

CANADA'S IMPLEMENTATION OF THE CCD WITH DEVELOPING COUNTRIES SUMMARY

Canada has been fully involved in the challenges posed by desertification, and in the global response to it, including as a Party to the United Nations Convention to Combat Desertification (UNCCD). In the developing world, Canada has a long tradition of helping countries and communities combat desertification and related problems through its official development assistance program (ODA), which is delivered by the Canadian International Development Agency (CIDA), and the International Development Research Center (IDRC).

Canadian cooperation takes place at all levels of intervention: multilateral, regional/sub-regional, national, and community, working with civil society. In the shared effort to combat desertification, CIDA takes an approach that emphasizes poverty reduction, capacity building, and local initiatives with broad participation.

Since ratifying the UNCCD, in 1995, Canada continues to support many countries, particularly in Africa, in their fight against desertification. Cooperation in combating desertification is largely facilitated by the fact that the Convention's principles are in close harmony with the mandate and priorities of Canadian assistance. Over the years, CIDA has implemented hundreds of projects in affected countries, which contributed directly and indirectly to combating desertification.

Canada has supported particular National Action Plan (NAP) processes, as in Senegal, Mali and Burkina Faso, where we provided financial and technical assistance, and participated on the Committee responsible for developing the national fund under the NAP. Although Canada has not participated in activities in support of National or Regional Action Plans in 1999, we continue to monitor the evolution of these process, in order to remain responsive to the needs and priorities identified by developing countries.

Canada also helps to fund a wide array of multilateral and regional organizations working to combat desertification, such as UN agencies, the World Bank, the International Fund for Agricultural Development (IFAD), the Consultative Group on International Agricultural Research (CGIAR), regional development banks, and specialized bodies such as the Global Environment Fund (GEF), the Comité Permanent Inter-États pour la lutte contre la sécheresse au Sahel (CILSS), the Southern Africa Development Community (SADC) and many more.

A major part of Canada's response has come from partners outside government, such as NGOs, communities, the private sector, and the academic community. A particular role has been played by Solidarité Canada Sahel, a coalition of NGOs that represents the North American focal point for NGO involvement in the Convention. Efforts are being made to raise awareness in Canada and abroad about the plight of people in affected countries. Our partner NGOs play an active role in this important task, ensuring wide dissemination of information. Films, teaching kits, internet tools, press kits, and even a CD have been used to increase knowledge about desertification and related problems.

The International Development Research Center (IDRC) is also contributing to finding solutions, through research and science, to the concerns of dryland countries. For example, IDRC's, People, Land and Water research theme focuses on soil management and water quality in Africa

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and the Middle East, to prevent environmental degradation. The IDRC has also assisted countries in defining useful indicators to monitor the implementation of the Convention.

A number of new initiatives to address desertification in affected developing countries have begun in 1999, many of which are implemented with the support of local and Canadian civil society. Efforts are continuously being made to use a holistic approach that integrates environmental concerns in development projects. Some new projects demonstrate a clear link between the fight against desertification and other issues, such as the protection of biological diversity. Emphasis is placed on building communities' capacities to manage their natural resources in a sustainable way. Assistance in decentralization of management structures, targeted training, awareness raising, and civil society support, for example, ensure that ownership of the process is placed in the hands of affected people.

Canada continues to be engaged in the fight against desertification, both at home and abroad. Indeed, Canada is also an affected country, and will submit, at the fourth Conference of Parties, its first report on domestic implementation of the Convention.

The following is an update of Canada's first report to the United Nations Convention to Combat Desertification, "*Desertification: A Canadian Perspective*", and will be submitted to the fourth Conference of Parties to be held in Adelaide, Australia, in Autumn 2000. The information contained in this update document pertains to new Official Development Assistance (ODA) initiatives which have begun in 1999-2000. At COP IV, Canada will also submit its first report on domestic implementation as an affected country: "*Desertification: A perspective on Canada.*"

Canada has a long tradition of helping countries and communities combat desertification and related problems through our Development Assistance program. Initiatives have ranged from dune stabilization and market gardening in West Africa, to agro-forestry in India and promoting soil-conserving agricultural practices in Latin America. The Canadian International Development Agency (CIDA) supports the desertification-related efforts of more than one hundred partners, including non-governmental organizations, intergovernmental organizations, universities, companies and community groups. The International Development Research Center (IDRC) has three decades of experience in helping countries apply science and technology to their environmental and developmental problems.

Although this year Canada has not participated in activities in support of the development of National or Regional Action Plans (NAPs/RAPs) under the Convention, we continue to monitor the evolution of these processes, in order to remain responsive to the needs and priorities identified by affected developing countries.

ASIA

Economic transformations in Asia are bringing new development challenges with respect to the environment, regional security and other issues. All programs in Asia integrate environmental considerations in their activities and support the implementation of environmental sustainability strategies. In that context, more attention is given to the issue of food security.

With regards to desertification, Canada is active in the following affected Asian countries: China, India, Nepal, Sri Lanka, Pakistan, Afghanistan, Indonesia, Philippines, Thailand, Bangladesh, Cambodia, Viet Nam and the Lao PDR.

A new initiative in the Lao PDR seeks to promote food security in the provinces of Sekong and Salavan, where poverty has led populations to unsustainable agricultural and natural resource practices, such as deforestation and unsustainable use of chemical fertilizers, both causes of desertification. This project reinforces the synergies between meeting basic human needs and the protection of the environment.

Another CIDA project, in India, implemented jointly by a Canadian NGO, the Western Canada Wilderness Committee, and a local NGO, Tiger Trust India, combines the conservation of biological diversity with the fight against desertification. This project seeks to involve local communities in efforts to reduce the most significant threats to India's tiger and to its habitat: desertification and land degradation, deforestation, and poaching.

