

Global Partnerships

Canada's Role in the Global Environmental Monitoring System's (GEMS) Water Quality Program



Global deterioration of water quality and quantity in many countries is projected to be the key sustainable development issue in the next century, for more than one third of the developing world. The business of water management has become a major export industry for Europe, Japan, and the United States. Internationally, Canada is considered to be very strong in the field of effective water resources management.

Due to Canada's international reputation in the water sector, Canada has played a central role in the water quality component of the Global Environmental Monitoring System (GEMS) since the inception of its Water Quality Program in 1977. GEMS is a United Nations program co-ordinated by UNEP and the central part of the UN's Earthwatch program. GEMS/Water is the single largest part of GEMS and the first program of its kind to address global freshwater quality issues using a worldwide network of surface and ground-water quality monitoring stations.

Through the National Water Research Institute (NWRI) of Environment Canada, Canada agreed to host the Global Data Centre at the Canada Centre for Inland Waters (CCIW). Because of its international reputation in freshwater science, CCIW was designated a "World Health Organization (WHO) Collaborating Centre for Surface and Ground Water Quality". In April 1993, NWRI/CCIW was designated a "UNEP GEMS collaborating Centre for Freshwater Quality Monitoring and Assessment". This UNEP

designation, the first time a non-UN facility had received this status, was in recognition of Canada's role as a co-equal partner with UNEP and WHO in managing and implementing major components of the GEMS/Water Program.

Until 1989, GEMS/Water focussed primarily on establishing a global network and major databases using the Global Data Centre in Canada. Following an international program review in 1990, and to respond to growing concerns over freshwater quality in developing countries, the program entered its second phase with two major objectives:

- * *To strengthen national water quality and assessment institutions so that national data programs are more effective and efficient in managing water resources and for developing public policy for environmental and resource management.*
- * *To strengthen the global databases for the purposes of regional and global assessments of water quality.*

Through GEMS/Water, Canada has strong institutional and/or data links to other regional and global water programs, such as the WHO's Operational Hydrology Programme, UNESCO's International Hydrological Programme, the ECE environmental statistics program, the Global Runoff Data Centre in Germany, and the lake management program of Japan's International Environmental Technology Centre, to name a few. Through the Global Data Centre,

Canada provides data compilation and analysis to international organizations such as the World Bank, World Resources Institute, and the GEMS Monitoring and Assessment Research Centre in London, U.K.

Canada's role in GEMS/Water has tangible domestic and international economic and strategic benefits for Canadians. Through the program numerous business opportunities have been identified for the private sector. GEMS/water often provides the background and local knowledge that contributes to a strategic framework for Canadian bilateral initiatives. For example, the GEMS program assisted in identifying partners to co-develop a Spanish language version of RAISON, a PC-based environmental information system. RAISON is now installed as a primary tool for managing water quality monitoring and regulatory data in Mexico.

GEMS/Water is implemented by the World Health Organization with the co-operation of UNESCO and the World Meteorological Organization. Some 57 countries currently participate, with many more (especially Eastern European countries) about to come on stream. GEMS/Water played the focal role in developing the freshwater chapter of Agenda 21 and continues to provide leadership in the water sector within the UN system in follow-up to the Rio Conference.

The GEMS/Water Program is one example of the global partnerships supported by Canada and the United Nations. 🍁

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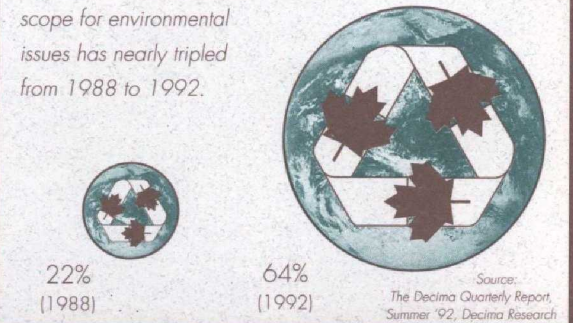
CANADA'S FOREIGN POLICY AND THE ENVIRONMENT

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Over the past several years, the protection of the global environment has increased in importance for Canadians, as it has for citizens of virtually all countries. Canadians feel strongly about the international role that their country plays in helping to care for a fragile world environment, and they expect Canada to do its fair share.

GLOBAL AGENDA is a quarterly bulletin that will discuss how Canadian foreign policy can most effectively deal with global environmental challenges. Each publication will focus on a priority issue for Canada in environmental foreign policy and will profile "policy in action" abroad. Canada's Ambassador for Environment and Sustainable Development will discuss issues on the global environment agenda and report on the work of the UN Commission on Sustainable Development. Periodically, guest articles and book reviews will be included.

The percentage of Canadians citing the "Whole World" as the scope for environmental issues has nearly tripled from 1988 to 1992.



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