change programs. For example, under mitigation programs, pressure to conserve forests and restrict forest usage and conversion will increase. In turn, forest conservation is expected to generate funds through payment for environmental service schemes. Sorting out the usage rights and financial benefits of such programs will prove complicated and will sometimes be contentious. Indigenous groups and communities residing in buffer areas are likely to be affected and will need to understand their rights; in some cases, such communities will also require legal counsel and representation. Other examples of contentious issues with respect to resource use rights will include revenue distribution, compensation for loss of land, and access to water.

Support Options:

- **Clarify land tenure and property rights.** In many cases, land ownership and resource use rights need to be clarified in order that individuals and communities may sustainably access lands, water and other resources. These rights need to be codified into law and should incorporate traditional access rights. This is an important governance issue that must be addressed in the context of climate change adaptation to ensure equity, and it will require effective involvement of government, civil society and the media.

- **Provide grant support to legal aid organizations to enable them to support climate change issues.** Specific assistance could go toward hiring personnel and building expertise in environmental law and issues related to climate change. Legal expertise would then be available to help review policy drafts and provide advice to NGOs to enable effective advocacy; to defend land and resource rights of communities, individuals and indigenous communities; and to help watchdog CSOs to engage on issues of government compliance with laws and policies.

D. Civil Society and the Media

Civil society organizations will have an active and important role to play in ensuring the effectiveness of climate change programs. This role will include acting as a communication conduit between their constituencies and the government on issues of policy and program development; helping to advocate and build support for climate change action; and serving as a watchdog over government efforts and the proper use of funds.

Specific democracy and governance and capacity issues that will need to be addressed include:

i. Strengthen Public Participation

Communicating issues and building support for policy and program action will be critical in creating a foundation for political decisions and actions. This will require building the knowledge of CSOs on the impacts of climate change and assisting them to mobilize constituency support for needed actions and reforms, including advocacy to reduce climate vulnerability.

In some communities, the desire for climate change action is present, but the ability to articulate this desire is lacking. Many communities in developing nations are already experiencing negative repercussions from

climate change, and they recognize the need for climate change adaptation. This issue here is not public will, but the public's ability to articulate its will to those in a position of power. This may be due to a lack of an appropriate forum to express concerns or because those affected may not know the appropriate action to advocate. Take, for example, the case of a community that is subject to an unprecedented amount of flooding: while community members will almost certainly want to resolve this situation and plan to prevent future flooding, they may be unfamiliar with the actions that could be taken to do so, particularly if flooding has not been an issue in the past.

The involvement of women will be particularly important to the development and implementation of adaptation programs. These programs will often center on reducing the vulnerability of livelihood activities to climate change, including agricultural production and water management. In many countries, women play a central role in these activities and programs should be designed to ensure significant opportunities for the participation of women in the programs' design and management.

> **The need to strengthen public participation:** The new environmental regulatory agencies that have sprung up across the developing world in recent years are almost invariably less politically powerful than well-established ministries of planning, finance, and agriculture. Moreover, environmentally conscious officials working within the traditional ministries must often take a back seat to officials in charge of conventional resource extraction activities. Civic environmental movements lend political support, legitimacy, and expertise to government reformers struggling against conventional bureaucratic approaches and resisting the political demands of those with a vested interest in unsustainable resource extraction.[17]

Support Options:

*   Options for increasing public participation are discussed under the section "Support the Development of Strong Leadership" and include supporting and developing environmental coalitions, conducting program and policy development consultations with stakeholders, and holding public events and forums.

ii. Establish Public Oversight

There will be a role for CSOs to play in ensuring that funds obtained to implement climate change programs are used appropriately and transparently. Civil society can inform and influence public opinion, lobby for changes to policy and programs, and act as a watchdog over government spending.

Support Options:

*   **Promote public access to government information.** There are a several things that can be done by USAID to increase the public's access to information, including (a) supporting the passing of freedom of information laws to allow citizens to gain access to information; (b) providing citizen groups and watchdog agencies the resources and training they need to monitor public programs; and (c) requiring the government to periodically publish budgets and program performance reports.