LATIN AMERICA AND THE CARIBBEAN

Canadian support for Latin America's efforts to combat desertification focuses on assisting affected countries to develop knowledge and technology to create an enabling environment for the management of natural resources. CIDA is working with local NGOs in Peru, the Dominican Republic and Haiti to help communities face the challenges of sustainable agriculture.

Haiti is seriously affected by desertification, and CIDA has been working for many years with communities to reclaim degraded land. A new initiative in Haiti aims to inform farmers about more appropriate farming techniques and practices, through a series of booklets, *Machete Verde*, with simple text and pictures. This initiative will replicate a successful CIDA project in Central America. This training manual, also available on CDROM, includes information on soil conservation and other aspects of farm management, such as pesticide use, animal husbandry, fire control, and agroforestry. It will be distributed through local organizations and schools.

AFRICA

Africa remains a priority for Canadian programming to combat desertification. The region is vulnerable to drought, and the increase of land lost permanently to desertification is grave. An interesting new initiative in Africa is the \$40 million Food Security Programme in Northern Ghana. This programme, encompassing multiple projects, provides assistance to the agricultural sector and its extension system in Ghana. This includes community support in natural resource management (irrigation, livestock, soil and water), and support to key institutional actors, such as NGOs, farmer's associations, research institutions, and agriculture professionals.

This programme seeks to address land degradation and desertification through improvement to existing land management technologies and knowledge, and direct assistance to communities.

IDRC is also strengthening its work in Africa to alleviate the pressures of land degradation in affected countries. This year the IDRC launches a new initiative in West Africa, covering Senegal, Mali, Gambia, Guinea Conakry and Guinea Bissau. The "*Western Africa Rural Foundation*" project seeks to develop local capacity for efficient and productive management of natural resources, contributing to food security goals, without destroying the environment. The project will also address related issues of good local governance to ensure equitable access to resources, and regional integration for effective sharing of information, goods and services.

CENTRAL AND EASTERN EUROPE

Canada's Technical Assistance Programme for Central and Eastern Europe is designed to promote democratic and economic reforms in the region through the development of mutually beneficial relationships with Canada.

Inconsistency in adequate supplies of water in Central Asian states has been straining relations between stakeholders at both the national and community levels. Tensions over water sharing

and use, which exploded in the early 1990s into violent conflicts, continue to remain unsettled. Fortunately, several of the critical water-related stresses in the region can be eased or mitigated by addressing some of the core issues of the problem: the deterioration of local water management skills, and the need for new coordination, negotiation and information-sharing structures. CIDA is supporting an initiative with McGill University of Montreal and Mount Royal College of Calgary, in consultation with the Interstate Coordination Water Commission (ICWC) to address these issues.

2000 will likely see further progress in ratification and the adoption of a new regional implementation annex under the Convention. As appropriate, Canada will seek to reinforce partnership in support of this process in the region.

MULTILATERAL AND REGIONAL PARTNERS

Canada continues to work through multilateral and regional institutions to promote sustainable development and combat desertification. Canada contributes to financing the activities of organizations such as the CILSS (Comité Permanent Inter-États de Lutte contre la Sécheresse au Sahel) and other regional institutions, as well as at the UN level, through organizations such as the Food and Agriculture Organization, the United Nations Development Programme, the Global Environmental Facility, and also the UN Desertification Convention Secretariat.

RAISING AWARENESS

Canada continues to raise awareness about the problem of desertification. Working with the North American NGO focal point, desertification information is being distributed to the Canadian public, with particular focus on schools and communities.

With support from CIDA, USC Canada, produced in 1999 a feature film on desertification, and this year is releasing two short educational videos on the fight against desertification and related food security issues. These are to be included in teaching kits and made available to schools across Canada. USC is also active in domestic awareness raising.

Partner NGO Solidarité Canada Sahel hosted an event in November 1999, bringing together the NGO community to discuss avenues of cooperation between Canadian civil society and developing countries towards implementation of the Convention.

On June 17, 1999, Canada marked the 5th World Day to Combat Desertification by launching its new desertification web page, which highlights new and ongoing Canadian initiatives (www.acdi-cida.gc.ca).

Finally, a special exhibit is on display in Ottawa, as of June 2000. "*Canada in the World*" is dedicating special attention to desertification related projects in developing countries. It is expected that thousands of Canadians and visitors will visit this exhibit during the year.

NEW DESERTIFICATION PROJECTS 1999-2000

COUNTRY	TITLE	BUDGET (CAN\$)
Canadian International Development Agency (CIDA)		
Bilateral Projects		
Lao PDR	CUSO agriculture and Forestry project	500,000.00
Uzbekistan	Water Resources Management Training Centre	1,822,000.00
Ghana	Food Security in Northern Ghana	40,000,000.00
Haïti	Machete Verde in Haïti	250,000.00
Total Bilateral		42,572,000.00
Partnership Branch Projects		
India	WCWC Tiger Trust Project	300,000.00
Peru	Agro-Ecological recuperation pilot project	75,000.00
	Hesquiaht/Amazonian Partnership - Exploratory Phase	10,000.00
Haiti	Conservation des sols IV	46,501.00
Niger	River to River	75,000.00
Ecuador	El Condor II	216,736.00
Dominican Republic	Integrated management of the OCOA River	51,817.00
Bolovia, Peru, Ecuador	Protected Landscape Partnership	10,000.00
Cameroon	SPEC AfriCAN Rainforest Project	15,000.00
Madagascar	Capacity Building for Madagascar's COMODE NGO	15,000.00
Total Partnership Branch		815,054.00
Total CIDA		#####
International Development Research Center (IDRC)		
Research project	Indigenous knowledge tool-kit	3,500.00
Jordan	Yarmouk - Carleton small grants	305,765.00
Bangladesh, India, Nepal, Sri Lanka, Pakistan	Enhancing community capacity to generate knowledge and influence policy	712,620.00
Senegal, Mali, Gambia, Guinea Conakry and Guinea Bissau	West Africa Rural Foundation	300,000.00
TOTAL IDRC		1,321,885.00

