

INTERNATIONAL ADAPTATION

Story Line for Canada

"Context"

- Canada has and will continue to support the most vulnerable countries to adapt to climate change.
- In recent years the Government of Canada has committed close to \$250 million specifically to international adaptation efforts.
- Canada is acting on all fronts: multilaterally, regionally and bilaterally.

"Multilateral Efforts"

- With approximately \$200M in funds dedicated for multilateral initiatives we are making a difference:
 - As part of a \$100M adaptation announcement by the Prime Minister at the recent Francophonie Summit we are helping the World Bank assist countries in becoming more climate-resilient.
 - Through the UNFCCC Canada was the first contributor to the Least Developed Country Fund, helping these countries develop programs to address urgent and immediate adaptation needs. We have also earmarked funds for adaptation in the Special Climate Change Fund.
 - Canada supports many global scale research efforts multilaterally including the Intergovernmental Panel on Climate Change and the Global Climate Observation System.
- All of these multilateral efforts, be they research oriented or programmatic, are significantly advancing the adaptation cause.

"Regional Efforts"

- Directly targeting our assistance toward the most vulnerable regions (close to \$50M) remains a priority for Canada:
 - In the Caribbean: key initiatives include "Disaster Risk Management Programs", "Adaptation Programs" and contributions toward a "Catastrophic Risk Insurance Facility".
 - In Africa: initiatives include the "West Africa Climate Change Adaptation Capacity Support" and in the Sahel region support for "Climate Adaptation Capacity".
 - In the South Pacific: direct funds provided to support adaptation and through the Asian Development Bank help promote adaptation mainstreaming in development planning.

- Canada also supports regional scale research efforts in the Americas, including the Inter-American Institute for Global Change Research.

"Bilateral Efforts"

- And bilateral assistance is growing with over \$20Million in direct support. Key recipients since 2000 include:
 - Jamaica* (\$100K)
 - El Salvador (\$713K)
 - Nigeria (\$5 million)
 - India (\$600K)
 - Bangladesh** (\$3 million)
 - Vietnam (\$1.2 million)
- And our efforts go well beyond the "adaptation" envelope per se. Broader risk management and development assistance programs bring several million dollars of needed help contributing indirectly to the adaptation challenge.

"Conclusion"

- Canada is using a range of mechanisms both to improve our understanding through research and to provide direct support to the most needy.
- Canada will continue to work stridently at the international negotiating table to ensure the adaptation side of the climate change challenge is adequately addressed.

* Small Island Developing State

** Least Developed Country

Background

Impacts of climate change are being observed in all continents and most oceans, and the best available science projects that these changes will continue over the next century and beyond. Changes to the climate system are now unavoidable. The Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report states that "... neither adaptation nor mitigation alone can avoid all climate change impacts; however, they can complement each other and together can significantly reduce the risks of climate change."

The impacts of the changes to the climate system are wide ranging and will affect all regions and sectors. While there will be both positive and negative impacts, on the global scale the negative impacts will predominate. Projections estimate, for example, that access to freshwater for more than 40% of the world's population may be jeopardized. Scientists are also projecting an increase in both frequency and intensity of extreme events, such as hurricanes, tropical storms, drought and flooding. Sea level rise will result in increased coastal erosion and flooding, saline intrusion into freshwater resources and, in some cases, may threaten the long-term viability of some states. The costs of adaptation, although difficult to fully predict, are estimated to be extremely high (estimates range from \$10 - \$50 billion/year). While the figures vary, all agree that addressing adaptation *now* is more affordable than the costs of inaction. ~~AS~~

Adaptation in the UNFCCC context

The issues of adaptation and mitigation are intricately linked within the context of the negotiations and developing country Parties will continue to push for significant progress to be made on adaptation issues, before agreeing to take action on mitigation. At COP 13, Parties agreed that adaptation would be one of the five pillars of a post-2012 agreement. Although details of the focus, structure and architecture of the adaptation component of the agreement are still very preliminary, discussions under the Bali Action Plan have focussed on: national planning for adaptation; streamlining and scaling up financial and technological support; enhancing knowledge sharing; and institutional frameworks for adaptation. Continued pressure from the G77 for new and additional funding for adaptation is expected.

Moving Forward

As the overall objective of adaptation is to build resilience to climate, whatever actions are agreed to in a post-2012 agreement should align with that objective. Building resilience requires: 1) economic resources (financing); 2) access to technology, and; 3) availability and access to data, and capacity to transform data into knowledge and action.

