

Meeting the Global Challenge



Themes
and Programs
of the
International
Development
Research
Centre

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Introduction

In June 1992 at the Earth Summit in Rio de Janeiro, IDRC was chosen by the government of Canada to be one of the key implementing agencies for Agenda 21. It was noted that greater access by the international community to the direct, hands-on expertise of IDRC would help to ensure an effective start to the implementation of the UNCED Agenda 21 program. With this in mind, IDRC's mandate was broadened to emphasize sustainable and equitable development.

The announcement at Rio publicly acknowledged the unique contribution which IDRC has made to development over the past twenty years. It also offered to IDRC a challenge well-matched to its own strengths and capabilities particularly in the areas of research and capacity building for development.

The fundamental principles contained in Agenda 21 mesh well with the aims and philosophy of IDRC. Sustainable and equitable development has been a guiding principle within IDRC since the organization began in 1970.

IDRC's international network and expertise will be used to help the world move toward implementation of Agenda 21. Over the past twenty years, IDRC has established a close working relationship with many eminent specialists working in the developing world. IDRC has helped support valuable, practical research designed to provide answers to many of the troubling questions facing societies in the South. This impressive network of researchers, decision makers and organizations represents the talent and expertise of hundreds of highly qualified and



committed men and women — our Southern partners — who are the strength and inspiration of our work.

In the months and years ahead, IDRC will be providing leadership and support for the implementation of Agenda 21. The IDRC Board of Governors, international and multi-disciplinary, will be instrumental in helping the organization respond closely to the needs and realities of the South.

Humanity stands at a crucial crossroads at this moment in history. The future of each individual and each nation on earth — and indeed, the very future of the planet itself — will depend on the choices we as a civilization make in the decades to come. Time is running out. Agenda 21 represents an opportunity for the world to renew itself. There is so much to gain if success is achieved. There is so much to lose if we fail.

The International Development Research Centre

Through support for research, Canada's International Development Research Centre (IDRC) assists scientists in developing countries to identify long-term, practical solutions to pressing development problems. Support is given directly to scientists working in universities, private enterprise, government and non-profit organizations.

Priority is given to research aimed at achieving equitable and sustainable development worldwide. Projects are designed to maximize the use of local materials and to strengthen human and institutional capacity.

Led by the dedication and innovative approach of Third World scientists — often in collaboration with Canadian partners — IDRC-supported research is using science and technology to respond to a wide range of complex issues in the developing world.

IDRC is directed by an international Board of Governors and is funded by the Government of Canada.



What is Agenda 21 ?

Over the years, the earth's natural resources have been seriously depleted. Serious damage has been done to the planet's fragile ecosystems. This threatens future generations' access to a clean, bountiful earth.

For many decades, economic growth and prosperity were considered acceptable justification for environmental depletion. Now, people and governments are recognizing that all efforts to improve standard of living — whether in food production, health care, housing, economic activity — must be sustainable and must give careful consideration to environmental impact.

Agenda 21 is a global action plan for the 21st century, designed to provide direction and information to governments and communities as they work to solve urgent environmental problems, locally and globally.

Agenda 21 is a direct follow-up to the UN Conference on Environment and Development (UNCED) also known as the Earth Summit, held in Rio de Janeiro, Brazil in June 1992.

Agenda 21 represents an inspiring challenge to all the nations of the world: Work together to improve quality of life, while protecting the environment and conserving its resources for future generations.

Agenda 21 emphasizes the goals of sustainable and equitable development.

Agenda 21 focuses on the intricate relationship between environment and development in a wide range of areas including population and human settlement, the role of women, health, protection of the atmosphere, agricultural and rural development, and management of the earth's fragile ecosystems.

Sustainable development

is development which meets the needs of the present without compromising the ability of future generations to meet their own needs (from Our Common Future - The Bruntland Commission Report, 1987).

Sustainable and equitable development

gives overriding priority to meeting the basic needs of the world's poor; it emphasizes social equality among all peoples now, and responsibility to future generations.



Initiatives for Agenda 21 and Sustainable and Equitable Development

With the June 1992 announcement that IDRC would be a key implementing agency of Agenda 21, the Centre undertook a process of intensive consultation and planning, in order to formulate a well-defined, appropriate response to the opportunities represented by this new mandate.

Essentially, IDRC was faced with a enormous choice. How could the Centre best use its expertise and experience in development research, in ways that will make an appreciable difference, yet not duplicate existing efforts?