> **Participatory Adaptation Priority Setting—WRI's National Adaptive Capacity Framework:** WRI is currently piloting a tool called the National Adaptive Capacity Framework (NAC) that assesses a country's capacity to carry out the functions necessary to adapt to climate change. The framework breaks the functions down into the following categories: assessment, prioritization, coordination, information management, and risk reduction. In an attempt to establish priorities, the assessment attempts to identify who performs each function and how well each is being performed. Once the initial assessment is made, its findings can be used as a baseline for subsequent NAC assessments to determine if progress has been made. http://www.wri.org/project/vulnerability-and-adaptation/nac-framework

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[17] Steinberg, Paul, World Development Report 2003: Dynamic Development in a Sustainable World, Background Paper, Civic Environmentalism in Developing Countries: Opportunities for Innovation in State-Society Relations

- **Monitor and publish environmental records and positions of election candidates.** Environmental CSOs can by supported by USAID to track the voting records of those running for public office and produce a summary of their positions on climate change related issues. This would help to increase the profile of climate change issues as an election topic and help voters concerned with such issues to make informed election choices.

- **Ensure the involvement of women in adaptation program development and management.** USAID can ensure this happens by including women and women's organizations in the coalitions and partnerships that are planning and implementing adaptation programs.

iii. Increase the Availability of Objective Information

The media will have an important role to play in raising awareness of climate change impacts and actions and in reporting on government programs and the usage of funds. Increasing journalists' understanding of climate change issues, impacts, and responses will bolster the media's capability to raise public awareness. The media can also bring public attention to practices that would be ill-advised in regard to future climate change impacts, e.g. approving development in coastal areas that will be susceptible to increasingly severe and frequent storm surges.

Support Options:

- **Increase the knowledge of journalists on climate change issues and build capacity to conduct investigative reporting.** Assistance in this area can include: training on climate change and the environment; support to journalism training institutes; funding for participant training on environmental issues; and supporting the integration of climate change issues into the work of existing training institutes and journalism associations. The objective of this work is to increase the knowledge of journalists on climate change issues so they can provide better public reporting of issues. In addition, training can be provided to increase investigative journalism skills.

> **Increasing media coverage of climate change issues:** The Climate Media Partnership (CCMP) is a partnership formed by Internews, Panos, and the International Institute for Environmental Development (IIED) with the aim of improving "media coverage and public debate on climate change in the developing world." This program offers fellowships to forty journalists a year from the developing world. The fellows receive training in climate change science and negotiations as well as editorial mentoring support. These activities are intended to raise public awareness of climate change issues and increase fellows' capacity to produce increased and better-quality reporting on climate change.

Emphasis should also be given to developing programs to provide journalists legal protection and to enable them to carry out their work in an environment free of undue harassment.

IV. DEMOCRACY AND GOVERNANCE CONTEXT AS A PROGRAMMING CONSIDERATION

The programming options identified in Chapter III will not be equally appropriate in every context; country democracy and governance capacity will need to be considered as programming options are selected. For example, programmatic approaches in an authoritarian context will differ from approaches in a new democracy, and both will differ from the approaches in a conflict or post-conflict environment. This section illustrates how a country's governance capabilities and context can be used as one consideration in the selection of programming approaches.

USAID has developed a list of 49 priority focus countries for climate change programming. The table below presents governance capabilities (as per the World Bank's 2008 Governance Indicators Scores) for ten countries that are likely to feature prominently on USAID's list of priority climate change countries. The information in the table below is an example of the type of information that can be used to inform country-level programming decisions.

World Bank Governance Indicators (2008)					
Scores range from 0–100, with 0 being the worst score and 100 being the best score					
Country	Voice and Accountability	Political Stability and Absence of Violence	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption
Brazil	61	38	55	58	46	58
Bangladesh	31	10	23	21	27	11
DRC	9	2	1	5	2	5
Ethiopia	11	6	40	20	33	30
Honduras	38	33	34	45	21	21
India	59	17	54	47	56	44
Indonesia	44	16	47	45	29	31
Kenya	43	12	32	51	18	14
Mali	57	36	22	41	43	38
Mozambique	48	56	43	35	28	34
Peru	49	19	46	62	26	49
Philippines	41	11	55	52	40	26

Key to World Bank Governance Indicators:

1. *Voice and Accountability (VA)*—capturing perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media.
2. *Political Stability and Absence of Violence (PV)*—capturing perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically-motivated violence and terrorism.
3. *Government Effectiveness (GE)*—capturing perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.
4. *Regulatory Quality (RQ)*—capturing perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.
5. *Rule of Law (RL)*—capturing perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence.
6. *Control of Corruption (CC)*—capturing perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests.