**Desertification:
Meeting the Challenge through Action Today**

Canada's 1st Official Report
on the Implementation
of the United Nations Convention to Combat Desertification -
with Special Regional Focus on Africa

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Asia

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Domestic

8. Working together: the role of Canada's civil society

Table A - Canadian International Development Agency's (CIDA) Gov't-to-Gov't projects related to combatting desertification

Table B - CIDA's Partnership Branch (CPB) projects and programs related to combatting desertification

Table C - International Development Research Centre (IDRC) projects related to combatting desertification

1. Introduction

Desertification is a problem that demands urgent action on every continent. It is eroding environmental integrity in many parts of the world. It menaces the well-being of about a billion people - mainly in the developing world, with Africa especially vulnerable. Unchecked, it can destroy livelihoods, render land useless, wipe out habitat for animals and people, generate conflict, spark migration, and contribute to global warming, while increasing human pressure elsewhere.

Each year, soil degradation costs the world 7 million hectares of fertile land - an area almost the size of Ireland - mainly because of overgrazing, deforestation, and mechanized farming. Desertification is a clear and present threat to some 70 per cent of the 5-billion-plus hectares of the world's drylands currently used for agriculture: it is damaging almost 30 per cent of our planet's land surface.

Desertification...

- is a term coined in West Africa in 1949 by a French forester who saw the Sahara engulfing marginal grasslands
- arose as an issue at the 1972 United Nations Environment Conference
- is defined in the 1994 **Convention to Combat Desertification** as:
Land degradation in arid, semiarid and dry subhumid areas resulting from various factors, including climatic variations and human activities.

Desertification is not so much, as often imagined, the relentless advance of existing deserts, but rather the deterioration of drylands, creating desert-like dead zones that can spread and merge. It afflicts a million hectares of Africa - but is a growing problem in Asia too, notably in the former Soviet Union and in North America as well, the continent with the highest percentage of degraded dryland, where much of the Southwest United States is at risk.

Since the process is driven largely by human misuse of land, plants and water, it can also be corrected by people through changes in their behaviour. Action to combat desertification is not only 'doable' but - in order to protect our economic, political and food security - is in the long-term best interest of everyone.

Combatting desertification: a global imperative ...

All life in our fragile biosphere is interconnected, interactive and interdependent, in ways we have barely begun to understand. This may prove to be the greatest lesson learned in the second half of the 20th century.

At first glance, desertification - unlike ozone depletion, climate change, and the loss of biodiversity - did not appear to affect the whole planet, so did not seem to be everyone's problem... until awareness dawned that the correlation between Desertification and its related threats - rural poverty and food insecurity - represent tremendous costs to developing societies in terms of economic and social potential and a monumental challenge to the sustainability of donor countries development investments. The potential resulting threat of environmental refugees and rapid urban growth can take on emergency proportions, spill over borders, destabilize societies, and in the long-term create complex problems that affect all of us. This insight helped create a global consensus in favour of something new - the Convention to Combat Desertification.

In recent years, the gradual build-up of overlapping conventions, agreements and agendas (on biodiversity, desertification, climate change, forests, the ocean, as well as various aspects of economic and social development) has become perplexing. But in fact these many commitments create synergy, precisely because of the interdependence that links plants, animals and humans, soil, water and air, each to the other. When we cooperate to combat desertification, we are helping to ensure food security and sustainable development, and we are likely moderating climate change... while also protecting livable habitat for vegetation, birds, livestock, wildlife, and our own species, and thus preserving our planet's rich biodiversity.

- Canada provided financial support to the IUCN Forum Linking Biodiversity and Desertification, held in connection with the 2nd Conference of the Parties (COP2), in Dakar, Senegal in December, 1998.

2. Canadian connections

Canada is fully involved in many ways in the challenge posed by desertification, and in the global response to it.

At home, Canadians are not among the most-threatened people, but those who remember or have studied the dust-bowl days of the 1930s know how much we have to lose - especially on the prairies, where Canada's massive production of foodgrains depends on treading lightly on the land, using our natural resources of topsoil and water wisely. A century of hard-gained experience gives Canada a reservoir of expertise, much of it located in the Prairie Farm Rehabilitation Administration (PFRA) and its many partners, in making large-scale dryland agriculture sustainable over the long term.

In the developing world, Canada has a long tradition of helping countries and communities combat desertification and related problems through our official development assistance (ODA) program. Bilateral (government-to-government) initiatives have ranged from dune stabilization and market gardening in West Africa, to agro-forestry in India, to soil-conserving agriculture in Latin America.

The Canadian International Development Agency (CIDA) also supports the desertification-related efforts carried out by more than a hundred partners - non-governmental organizations (Canadian, Southern or international), universities and colleges, companies, municipalities and community groups. And the International Development Research Centre (IDRC), created by Canada's Parliament in 1970, has three decades of experience in helping developing countries apply science and technology to their environmental and development problems, including desertification.