The consultation process entailed a high level of interaction among IDRC program staff, their peers in developing countries, and representatives of the development community both in Canada and overseas. Indeed, community participation has been, and will continue to be, a key feature. A series of roundtables established through IDRC's regional offices will advise further on ways to respond effectively to Agenda 21.

The consultation process yielded a new corporate program. Over the next three years, the full range of IDRC's programming will be dedicated to pursuing the goals of sustainable and equitable development.

IDRC will give approximately half of its support to six core themes linking environment and development. This relative concentration has the advantage of focusing the Centre's efforts and emphasizing a multidisciplinary approach to problems.

At the same time, IDRC will provide less concentrated support to nearly twenty areas which are essential to sustainable and equitable development and which fulfill the Centre's role as an implementing agency in the follow-up to UNCED. In some cases, these areas are very closely related to the core themes.

To implement its new mandate, IDRC will build on its existing strengths, for example, its established network of Third World scientists, its comparative advantage in capacity building, and its experience as a knowledge broker. IDRC has over twenty years of experience working with developing countries and their local communities to bring together the people, the knowledge and the organizations and institutions to enable them to make wise decisions and sound policies.





Integrating Environmental, Social and Economic Policies

In the years ahead, countries in both the North and South will need to modify their policy-making processes and adopt social, economic and environmental policies which are complementary to one another and beneficial to sustainable development.

To help countries become more adept at the integration of policies, IDRC is funding research and research-based activities which concentrate on three key areas:

- **Improving the existing body of knowledge** available to developing countries on subjects related to policy making
- **Increasing the number of social scientists in the South** capable of integrating environmental concerns into their work
- **Enabling policy makers in developing countries to reshape their current practices** at both the national and local level to achieve sustainable and equitable development.

INITIATIVES

IDRC will ...

- **support research and training programs** to investigate the relationship between the environment and the economy.
- **strengthen local management** in developing countries through initiatives aimed at improving access to information and resource materials.
- **support the strengthening of human resources and organizational capabilities** in developing countries
- **fund projects which highlight the role of non-traditional partners** such as small local NGOs and vulnerable groups in the decision-making process
- **provide training to policy makers** in the public, private and non-profit sectors, and to intermediate level personnel (managers and technicians) responsible for implementing the changes outlined in Agenda 21.





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Technology and the Environment

The ability of developing countries to implement Agenda 21 will depend to a large extent upon their access to environmentally sound technologies. IDRC has a proven track record in the support of research and technology in several key areas of clean technologies. These include water quality management, remote sensing, and industrial waste management.

INITIATIVES

IDRC will ...

- **support R & D into technology development**, to help create clean alternatives to current environmentally degrading technologies.
- **improve information on technology needs** through research into technology utilization.
- **promote access to technology** especially for small and medium-sized enterprises.
- **develop technology management and innovation capabilities** and help small and medium-sized entrepreneurs better manage technology and innovation.
- **provide expertise in biotechnology, geomatics, waste management, and natural resource-based products** and other areas where IDRC has proven experience.





Food Systems Under Stress

Statistics indicate that some 350 million people are “food insecure”, i.e., at risk from ill health, malnutrition, hunger and famine. UNCED and Agenda 21 focused attention on the links between food production, poverty and environmental degradation.

IDRC has targetted three eco-regions where food insecurity and environmental degradation are most urgent, and where IDRC research support can expect to make an appreciable difference.

INITIATIVES

IDRC will look at ...

- **Desertification.** Every year millions of hectares become desert, causing loss of land and livestock, substantial human migration and loss of life. IDRC will provide support for research into community management of fragile ecosystems, efforts to regenerate degraded land resources, and water management.
- **Fragile highlands** in Latin America, Asia and Africa. These areas are being degraded as expanding populations are forced by poverty to fell trees and bring more land under cultivation. Highlands are key areas for genetic diversity, particularly in the foothills and are home to many of the world's poorest people. IDRC will help identify policy options for increasing food security and reducing environmental degradation.
- **Coastal resources.** These areas protect the security of livelihood for nearly half the human population, and these fragile, complex ecosystems (including coral reefs, estuaries and inshore open waters) are under threat. IDRC support for research will expand available information about the ecological, socio-economic and political factors shaping these areas. Building upon existing community-based programs, IDRC support will help fund resource management projects, such as one involving the six countries bordering the Mekong River.