Below are some general democracy and governance considerations that should be taken into account as programming options are selected. These considerations relate to the governance capacity scores in the previous World Bank table.

Consideration of a country's governance effectiveness capacity: For climate change programming to be effective, it is critical that there be some acceptable level of capacity to develop policy and implement programs. If government effectiveness is relatively low, then a focused effort will be required to bolster capacity. Focus areas of assistance may include training, institutional capacity building, management and policy skills, as well as a bolstering of basic business skills, such as planning, budgeting, and proposal writing. If a government does not have the ability to govern effectively, then building civil society demand for government change will not necessarily result in government reform, as the government will not have the ability to effectively respond to this demand. All countries facing serious climate change challenges are going to require some level of external support to strengthen management capabilities. This is particularly the case for issues for which the government has direct control, such as transportation infrastructure, power generation, water distribution, and public lands management.

Effective governance capabilities will vary from country to country, and many countries that end up being focus countries for climate change programming may have relatively low governance capabilities. In such cases, there may be opportunities to engage and support coalitions to accomplish new activities, or to "out-source" some capabilities, in partnership with government. For example, USAID could support the creation and operation of a scientific advisory committee chaired by government, but staffed largely with university and research institute personnel, to oversee policy development. This would enable government to gain topical expertise and allow policies to be developed in an efficient timeframe. Similarly, coalitions could be supported to develop and oversee adaptation plans in coordination with government counterparts. The intent would be to build government capability but to be sensitive to absorptive capacity limitations. Even in cases where existing governance capabilities are strong, it will still be effective to work through advisory committees and partnerships; however, in countries with weak governance effectiveness this may be the only way to move agendas forward. In addition, USAID could selectively identify programs and sectors to support based on the existing capacity, as opposed to supporting overall national coordination, for example by providing support for energy or forestry reform as opposed to supporting the development of a national adaptation program.

Countries with a high degree of voice and accountability: In these countries, it will likely be cost-effective to build societal demand for climate change policy. If governments allow active civil society participation, and especially for those that have effective governance capacity, supporting civil society advocacy will be an effective way to catalyze policy change, develop implementation priorities, and involve civil society in sharing the responsibility for policy and program development.

Countries with a low level of voice and accountability: In a country that has a relative closed political system, and a low level of "voice and accountability," USAID may decide that sufficiently effective environmental coalitions do not exist and that supporting the establishment of such institutions may prove to be expensive, time-consuming, or a poor use of resources. On the other hand, a country's low score for voice and accountability may be exactly the reason why building advocacy coalitions may be a worthwhile strategy, albeit one that may take a relatively longer support commitment to bear results. It will likely be an effective use of resources to bolster civil society capacity in countries where such capacity is low, or if the political space seems to exist to allow for an increased civil society role, if the government has sufficient capacity to act on CSO positions.

Countries with low scores for control of corruption: Climate change effectiveness will ultimately rely on large resource transfers from developed to developing countries. It is expected that potentially tens to hundreds of billions of dollars will be available to developing countries for climate change mitigation and adaptation, particularly from carbon market transfer programs such as REDD. Countries that receive these funds will need to establish transparent institutions to account for, disburse, and report against fund usage. This will also require the institution of effective controls on corruption in order to maintain donor and citizen confidence and to ensure that countries are in a position to access the levels of funding that will be potentially available.

There is not necessary any single way to use governance scores to determine the most effective climate change governance programming options; however, consideration of governance capacities can be one useful level of analysis for selecting effective support strategies. Managing climate change programs will in all cases require some level of effective governance capacity.