1) The UNFCCC funds established to help respond to funding obligations are widely criticised as being under-funded. Post-2012 discussions have seen a range of new proposals to significantly scale up financing, including insurance schemes. Some of these proposals are gaining traction, and it is likely that one or more enhancements to existing funding mechanisms or new funding mechanisms to address adaptation will be included in the post 2012 framework. ~~AS~~

2) Technology will also be fundamental in building resilience to climate, particularly in key sectors such as coastal zone protection, water resource management, agriculture, health, and infrastructure. Unlike mitigation technologies, technologies for adaptation are most often modified and applied at the local/regional level; hence information sharing is a critical component of broader success.

3) Lack of adequate information and inability to access information are repeatedly identified as significant barriers to action on adaptation. Types of information required to inform adaptation responses include both non-climate data, (aspects of socio-economic systems that are sensitive to climate), and climate data, (the extent, rate and type of change anticipated). For developing countries, national or regional institutional capacity is critical in order to receive and effectively utilize any needed information.

s.21(1)(a)

Canadian Support for Adaptation

s.21(1)(c)

While adaptation is an issue for all countries, Canada recognizes that the most vulnerable countries will need support to adapt. Canada has made contributions to adaptation through both multilateral and bilateral efforts, totalling more than \$240 million. This number is significantly higher when initiatives with adaptation benefits, but which are not necessarily directed at adaptation per se, are included (disaster risk management and agricultural technology development, for example).

Canada is active in a number of multilateral adaptation initiatives, through which it has contributed over \$200 million since 2000.

Canada has also contributed to both the Caribbean Climate Change Centre and the Caribbean Disaster Risk Management Program, where activities will inform the region's response to managing and adapting to climate change in the Caribbean. Canadian contributions to the regional development banks are also targeted to adaptation initiatives. Canada financed, for example, a pilot project through the Asian Development Bank to mainstream adaptation through risk reduction into development planning and management in Pacific developing countries and the operations of the bank itself. In terms of multilateral research and development, Canada participates in several global scale efforts, including the Intergovernmental Panel on Climate Change, the Global Climate Observing System (GCOS), and the Inter-American Institute for Global Change Research, for example.

Through the UNFCCC, Canada was the first contributor to the Least Developed Country Fund (LDCF), aimed at supporting least developed countries in developing national adaptation programmes of action (NAPAs). Canada also earmarked \$11 million of its contribution to the Special Climate Change Fund for adaptation. In addition to financial contributions to both the Nairobi Work Programme on impacts, vulnerability and adaptation (NWP) and the Global Climate Observing System, Canada continues to provide expert advice and support through active engagement in the NWP and membership on both the Least Developed Country Expert Group (LEG) and the Expert Group on Technology Transfer (EGTT), both of which contribute to enhancing adaptation activities.

Through bilateral channels, Canada has supported adaptation projects in some of the most vulnerable areas of the world. Between 2000 and 2009, Canada will have contributed more than \$21 million to bilateral projects aimed directly at adaptation, including work with small island developing states and least developed countries.

Highlights of Canada's contributions to adaptation:

- \$85M to the World Bank's Pilot Program for Climate Resilience (proposed)
- \$21M for adaptation to UNFCCC funds (SCCF and LDCF)
- Over \$21M in direct bilateral support

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- 2) Technology will also be fundamental in building resilience to climate, particularly in key sectors such as coastal zone protection, water resource management, agriculture, health, and infrastructure. Unlike mitigation technologies, technologies for adaptation are most often modified and applied at the local/regional level; hence information sharing is a critical component of broader success.
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Highlights of Canadian Investment in International Adaptation

Multilateral Initiatives (outside the UNFCCC)			
• Caribbean: "Disaster Risk Management Program"	Ongoing (2007-2015)	Donor - CIDA	\$16.9 million
• West Africa: "Climate Change Adaptation Capacity Support"	Ongoing (2002-2008)	Donor - CIDA	\$4.9 million
• Global Facility for Disaster Risk Reduction	Ongoing	Donor	\$3.5 million
• Caribbean Catastrophic Risk Insurance Facility	Ongoing	Donor	\$20 million
UNFCCC initiatives			
• Inter-American Institute for Global Change Research	Ongoing	Donor - EC	
UNFCCC initiatives			
• GEF – Special Climate Change Fund	Ongoing	Donor - CIDA	\$11 million (for adaptation)
• GEF – Least Developed Countries Fund	Ongoing	Donor - CIDA	\$10 million
• GEF replenishment (climate change related)	Ongoing	Donor – CIDA	\$55.6 million
• UNFCCC- Nairobi Work Program	Ongoing	Donor – DFAIT	\$250k
• Global Climate Observing System (GCOS) Secretariat	Ongoing	Donor – DFAIT	\$85k
• Intergovernmental Panel on Climate Change	Ongoing	Donor - DFAIT	
Current bilateral projects			
• Nigeria: "Building Response to Climate Change"	Ongoing (2007-2012)	Donor - CIDA	\$5 million
• Jamaica coastal vulnerability assessment	Ongoing (2008/09)	Donor - DFAIT	\$100k