Internationally, Canada helps to fund a wide array of multilateral and regional organizations working partly or entirely to combat desertification. These include UN agencies, the World Bank, regional development banks, and such specialized bodies as the Global Environment Fund (GEF), the Consultative Group on International Agricultural Research (CGIAR), the International Fund for Agricultural Development (IFAD), the Comité permanent Inter-États de Lutte contre la Sécheresse dans le Sahel (CILSS), the Club du Sahel of the Organisation for Economic Cooperation and Development (OECD), international non-governmental organizations such as the International Union for the Conservation of Nature (IUCN), and many more.

Canada's support for multilateral action to combat desertification....

Canada supports several multilateral development institutions which contribute to efforts to combat desertification. Information on the extent and nature of their desertification activities could be obtained directly from these respective organizations. Canada's annual contributions, in support of each institution's general mandate, are approximately as follows:

<u>Agency</u>	<u>C\$ million¹</u>
United Nations Development Programme (UNDP)	C\$41.25
Global Environment Fund (GEF)	C\$30.00
UN Food and Agriculture Organization (FAO) ²	C\$15.00
Consultative Group on International Agricultural Research (CGIAR)	C\$13.26
International Fund for Agricultural Development (IFAD)	C\$ 9.10
Inter-American Institute for Cooperation on Agriculture (IICA)*	C\$ 5.25
World Meteorological Organization (WMO)*	C\$ 1.80
UN Voluntary Fund for the Environment (UNVFE)	C\$ 0.93
United Nations Environment Program (UNEP) *	C\$ 0.93

¹ FY1998/99 information is not yet

² contributions.

Annual contribution is based on figures to various organizations in the FY1997/98 period.

* Amount includes both CIDA and Department of Foreign Affairs and International Trade

This is the first official report on Canada's effort to help implement the UN Convention to Combat Desertification. As called for in that agreement, the substantive content of this 1st Report focuses on Africa; with only an overview on the additional Canadian effort underway domestically and in other regions. Future reports will deal in more detail with activities in these other affected parts of the world. Attached are tables giving full project information on bilateral, partnership and IDRC initiatives in all regions.

Often it is difficult to determine how much of a project's impact, or what share of a supported organization's work, should fall into the category of contributing to 'combatting desertification'. Canada has supported hundreds of relevant projects with aid dollars over the years, and the current crop of desertification-related projects indicates its ongoing commitment.

. Canada's role to date

A rising global priority...

- When Canada's development assistance program began (1950), the word 'desertification' was unknown.
- The term came into public discourse at the UN Conference on Human Environment (Stockholm, 1972).
- Drought and famine in the Sahel (1973-74) made desertification a high-profile concern.
- The UN Conference on Desertification (Nairobi, 1977) adopted a Plan of Action, endorsed by the General Assembly and passed to the UN Environment Program to be carried out..
- Despite efforts, implementation lagged in the '80s... even though famine in the Horn of Africa (1984) caught the world's attention.
- With Africa pressing for action, the UN Conference on Environment and Development (Rio, 1992) asked the General Assembly to establish a committee to negotiate an agreement binding on governments.
- The Convention to Combat Desertification (CCD) was adopted (Paris, 1994).
- An Urgent Action for Africa Resolution (1994) called for planning and communications work to begin in the region while ratification process was under way.
- Canada specifically recognized the desertification agreement as an "important instrument" in the Government's foreign policy statement (*Canada in the World*, 1995). It became one of the first developed countries to ratify it (December 1, 1995).
- The Convention came into legal effect December 26, 1996, after the 50th ratification (now over 145 ratifications or accessions).
- Canada is actively programming against desertification, in all affected regions of the developing world, in the spirit of the Convention.

The **United Nations Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa** - the full name of the CCD - is a triumph of international diplomacy and collaboration. After Rio - where the South, led by Africa, insisted on serious action - came 13 months of strenuous negotiations before, against the odds and expectations, agreement was reached.

Canada was a strong supporter of the urgently needed Convention, and played a key role in the process. CIDA is Canada's lead agency in the negotiations, drawing on its long-time involvement in combatting desertification in developing countries, especially in Africa.

Besides recognizing the Convention as an important initiative for sustainable development, and ratifying it promptly, the Government mandated CIDA, in cooperation with IDRC, to implement it. There is also

interdepartmental information-sharing, with other parts of the government cooperating on desertification issues and sometimes helping carry out projects.

A major part of Canada's response comes from partners outside government, in the 'civil society' - the academic community, the private sector, and especially non-governmental organizations (NGOs). A particular role has been played by *Solidarité Canada Sahel* (SCS) a 'focal-point' coalition of NGOs that coordinates North American NGOs' interest in the Convention. These important players ensure emphasis on local, grassroots initiatives.

4. Urgent Action for Africa: National Action Plans and awareness raising

Academic partners...

Canada's universities and colleges have played a major role in our development cooperation efforts ever since the Colombo Plan days of the 1950s, and many of them are active partners today in combatting desertification. CIDA helps to fund specific research projects, as well as partnering between Canadian academics and their colleagues in developing countries.

In 1997-98, college partnerships were linking Canadians with counterparts in Botswana, Namibia and India, while university partnerships involved Zimbabwe and Ethiopia (in cooperation with the Association of Canadian Community Colleges and the Association of Universities and Colleges of Canada).

Meanwhile, several key Canadian universities were taking part in relevant research projects - including Lakehead and St. Mary's, as well as the Universities of Moncton, Calgary and British Columbia.

U.B.C., for instance, has been helping the University of Nairobi to strengthen its departments of animal production, soil and crop science, and range management, and improve its Machang field station... the University of Calgary has been collaborating with the University of Kelaniya and other Sri Lankan institutions to develop effective training in terrestrial ecosystems ecology... and the University of Moncton is working with partners in Haiti, where degradation of agricultural land is severe.