V. THE IMPACT OF CLIMATE CHANGE ON DEMOCRACY AND GOVERNANCE

The principal topic explored in this paper is on identifying how USAID DG programming can support effective climate change management. However, it is noteworthy that climate change will have an effect on democracy and governance in affected countries. The impacts of climate change, and the need to adapt and reduce vulnerabilities, will affect governance, democracy and national security, and should be explored further through a separate research effort.

A few of the implications of climate change on democracy and governance are presented below:

- **Increased economic and damage and loss of life from severe weather events will strain government credibility if responses are considered inadequate.** Developing countries will experience an increase in severe weather events and associated catastrophic damage, including floods, droughts, crop failure, infrastructure damage and coastal inundation. If those impacted do not consider their government's response to be adequate, they may challenge in the government's legitimacy to lead. Such challenges could result in civil unrest and the destabilization or overthrow of political regimes. Conversely, governments that prepare and respond well will gain additional legitimacy from their citizens.

> **Climate change and conflict scenarios:** There are two basic scenarios for climate change leading to conflict, with the first more likely: Climate change could intensify environmental or resource problems that communities are facing already, exacerbating grievances, overwhelming coping capacities, and at times spurring forced migration. In this scenario, climate change places additional stress on pre-existing situations, worsening the quantity, condition, and distribution of already scarce natural resources. Climate change could create new environmental problems that lead to instability. If coping strategies are unsuccessful or adaptation measures are not taken, the likelihood of conflict may increase as human security is eroded and grievances intensify.[18]

- **Public sector finances will be challenged due to lost economic productivity and the need to implement adaptation programs.** The results of climate change will place severe strains on developing country budgets, particularly for those countries that face a significant loss of revenue and an increased need to address adaptation issues. The need to program resources to address critical water shortages, for example, will constrain governments' ability to fund basic poverty reduction services such as education and health care.

- **Climate change could intensify environmental or resource problems that communities and governments are already facing.** This will exacerbate grievances, overwhelm coping capacities and spur migration and displacement. Furthermore, climate change could create new environmental, economic, social and political problems that lead to instability.

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[18] Stark, Jeffrey, Mataya, Christine, and Lubovich, Kelley, Foundation for Environmental Security and Sustainability, Climate Change, Adaptation and Conflict: A Preliminary Review of the Issues, USAID Discussion Paper, Washington, DC, October 2009.

GLOSSARY OF TERMS

Adaptation: Adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.[19]

Cap and Trade (also called Emissions Trading): Parties with commitments under the Kyoto Protocol (Annex B Parties) have accepted targets for limiting or reducing emissions. These targets are expressed as levels of allowed emissions, or "assigned amounts," over the 2008–2012 commitment period. The allowed emissions are divided into "assigned amount units.**"** Emissions trading, as set out in Article 17 of the Kyoto Protocol, allows countries that have emission units to spare—emissions permitted them but not "used"—to sell this excess capacity to countries that are over their targets.[20]

Carbon Market: Emissions trading, as set out in Article 17 of the Kyoto Protocol, allows countries that have emission units to spare—emissions permitted them but not "used"—to sell this excess capacity to countries that are over their targets. Thus, a new commodity was created in the form of emission reductions or removals. Since carbon dioxide is the principal greenhouse gas, people speak simply of trading in carbon. Carbon is now tracked and traded like any other commodity. This is known as the "carbon market."[2]

Carbon Sequestration: The process of removing carbon from the atmosphere and depositing it in a reservoir.[1]

Climate change: Climate change refers to any distinct change in measures of climate lasting for a long period of time.[21]

Climate Vulnerability: The degree to which a system is susceptible to, or unable to cope with, adverse effects of climate change, including climate variability and extremes. Vulnerability is a function of the character, magnitude, and rate of climate variation to which a system is exposed, its sensitivity, and its adaptive capacity.[1]

Copenhagen Accord: The Copenhagen Accord, a political agreement struck by world leaders at the 2009 U.N. Climate Change Conference in Copenhagen, calls on participating countries to pledge specific actions they will undertake to mitigate greenhouse gas emissions. This represents the first time ever that all of the world's major economies have offered explicit international climate pledges.[22]