Canada Climate Change Development Fund (CCCDF)			
• Bangladesh: Reducing Vulnerability to Climate Change	2000-2006	Donor – CIDA	\$3.0 million
• Caribbean: Adaptation to Climate Change in the Caribbean Region	2000-2006	Donor – CIDA	\$3.1 million
• El Salvador: Adapting to Impacts of Climate Change in the Jiquilisco Bay Region	2000-2006	Donor – CIDA	\$713k
• India: Vulnerability and Adaptation in Indian Agriculture in the Context of Climate and Economic Changes	2000-2006	Donor – CIDA	\$600k
• Sahel: Support for Climate Change Adaptation Capacity in the Sahel	2000-2006	Donor – CIDA	\$5.4 million
• South Pacific: Adapting to Climate Change in the South Pacific Region	2000-2006	Donor – CIDA	\$2.3 million
• Vietnam: Capacity Building for Adaptation to Climate Change in Vietnam	2000-2006	Donor – CIDA	\$1.2 million
Total (including the remaining \$15 million from the \$100 million*)			\$243.65 million



Canada's current actions in support of international adaptation efforts:

Bilateral projects			
• Nigeria: "Building Response to Climate Change"	Ongoing (2007-2012)	Canada is a donor through CIDA	\$5 million
• West Africa: "Climate Change Adaptation Capacity Support"	Ongoing (2002-2008)	Donor - CIDA	\$4.88 million
• Caribbean: "Disaster Risk Management Program"	Ongoing (2007-2015)	Donor - CIDA	\$16.85 million
• Jamaica coastal vulnerability assessment	Ongoing (2008/09)	Donor - DFAIT	\$100,000 - pending
Past bilateral projects: Canada Climate Change Development Fund (CCCDF) Adaptation Projects			
• Bangladesh: Reducing Vulnerability to Climate Change	2000-2006	Donor - CIDA	\$3,005,850
• Caribbean: Adaptation to Climate Change in the Caribbean Region	2000-2006	Donor - CIDA	\$3,140,450
• El Salvador: Adapting to Impacts of Climate Change in the Jiquilisco Bay Region	2000-2006	Donor - CIDA	\$712,500
• India: Vulnerability and Adaptation in Indian Agriculture in the Context of Climate and Economic Changes	2000-2006	Donor - CIDA	\$600,000
• Sahel: Support for Climate Change Adaptation Capacity in the Sahel	2000-2006	Donor - CIDA	\$5,417,112
• South Pacific: Adapting to Climate Change in the South Pacific Region	2000-2006	Donor - CIDA	\$2,300,000
• Vietnam: Capacity Building for Adaptation to Climate Change in Vietnam	2000-2006	Donor - CIDA	\$1,205,000
UN Initiatives			
• GEF - Special Climate Change Fund	Ongoing	Donor - CIDA	\$5 million to adaptation
• GEF - Least Developed Countries Fund	Ongoing	Donor - CIDA	\$10 million (from the Canada Climate Change Development Fund)
• GEF (35% of which is climate	Ongoing	Donor - CIDA	\$158.9 million over

change related)			4 years
• UNFCCC- Nairobi Work Program	Ongoing	Donor – DFAIT	\$250,000
• Global Climate Observing System (GCOS) Secretariat	Ongoing (2008/09)	Donor - DFAIT	\$85,000 (\$35k 08/09, \$50k 07/08)
World Bank			
• Caribbean Catastrophic Risk Insurance Facility	Ongoing	Canada largest donor through CIDA	\$20 million
• Global Facility for Disaster Risk Reduction: Track I – global and regional; Track II – national; Track III – Standby Recovery Financing Facility	Ongoing	Canada donor to Track II	\$3.5 over 2 years