By making their expertise and capacity in science, research and education available, Canada's universities and colleges are contributing significantly to combatting desertification in many parts of the developing world.

To advance the Urgent Action for Africa initiative, CIDA has helped several countries in West Africa to proceed with preparation of National Action Plans (NAPs) for combatting desertification. Priority in this process is put on consultation with and participation by the people most affected, and local-level awareness and action.

National Action Plans...

A key element of the Convention calls for affected developing countries to “develop strategies and identify priorities in national action plans” - using a ‘bottom-up’ approach that enables the local population to be real partners. Canada actively supported the consultation process, as Senegal, Mali and Burkina Faso developed their national action plans (NAPs). In Burkina Faso, CIDA and IDRC provided financial and technical help to the process. As well, Canada is acknowledged for having played a helpful role in discussions on the development of national funds under Burkina Faso's NAP. Working with the Burkinabe, IDRC has been instrumental in developing a methodology for indicators to measure the success of the consultative process for national action plans, this work is a positive contribution to other countries which are initiating similar processes.

The CILSS’s program on managing resources and combatting desertification - which is helping in the preparation of a regional desertification strategy and national strategies, policies and plans in member countries - receives financial assistance from Canada. And Canada supports various related initiatives, such as the project to strengthen community organizations in Burkina Faso, Mali and Niger and improve NGO coordination at national, regional and international levels.

To help coordinate efforts and progress, Canada has provided support and encouragement to the Secretariat of this Convention - throughout the negotiation process, during the interim period, and now that the Convention is in force. This has included contributions to special funds administered by the Secretariat to help least-developed countries and NGOs take part in the negotiations. Canada also supplied the Secretariat with the services of a legal adviser, essential to the Convention's success; provided assistance to regional consultations; and hosted a gathering of members of the Committee on Science and Technology for an Ottawa workshop in 1997 to advance discussion on benchmarks and indicators to monitor progress in combatting desertification.

And to build public awareness, and raise the profile of desertification as an important issue - both domestically and in the affected developing countries - a broad array of communications activities have been carried out over the past four years by CIDA and IDRC, in cooperation with partners, notably in the voluntary sector. Products created, promoted and distributed, for use at home and overseas, have included publications, fact sheets, 'tool kits', media information, public service announcements, videos, and a CD-ROM presentation. Support was also provided to USC Canada to assist them in the production of a film. Activities have included Parliamentary and Cabinet briefings, provision of classroom material, and creation of a website, as well as special events each year to mark June 17, the World Day to Combat Desertification.

In addition, CIDA has supported the Developing Countries Farm Radio Network (a Canadian-based NGO) in its efforts to reach out to local farmers and communities to encourage participation in the preparation of National Action Plans, as well as to share knowledge about simple and practical steps for fighting desertification. Funding also went to the International Institute for Environment and Development to help it prepare position papers and publish the newsletter *Haramata*, which links policy-makers and practitioners in East, West and Southern Africa.

Early communications efforts focused largely on making the Convention known and explaining the national obligations involved. Now, the emphasis is shifting toward the substance of the problem and how the people and communities involved can make a difference - with less stress on the 'disaster' aspect, and more on success stories. CIDA will target youth and concentrate on building awareness in the civil society, while IDRC will work with the media to popularize the science of combatting desertification. Video, media-briefing and internet material is currently being prepared.

5. Canadian implementation

The Convention - with its 40 articles and four regional annexes (and a possible future fifth, for Eastern Europe) - takes an innovative approach to international environmental law, and to inclusive, democratic partnership. Article 3 describes the kinds of action required: local communities are to participate fully in decision-making, and all levels of government are to:

- improve cooperation and coordination,
- encourage a better understanding of the nature and value of land and water resources, and

- consider and take fully into account the special needs of developing countries.

The Convention imposes obligations. Affected developing countries must develop a National Action Program, and allocate resources for community-level action. But there are requirements for developed countries to meet, as well. In Canada's case, as both a developed and an affected country, the basic obligations are to:

- respond to the needs of affected developing countries, particularly in Africa, through providing financial assistance (within existing budgets) and exchanging technology and knowledge;
- improve efficiency and effectiveness of development assistance for desertification control, through donor coordination and programming approaches;
- report on Canadian dryland management programs.

Canada's compliance with its Convention obligations is greatly simplified by several favourable factors:

- close harmony between the Convention's principles and the mandate and priorities for Canadian assistance;
- Africa's traditional 'lion's share' of Canadian bilateral aid (a regional priority confirmed in the Government's foreign policy statement);
- firm Canadian support for the UN system, and confidence in global change through multilateral cooperation;

Canada's ODA...

Mandate: *to support sustainable development in developing countries, in order to reduce poverty and to contribute to a more secure, equitable and prosperous world.*

Priorities: Basic human needs
 Women in development
 Infrastructure services
 Human rights, democracy, good governance
 Private sector development
 The environment

- Canada in the World, 1995

(The Government's foreign policy statement also emphasizes **a commitment to strengthening partnerships and local participation and ownership.**)

- strong provincial land-management systems already existing, and a great deal of research, technology and know-how, concerning land management and combatting desertification.

In the shared effort to combat desertification, CIDA takes an approach that emphasizes poverty reduction, capacity building, and local initiatives with broad participation - as shown in the Canadian-supported projects described below, in Africa and other parts of the world.

Canada's cooperation takes place at all levels of intervention: multilateral, regional/sub-regional, national, civil society and community. Programs and projects to combat desertification and ensure sustainability reflect several key thrusts and themes:

- involvement and participation by local communities and the people most affected, including partnership with civil society, all vital to creating long-term, sustainable solutions;
- bringing science, knowledge and technology to bear, while integrating them with traditional knowledge and social realities;
- sectoral and natural resource management approaches;
- careful use of development assistance, including food aid, to ensure long-term sustainability and food security.