Designated National Authorities: At a national level, each country involved in the **CDM** (Clean Development Mechanism) has a Designated National Authority (DNA) responsible for granting approval to local projects which have fulfilled national criteria for sustainable development and with a good chance of succeeding at eventual registration, as well as acting as a focal point for **CDM** activities.[23]

Greenhouse gases (GHGs): The atmospheric gases responsible for causing global warming and climate change. The major GHGs are carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O). Less prevalent—but very powerful—greenhouse gases are hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF_6).[1]

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[19] UNFCCC http://unfccc.int/essential_background/glossary/items/3666.php#C
[20] UFCCC http://unfccc.int/kyoto_protocol/mechanisms/emissions_trading/items/2731.php
[21] EPA http://www.epa.gov/climatechange/fq/science.html
[22] Pew Center http://www.pewclimate.org/docUploads/targets-and-actions-copenhagen-accord-05–24–2010.pdf
[23] CDM Update http://www.cdmupdate.com/dna.asp

Kyoto Protocol: The Kyoto Protocol is an international agreement linked to the United Nations Framework Convention on Climate Change. The major feature of the Kyoto Protocol is that it sets binding targets for 37 industrialized countries and the European community for reducing greenhouse gas (GHG) emissions. This amounts to an average of five percent against 1990 levels over the five-year period 2008–2012. The major distinction between the Protocol and the Convention is that while the Convention encouraged industrialized countries to stabilize GHG emissions, the protocol commits them to doing so. Recognizing that developed countries are principally responsible for the current high levels of GHG emissions in the atmosphere as a result of more than 150 years of industrial activity, the protocol places a heavier burden on developed nations under the principle of "common but differentiated responsibilities.[24]

Low Emission Development Strategy (LEDS): A development strategy that uses policy and resources to reduce the generation of carbon emissions from all sectors, including power generation and use, agriculture, forestry, transportation, and water management.

Mitigation: In the context of climate change, a human intervention to reduce the sources or enhance the sinks of greenhouse gases. Examples include using fossil fuels more efficiently for industrial processes or electricity generation, switching to solar energy or wind power, improving the insulation of buildings, and expanding forests and other "sinks" to remove greater amounts of carbon dioxide from the atmosphere.[1]

Nationally Appropriate Mitigation Actions (NAMAs): NAMAs are voluntary actions taken by developing countries to reduce emissions that national governments report to the UNFCCC.

National Adaptation Programmes of Action (NAPAs): NAPAs are documents prepared by least developed countries (LDCs) identifying urgent and immediate needs for adapting to climate change. The NAPAs are then presented to the international donor community for support.[1]

Reducing Emissions from Deforestation and Forest Degradation (REDD): REDD is an effort to create a financial value for the carbon stored in forests, offering incentives for developing countries to reduce emissions from forested lands and invest in low-carbon paths to sustainable development. "REDD+" goes beyond deforestation and forest degradation, and includes the role of conservation, sustainable management of forests, and enhancement of forest carbon stocks.[25]

Payment for Environmental Services (PES): One type of economic incentive for those that manage ecosystems to improve the flow of environmental services that they provide. Generally these incentives are provided by all those who benefit from environmental services, which include local, regional and global beneficiaries. PES is an environmental policy tool that is becoming increasingly important in developing and developed countries.[26] An example would be the use of municipal water fees to generate funds for watershed management.

United Nations Framework Convention on Climate Change (UNFCCC): The Convention on Climate Change sets an overall framework for intergovernmental efforts to tackle the challenge posed by climate change. It recognizes that the climate system is a shared resource whose stability can be affected by industrial and other emissions of carbon dioxide and other greenhouse gases. Under the convention, governments: gather and share information on greenhouse gas emissions, national policies and best practices; launch national strategies for addressing greenhouse gas emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; cooperate in preparing for adaptation to the impacts of climate change. [27]

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[24] UNFCCC http://unfccc.int/kyoto_protocol/items/2830.php
[25] UN-REDD Programme http://www.un-redd.org/AboutREDD/tabid/582/Default.aspx
[26] FAO http://www.fao.org/es/esa/pesal/index.html
[27] UNFCCC http://unfccc.int/essential_background/convention/items/2627.php