Information and Communication for Environment and Development

Agenda 21 calls for concerted, systematic action to strengthen the flow, availability and use of information. Information is a critical element in environment and development. Developing countries need access to reliable and relevant information to make greater strides toward sustainable development. IDRC's aim is to discover practical solutions to information problems, generate new products and techniques, and help train experienced professionals and technicians in this field.

INITIATIVES

IDRC will support research into ...

- **Information Management.** Design and implementation of environment-related information systems and networks, including the marketing of information products and services, will be explored.
- **Information and Communication Technologies.** IDRC is supporting research and application of new technologies and software for improved management of environment-related information.
- **Information for Decision Making.** New geomatic-based technologies will be explored to facilitate data acquisition, interpretation and analysis in selected areas such as natural resources management, environmental monitoring and land use planning.
- **Development Communications.** A variety of possible communications channels, from the sophisticated to the traditional, will be explored. Research will study the role played by mass media and community information services in promoting sustainable development.



Developing countries need an active and healthy population to achieve equitable and sustainable development. IDRC will support research which addresses the physical, chemical, biological and social environmental factors affecting human health. Such research will help promote a better understanding of health-related environmental factors. IDRC will use its extensive experience linking health with other aspects of social and economic development and with environmental concerns.

INITIATIVES

IDRC will ...

- **help build a program of research** into environmental impact assessment in relation to human health conditions.
- **focus on the impact of air and water pollution**, including mercury contamination due to gold mining in the Amazon; the cholera epidemic in Latin America; the empowerment of indigenous communities to test their own water quality using simple, sustainable and affordable tests.
- **support research into the control of diseases** such as leishmaniasis, malaria, Chagas disease and neuro-systicercosis.
- **help strengthen local know-how in areas of occupational health and safety.**



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Biodiversity

The Convention on Biodiversity signed at the Earth Summit in June 1992 recognized the rich value of living organisms and the environments in which they occur; it also underscored that human survival and development depend upon maintaining and preserving biodiversity on the planet.

INITIATIVES

IDRC will ...

- **help provide a better understanding of the forces causing biodiversity loss**, and support the development of local alternatives and countermeasures.
- **explore the incentives needed to encourage people to maintain biodiversity**.
- **increase the sustainable use of natural resources by local communities**, through the application of indigenous knowledge, appropriate technologies and management practices for biodiversity conservation.
- **fund policy and socio-economic analysis** for the regional implementation of wildlife management and studies into the commercial value of plant materials in various countries.
- **explore the advantages of domestication** of minor animal and plant species that may become extinct unless they are raised commercially.
- **research the sustainable use of aquatic animal and plant populations**, and the habitats which support them. Studies will focus on ways to conserve aquatic ecosystems for both wild and domesticated species.



Programs For Sustainable and Equitable Development

In addition to the six main core themes, IDRC also supports research and research activities in approximately twenty other areas which are essential to sustainable and equitable development and to fulfilling the Centre's role in the implementation of the follow up to UNCED. These programs range broadly over a diverse number of topics and bring somewhat less volume of resources to bear on any one topic.

Environment and Natural Resources Program

- **Low-Input Sustainable Agriculture** aims at increasing food production in developing countries through the use of locally available resources (soils, organic fertilizers, natural biocides, improved farming skills, especially among women and indigenous groups.) Special emphasis will be given to research on soil fertility management and pest management.
- **Water Resources Management** will focus on developing strategies to enhance food production, nutrition, and employment from aquatic sources in ways that are environmentally sustainable and socially equitable. The program will look at global policy for international fisheries research, integrated river basin management and water security.

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- **Urban Environment Management** will help provide urban communities with information, skills and capacity to assess water supply, study waste management practices and identify food security problems. Emphasizing community participation, the program will work to empower communities to find solutions they can implement themselves.
 - **Green Technologies** will provide support for the development and commercialization of environmentally sustainable technologies that can provide income to poor and indigenous communities, and reduce dependence on imported materials and processes. National policy makers will be a key target group since it is they who can enact “enabling policy frameworks” for the development of local innovations in sustainable technology.

Health Sciences Program

These programs will support research and capacity building related to understanding the factors affecting health and how society responds to the health needs of its population. Research in these programs is less directly related to the environment than research within the core theme.