6. Focus on Africa

Desertification hits hardest here. Two-thirds of Africa is desert or drylands; three-quarters of the continent's agricultural drylands are already degraded; droughts are frequent and severe. Many countries are poor: they have inadequate infrastructure and very limited scientific, technical and educational capacity, while their rural people depend heavily on natural resources for subsistence and survival - thus Africa's strong advocacy for the Convention.

Canadian assistance supports many of the goals and proposals set out in the Convention's detailed Regional Implementation Annex for Africa, and in the National Action Plans developed by affected countries.

Canada contributes to all the major multilateral organizations active in Africa (UN agencies, World Bank, African Development Bank, IFAD, etc.). A host of regional and sub-regional bodies and agencies, also supported by CIDA, include the *Club du Sahel* and the CILSS in the west, and the Southern African Development Community (SADC), with its eleven member countries.

Meanwhile, at the national level, dozens of desertification-related projects funded by CIDA are being carried out in affected countries, with partners including national governments and often NGOs. Such efforts across Africa reflect the four key themes mentioned above, with significant projects focusing on participation, science/knowledge, basic natural resources (soil/water), and long-term sustainability (drought mitigation).

NGOs have special skills and experience that can help a participatory approach to development take root and produce results.

In West Africa, for instance, *Solidarité Canada Sahel* is implementing the \$18 million CIDA-funded Strengthening Civil Society in the Sahel project. Benefiting from SCS's 14 years of experience working with NGOs and rural communities in the region, the project aims at building the capacity of regional NGOs and local groups in Burkina Faso, Mali and Niger, with a focus on NGO collaboration in implementing the Convention. The goal is to help such groups - which have given high priority to fighting desertification and taking part in shaping National Action Plans - gain the capacity to pursue their goals autonomously.

In Mali, farmers and herders face drought and deterioration of the arid lands. The Unitarian Service Committee (USC Canada) is working with local partners (rural communities, an NGO, government and a research institute) to tackle desertification. A new environmental rehabilitation and food security (RESA) project centered in Mopti, one of the country's poorest regions, will have three elements:

- food security (composting, erosion control, irrigation, livestock management, alternative crops, plant research, seed banks, demonstration plots, local grain banks);
- environmental rehabilitation (vegetation, energy conservation, local nurseries, windbreaks, school gardens, ecology courses);
- capacity-building and social mobilization (farmers' meetings and workshops, participatory management groups, village organization, consultation structures, training, literacy, communication).

Attention is being placed on the key roles of women and students. A participatory methodology with bottom-up planning is a key element of the project. Goals include food security, better living conditions, restoring plant cover, and fostering decentralized 'civil society' structures able to manage natural resources sustainably. This project will benefit an estimated 13,000 people living in 25 villages.

Research lends the power of science and knowledge to Africa's drive to combat desertification and achieve sustainable development. Research can reveal better ways to prevent desertification and even to return lost ground to usefulness. Many of the projects supported by IDRC in Africa aim at protecting or restoring vulnerable land and helping communities address their research needs. For instance:

- Filao trees, planted near Senegal's coast in the 1930s to stabilize advancing dunes, last half a century but do not regenerate. The *Institut sénégalais de recherches agricoles*, IDRC and *Université Laval* are cooperating

to find effective ways of regenerating the vital trees, and involving local people and governments in plantation management.

- Kenya has described its Baringo lowlands as an “ecological emergency”. A shift from pastoralism to subsistence farming has removed vegetation and eroded the land. Under its People, Land and Water (PLAW) program, IDRC is working with local communities and Kenya’s Rehabilitation of Arid Environments Charitable Trust to research strategies to revegetate damaged land and establish cooperatives to manage natural resources sustainably.

Canada and research ...

Vital research is being carried out worldwide on a range of problems which are challenging the region. Many of the research organizations which Canada supports are focusing their research effort in areas which will contribute to combatting desertification:

- Drought-resistant food crops are being developed by the Pan-African Bean Research Alliance (PABRA).
- The International Institute for Biological Control (IIBC), the CILSS and the International Institute for Tropical Agriculture (IITA) are cooperating on a mycoinsecticide - LUBILOSA - as an alternative to chemical pesticides for controlling costly locust infestations which destroy crops and vegetation alike.
- The World Bank's Special Program for Agricultural Research (SPAR) is making accumulated knowledge from global agricultural research available to Africans.
- Canada supports the work of the Consultative Group on International Agricultural Research (CGIAR) which includes relevant research being undertaken by:

- the Center for International Forestry Research (CIFOR),
- International Services for National Agricultural Research (ISNAR),
- International Center for Agricultural Research in Dry Areas (ICARDA),
- International Center for Tropical Agriculture (CIAT),
- International Council for Research in Agro-forestry (ICRAF),
- International Crops Research Institute for Semi-arid Tropics (ICRISAT),
- International Institute of Tropical Agriculture (IITA),
- International Irrigation Management Institute (IIMI),
- International Livestock Research Institute (ILRI),
- International Maize and Wheat Improvement Center (CIMMYT),
- International Plant Genetic Resources Institute (IPGRI),
- West Africa Rice Development Association (WARDA).

- CIMMYT, with assistance from CIDA since 1985 for its East Africa cereals program, has developed many varieties of drought-resistant maize and wheat that have improved farm productivity - which is still far from potential yields. The program is continuing its work to increase maize and wheat production further in the region in a sustainable manner.

