

economic, ecological, and environmental reality. This argument has clear implications on the strategies devised to cope with water-related problems.

The participants collectively raised the following reasons for the world water shortage:

- **uneven distribution**
- **consumerism**
- **wastage** including leakage, theft, and poor accounting
- **inefficient use of fresh water resources** including unsustainable use of underground water
- **pollution**
- growing water demand due to **population growth** (world population will have increased from 5.8 to 8.0 billion by 2025)
  - increasing urbanisation
  - increasing agricultural irrigation
  - increasing food production
- **rising standards of living** (in some parts of the world)

Solutions offered during the discussion were based on how problems were perceived. Some proposed political solutions (i.e., facilitation of conflict), while others addressed problems by looking at global economic inequalities (i.e., western consumerism). Technical solutions were also explored (i.e., methods of exploiting under-utilised sources of fresh water, treating and re-using domestic "grey" water, collection of rain water and moisture from sea fog). Attention was paid to countering the problem of uneven distribution through the movement of water, including water exports, and movement of products that require water in their production (virtual water). The contentious idea that Canada could/should export fresh water was also brought up, raising such dilemmas as "getting the price of water right."

## **POLICY OPTIONS: CANADIAN-BASED STRATEGY**

Some participants raised the point that since Canada has a wealth of experience dealing with its own water-related issues, a Canadian-based strategy could be developed to address global water-related problems. The key resources Canada could draw on in developing such a global strategy include:

- ▶ experience and expertise in **institutional arrangements for shared water management** (i.e., Canada-U.S. relations/**International Joint Commission**, the Great Lakes Water Quality Board, Prairie Provinces Water Board)
- ▶ experience and expertise in **water management in the context of federalism** (i.e., federal/provincial shared water management practices)
- ▶ experience and expertise in **science and monitoring** (i.e., Global environmental Monitoring Systems (GEMS), a worldwide water quality monitoring system based at NWRI in Burlington, **RAISON** -- decision making for watershed management, Canadian Water Quality Guidelines, ecological monitoring and assessment, risk and environmental