



Strengthening Science-Based Decision Making in Developing Countries: Workshop Reports (CD-ROM)

*What information do decision-makers in developing countries need from scientists?
Who do they turn to for scientific advice?
How can scientists respond more effectively to the needs of decision-makers?*

During the 2002 World Summit on Sustainable Development (WSSD), the U.S. National Academies, the U.S. Environmental Protection Agency and the American Chemistry Council announced a new partnership to promote better utilization of scientific knowledge in policy and program decisions and better incorporation of the needs of decision-makers into research priorities. Over time, the partnership expanded to include the Department of State and other interested organizations. The partners, through the U.S. National Academies, collaborated with national and regional scientific academies as well as local scientific and technical organizations to plan the workshops and to ensure that the topics were relevant to the local or regional community.

The partnership supported a series of international workshops on science in decision-making, focusing on three specific issues: groundwater management, the elimination of persistent organic pollutants, and agricultural water management. The workshops provided an opportunity for scientists and decision-makers to 1) address practical issues in the use of scientific information in decision-making, 2) identify common elements of the scientific process, such as transparency, data quality, and peer review, and 3) discuss lessons from past experiences and ideas for strengthening collaboration between scientists and decision-makers.

Strengthening Science-Based Decision-Making for Sustainable Management of Ground Water in Mexico: Proceedings of a Workshop (2007)

Luis Marin, National Autonomous University of Mexico, Co-chair
Henry Vaux, University of California, Berkeley, Co-chair

The initiative's first activity was a joint workshop with the Mexican Academy of Sciences on February 8-10, 2004. Held in the Yucatan Center for Scientific Research (Centro de Investigaciones Científicas de Yucatán) in Mérida, Mexico, the workshop provided a broad overview of Mexico's water situation with special focus ground water management in the Yucatan. It examined general ground water management principles and the role of science in ground water management. The workshop provided a venue for extensive interaction between scientists and water managers about the role of science in policy formulation and management. The papers included in this volume describe the groundwater resources of Mexico's Yucatan Peninsula, approaches to managing groundwater in the Mexico and in the US. Participants in the workshop included representatives from leading scientific and academic institutions, federal, state and local governments, non-governmental organizations, and businesses.

Implementing the Stockholm Convention on Persistent Organic Pollutants: Summary of a Workshop (2005)

Lu Yonglong, SCOPE-China (Scientific Committee on Problems of the Environment) Co-chair
John Giesy, Michigan State University, Co-chair

Held June 8-10, 2004, in Beijing, China, this workshop was organized with the Chinese Academy of Sciences. The workshop provided participants with a broad understanding of the environmental and health impacts of POPs and the provisions of the Stockholm Convention. Attendees discussed specific implementation issues facing China and the U.S., as well as the role of government policy makers, industry and trade associations, non-governmental organizations and the public in implementing the treaty. The workshop identified the elements of good scientific advice (such as transparency, peer review, and disclosure of conflicts of interest) and the kinds of scientific information needed to make informed decisions to eliminate the use of POPs, along with mechanisms to make science information available and to ensure its continued use. Many of the technical papers from this workshop were published in the August, 2005, issue of *Chemosphere*.

Agricultural Water Management: Proceedings of a Workshop in Tunisia (2007)

Sihe Benabdallah, National Institute of Scientific and Technical Research, Tunisia, Co-chair
Henry Vaux, University of California, Berkeley, Co-chair

The initiative's final workshop took place June 4-9, 2006, in Tunisia. Participants, including scientists, decision-makers, non-profit organization representatives, and a farmer, came from several countries in North Africa and the Middle East as well as the US to explore ways to manage scarce water resources for agricultural uses. They focused on the state of the science regarding water management for agricultural in the Middle East and North Africa and how science can be applied to better manage existing water supplies to optimize the domestic production of food and fiber. Although the thematic focus of the discussions was the management of scarce water resources for agricultural production, the workshop also identified outreach activities to strengthen science-based decision-making in general.

IMPACT

The crosscutting themes of the series of workshops were the elements of science-based decision-making and the role of the local and regional scientific community in ensuring that science is an integral part of the decision-making process. In addition to elucidating these themes in the context of specific environmental challenges, each of the workshops resulted in a strengthened dialogue among government policy makers, the scientific community, and other key stakeholders, including local businesses and non-governmental organizations:

- Following the Mexico workshop, a Center for Water Studies was started in Cancun with strong support from the Water Network of the Mexican Academy of Sciences. This center currently has six scientists and five technicians. In addition, the Peninsula of Yucatan's Basin Council has organized a series of meetings between local scientists and water-level policy makers.
- Scientists from the Chinese Academy of Sciences have participated in the formulation and review of the Chinese National Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants. The Chinese Academy has also been involved in providing policy analysis, studying alternative technologies, and field investigations on the impacts of POPs.
- Participants in the Tunisian workshop are now regularly present at international meetings on water resources where they exchange information with scholars and water managers from around the world.

For a CD-ROM containing all three reports or more information about the project, contact staff at (202) 334-2047. Printed copies of the reports are available from the National Academy Press (NAP); (800) 624-6242 or (202) 334-3313, or visit the NAP website at www.nap.edu.