Water and soil are the focus of important initiatives in other parts of the continent.

In Ethiopia's province of Tigray - where erratic rains contribute to chronic food deficits, and almost all of the annual run-off is lost - CIDA is working closely with the FAO and its Special Programme for Food Security, to strengthen institutions and improve water-harvesting techniques. The WHIST (Water Harvesting and Institutional Strengthening - Tigray) project, implemented by the PFRA, will help to develop regional and community capacity to harvest water and use it for food production. WHIST is a test-case for future irrigation efforts intended to ease food shortfalls when rain is unreliable.

Egypt's vital agriculture, heavily dependent on irrigation, is threatened by water scarcity and soil deterioration. An On-Farm Water and Soil Management project - funded by CIDA (\$20.5 million) - will help Egypt maintain productivity through farmers' involvement in decision-making about water conservation and soil improvement.

In Jordan, the Sustainable Rangeland Management is designed to restore the productivity of arid rangeland and demonstrate participatory management involving local communities. This project has also been undertaken as a support to the Middle East Peace Process.

Sustainability and survival under difficult conditions calls for varied approaches to suit different environments, in order to reduce the impact of drought and other difficulties.

A decade of near-drought in several countries of the Southern Africa region generated expensive emergency relief programs, and the realization that more effort must go into reducing the effects of drought at the community level. In the SADC region, CARE Canada and three other Canadian NGOs are carrying out a project to reduce vulnerability in drought-prone areas by working with communities to improve water use and food storage, with food aid used to support drought mitigation initiatives.

In Ethiopia, similar efforts are under way to move beyond massive, recurrent emergency food aid programs. A project implemented by Canadian Lutheran World Relief is using food aid to support the rehabilitation of degraded lands (reforestation, soil conservation, erosion control) and to improve food production (irrigation, tools, seeds, livestock). Local communities, and disadvantaged groups in particular, are involved in solving their problems by taking part in planning and carrying out food-for-work projects with long-term developmental benefits.

To tackle the same situation from another angle, CIDA and Save the Children Canada are helping Ethiopia strengthen its Disaster Prevention and Preparedness Commission, so the country will be able to detect, plan for, and respond to any looming food crisis in the future. Early warning systems, warehousing, employment generation, data collection and community involvement are elements of this effort to mitigate the impact of inevitable disasters and reduce suffering and dislocation.

Many other small-scale initiatives are being carried out by Canadian and international NGOs with support from Canada. Organizations such as the International Union for the Conservation of Nature, Oxfam Canada, World Relief Canada, Partners in Rural Development, and the Rural Development Foundation are working with local partners on desertification-related projects across Africa.

Similarly, the Canadian private sector has been involved in joint ventures and in exploring linkages with their counterparts in African countries, to develop ways of making its special contribution to combatting

desertification. Sectors with such potential include water, solar/alternate energy, forestry, geomatics and remote sensing.

6. Other regions

Asia

With half the world's people and one-third of its drylands, Asia presents a kaleidoscopic variety of forms and aspects of desertification - with damage ranging from lowland deforestation to overgrazing of pasture to erosion of hard-won mountainside terraces. Various countries - Nepal, Laos, Pakistan - face their own specific challenges, and must tailor responses to suit their particular circumstances and needs. But where there is commonality of problems, regional activities are being launched through six 'Thematic Programme Networks' that seek answers to shared problems (India, for instance, hosts the network on agroforestry and soil conservation).

Canada is assisting six Asian countries in their efforts against desertification through bilateral projects ranging from groundwater irrigation in Nepal and food security in Sri Lanka to emergency management in Pakistan and Indonesia.

In China, three CIDA-supported projects aim at easing environmental stress while maintaining emphasis on agricultural production:

- The Hebei dryland project focuses on conservation in rain-fed agriculture, using Canadian technology (minimum tillage, efficient irrigation, cropping patterns, GIS information system).
- An integrated rural development project to reduce poverty in some of China's isolated interior regions, carried out by the Mennonite Central Committee and the Chinese NGO Amity Foundation, uses counterpart funds from food aid (canola oil) to spark improvements in household food security and sustainable agriculture.
- Another project, implemented by the Potash and Phosphate Institute of Canada, will help China strengthen its capacity in soil nutrients and sustainable agriculture.

Counterpart funds from a \$72 million project have enabled the India Canada Environment Facility to help hundreds of grassroots co-op institutions to reclaim wasteland and promote agro-forestry through a variety of sub-projects located throughout the country.

Women and desertification...

Women - a majority of the world's poor, and the main hands-on users of its natural resources and crops to nourish families - are also the most vulnerable when desertification kills fields, water sources, vegetation and livelihoods.

For more than a decade, CIDA has routinely required all its aid projects to be looked at, before approval, to gauge their impact on women. Many of the initiatives mentioned in this report directly benefit women living in drylands areas by involving them as agents of change:

- The National Tree Growers' Cooperative Federation in India aims at planting 13 million trees to reclaim land, control flooding, and produce wood (and thus income). Women, the landless and marginal farmers will be the main beneficiaries of the CIDA-funded \$16 million initiative.
- In China, the Canadian Cooperative Association is carrying out the \$15 million Xinjiang women's income generating project.

The IDRC is also helping Asia deal with desertification and sustainability problems. It is working along with researchers from Tsinghua University to explore ways of managing water better (price, allocation contracts, improved irrigation, efficient cultivation) in China's remote Tarim Basin, where deforestation, desertification and water flow decline are degrading the environment. In Indonesia, the IDRC and Udayana University are examining farming systems and family food procurement to enable people to improve their food security and well-being in the arid uplands of Nusa Tenggara Timur.