Global Threats to Health

- **Social Change, Culture and Health** will address health issues that arise from social instability, extreme social change, and cultural practice. Violence against women and children, drug addiction, the health of refugees, and mental health problems will be among the concerns explored.
- **AIDS** research activities will include acceptable ways of coping with AIDS at the individual, family, community and health systems levels; the establishment of research training facilities and networks; and the systems issues surrounding the implementation of affordable blood screening using Dipstick technology.
- Research will be supported into **nutrition** education and intervention, and into the efficacy of micronutrient intervention and supplementation programs.
- By using Canadian expertise in effective smoking control, IDRC will support studies into the impact of **tobacco use** on mortality patterns to provide countries with needed data to adopt integrated anti-smoking strategies and legislation.

Health Policies, Priorities and Programs

- In terms of **policy formulation**, research into community based financing schemes will focus on the appropriateness of the public and private sectors in providing health care, the regulatory systems this would require, and the challenges to health policy created by changing political, social and economic conditions.
- In terms of **priority setting**, the Centre will assist developing countries to determine national health priorities and the most effective use of health care funds.
- **Community-based health systems management** research will assess the effectiveness of decentralized health care, and evaluate changing organizational structures, community health needs, and the appropriateness of new health technologies. Other areas to be explored will include ensuring better occupational health and obstetrical care, and the prevention and treatment of tropical diseases.



Information Sciences and Systems Program


- **Information Policy Research** will examine critical issues affecting the availability and use of information in developing countries and will support the creation of information and communication policy guidelines suitable to local needs and culture. Emphasis will be on policies which promote ready access to information for planning and decision-making. IDRC will assist in the examination of policy issues relating to information technology, and support mechanisms for ensuring that knowledge gained will be used to enhance sustainable and equitable development.
- **Information Capacity Building** reinforces human and institutional resources to enhance developing countries' ability to manage and use information. Activities will include strengthening research capacity in information science and information technology. IDRC will promote increased south-south and south-north collaboration among research institutions and other agencies through information sharing. IDRC will support the design and implementation of a range of training programs from formal education to short, intensive, practical courses.

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- **Software Development and Application** supports the development, adaptation, and use of software systems for information collection and management. IDRC will help in the development of new applications, particularly those related to the new version of MINISIS software. These applications will focus on areas of practical benefit to developing countries and the donor community.

Social Sciences Program

- **Social Policy** supports applied research into policy innovation to promote human development, encourage grassroots solutions to poverty, and achieve sustainable development. Issues to be addressed include globalization and social issues, the changing relationship between the State and civil society, and urban services.
- **Learning Systems for Change** supports research into new learning systems aimed at strengthening sustainable and equitable development and human resource development so that developing countries will be better positioned to compete internationally and manage social change.



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- **Macroeconomic Policy** funds research on how to achieve and maintain a viable macroeconomic framework. A wide range of issues will be addressed including balance of payments management, fiscal and monetary policy, and banking and finance.
 - **Industrial and Agricultural Policy** focuses its support on research on the industrial sector including the promotion of small-scale enterprise and entrepreneurship itself. The interaction between agricultural policy and industrial or macroeconomic policy, will also be addressed.
 - **Regional Integration** funds research on the economic costs and benefits of integration and on integrating mechanisms. Support will take account of the particular needs of each region, including the political, cultural, social and institutional elements.

Corporate Program

- **Evaluation** activities will enable IDRC to execute programs effectively and efficiently. The Centre will develop indicators for sustainable and equitable development. The IDRC Ottawa office and overseas offices will benefit from evaluation activities designed to increase the quality of IDRC programming.
- **Canadian Partnerships** establishes links with Canadian organizations and institutions interested or involved in development research, for example, Canadian universities and their affiliates such as learned societies, NGOs, and indigenous groups.
- **Human Resource Development** administers awards and training activities. To develop Canadian expertise in international development IDRC offers Young Canadian Researchers Award, the Gemini and PÉRISCOOP internships in journalism, the Pearson Fellowship and Centre internships.

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- **Gender and Development** works to achieve empowerment of women through knowledge by increasing the use of gender knowledge for sustainable development and by strengthening gender-focused capacity building for IDRC staff and project recipients. Research funds will be used to link IDRC to international gender research networks.
 - **PRISM**, the Program for Innovation Systems Management, promotes better understanding of the process of innovation and its effective implementation in developing countries. The program aims to help developing countries identify and acquire the research results which can help them achieve their development objectives in the areas of science, technology and social policy.
 - **Public Information** responds to Agenda 21 and the IDRC corporate strategy by promoting public awareness, training and education on sustainable and equitable development. The program works to disseminate information about the work of IDRC, and to familiarize Canadian audiences with development and environmental issues. It also disseminates research knowledge gained from IDRC-supported projects by communicating with scientific and development communities throughout the North and South.

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