A variety of smaller-scale NGO and private sector initiatives are also under way throughout Asia. In India, for example, Save a Family Plan has been working on environmental conservation and pollution remediation.

Americas

About one-quarter of the land area of Latin America and the Caribbean is arid - including Pacific Coast deserts, the Andean altiplano, a large interior region, Northeast Brazil's savannah, much of Mexico, and parts of Cuba, Jamaica, Haiti, and the Dominican Republic. Poverty, population pressure, overgrazing, deforestation, drought, fires and unsustainable agriculture are degrading land in many places. However, support for the Convention is strong, and a regional action program was established in 1998.

Canadian support for Latin America's efforts to combat desertification focuses on improving the region's environmental information and management. Brazil, for instance, needs accurate information to monitor and plan the use of natural resources - but cloud cover and haze obscure large areas of the country. The Canada Centre for Remote Sensing is helping Brazil gain expertise in using new technology, such as Radarsat, that can 'see' through clouds, so it can improve the monitoring and management of its natural resources and environment.

Meanwhile, Canada is working with various countries in the Americas to help them solve environment/development problems. Many of these activities involve watershed management, afforestation, environmental capacity development and environmental policy formulation. Particularly challenging is the situation facing Haiti, where land degradation is deepening rural poverty.

In Haiti, Canadian cooperation includes:

- the *Aménagement de terroirs* project, in the Nippes region, which is reclaiming agricultural land by introducing agro-forestry and improving water and soil management, while also incorporating local traditional knowledge;
- a fund for the environment, economic development, and civil reconstruction, which has supported more than 80 local projects to improve environmental conditions, incomes and access to credit (implemented by the Mennonite Economic Development Association);
- assistance for Haiti in creating an Environmental Action Plan;
- a project to revitalize Haiti's agricultural cooperatives, carried out by SOCODEVI and Haiti's planning ministry.

Small-scale projects are also being supported by Canadian NGOs throughout the region, including Haiti - such as a modest initiative by *Regroupement organismes Canada-Haitiens Développement*, involving local-level tree-planting, land reclamation, and organic gardening.

In Mexico, to help protect and restore soils in Oaxaca state, the IDRC has supported demonstration plots and networking to test and promote improved technology, as well as the use of local plants to control erosion.

Domestic

Canada has its own vast drylands, used for agriculture (mainly the western prairies) and vulnerable to drought or mismanagement. The main national agency responsible for protecting those drylands, to ensure sustainable rural development, is the Prairie Farm Rehabilitation Administration (PFRA).

Today a branch of a federal government department - Agriculture and Agri-Food Canada - the PFRA was created in 1935 to help the prairie provinces recover from prolonged, devastating drought. Since then, it has carried out many major land and water management projects across western Canada, involving large-scale irrigation and soil conservation projects, while also providing other support to prairie farmers.

The PFRA has accumulated in-depth experience, and has developed leading-edge expertise, in such desertification-relevant areas as:

- irrigation and sustainable water development,
- tree shelterbelts and woodlots,
- monitoring marginal crop land,
- risks to long-term productivity of land,
- threats to water quality and availability,
- managing community pastures,
- developing databases and GIS products that interpret the health of land resources.

The PFRA also works in such areas as public awareness of land and water issues, multiple use of land, and rural access to information and support.

Based in Regina, Saskatchewan, the PFRA operates as close as possible to its rural clients, providing them with information (soil moisture, precipitation, pasture and crop conditions) vital to successful farming. Its internet home page now has a new feature - 'Drought Watch' - following last summer's serious situation.

Because of the PFRA's special capacities, it is the implementing agency for a CIDA-supported initiative in Ethiopia - the WHIST (water harvesting and institutional strengthening - Tigray) project.

8. Working together: the role of Canada's civil society

Development cooperation is not just transfers between governments, but involves the full range of skills and resources found in all of society. Partnership with the voluntary sector, educational institutions, business, labour, professions, cooperatives and communities toward a common goal has increasingly strengthened Canada's development assistance effort for five decades now, and these partners are playing important roles today in the concerted effort to combat desertification.

NGOs have been particularly active in the continuing process of negotiating, supporting and implementing the Convention to Combat Desertification. The *Réseau international d'ONG sur la désertification* (RIOD) is the mechanism through which the world NGO community coordinates desertification efforts, and *Solidarité Canada Sahel* is the North American focal point of this network. Its members, who worked with the Canadian delegation, contributed significantly to negotiation of the Convention and are now helping to carry it out, through a wide range of projects in affected countries.

There is also a broader, more subtle, supportive role for which Canadian NGOs are particularly valuable: facilitating the growth of a vibrant civil society, with strong voluntary movements, in developing countries, so that the people as a whole - the poor, the landless, women, the disadvantaged - have a voice in decision-making. This happened during the negotiation process, as Canadian NGOs encouraged and assisted their less-experienced, emerging, developing country counterparts to voice their concerns and help shape the outcome. Particularly noteworthy was the contribution of Canadian NGO leadership in the formation of the working group on Women and Desertification and the resulting Network which has since found its place in the COP system with the establishment of the Women's Caucus for Africa - which contributed substantially to COP1 and 2.

Thus, the contribution of NGOs - to combatting desertification, and to ensuring sustainable development - goes beyond the carrying-out of grassroots projects to include helping the people of the developing world build the institutions and capacity to take charge of their own future.

Participation by all the varied elements of civil society has long enriched Canada's own domestic development, and its overseas cooperation - adding extra dimensions - of innovation, flexibility, specialization, initiative, community contact, and personal involvement. Such qualities can help to drive and sustain the vital effort to combat desertification in the 21st century.

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