Strengthening International Science for the Benefit of Society

Celebrating 75 years: 1931-2006
ICSU: who and what?

- Founded in 1931, but roots back to 1899
- A membership organization with: 105 National Members, and 29 International Scientific Unions
- Establishes Interdisciplinary Bodies (18) in key areas
- Limited finances but unique worldwide access to intellectual resources
ICSU: a long history

A few landmarks:
- International Geophysical year (1957-1958)
- International Biological Programme (1964-1974)
- Freedom in the conduct of science (1963-)
- Four global change programmes (1980-)
- Summit on Sustainable Development (WSSD, 2002)
- Summit on the information Society (WSIS, 2003, 05)
- Regional Offices (2005-)
- International Polar Year (2007-2008)
The ICSU Vision

“A world where science is used for the benefit of all, excellence in science is valued and scientific knowledge is effectively linked to policy-making. In such a world, universal and equitable access to scientific data and information is a reality and all countries have the scientific capacity to use these ....”
ICSU Strategic Plan

• 3yr consultation involving scientists across the world to identify societally important priorities where science can and should be making a major contribution.
• the process itself resulted in a total of 13 separate expert reviews, reports and statements
Three inter-related themes:

- International Research Collaboration
- Science and Policy
- Universality of Science
International Research Collaboration

- Linking research, monitoring, and assessments with focus on global environmental change
- International Polar Year 2007-2008
- Natural and Human-Induced Environmental Hazards and Disasters
- Science for Sustainable Development
- Science for Human Health
- Sustainable Energy
Common features

- Complex scientific challenges
- New knowledge and new approaches necessary
- Trans-disciplinary: natural and social sciences need to work together
- Many stakeholders outside of science involved
- Politically (and commercially) sensitive
- Raise issues of equity and openness
- Critical links between local and global challenges and solutions
ICSU’s role: the Global Change example

100% Research

0.5% Planning and Coordination

0.005% Initialization

Seeding and catalysis

US$ 2 bn

US$ 10m

US$ 100k

ICSU

June, 2006 Celebrating 75 years: 1931-2006
Science for Policy

• Ensure that international research programmes address key policy issues
• Participate in major international assessments
• Produce authoritative statements
• Speak as the voice of international science in policy fora
Coordinated Research

The four global change programmes provide the framework for the science on which IPCC assessments are built.
Targeted Assessments

ICSU as an institutional partner in the Millennium Ecosystem Assessment, which feeds into UN conventions on:
• Biodiversity,
• Desertification,
• Migratory Species
Authoritative Statements


“Stronger worldwide capacities in science and technology are necessary to allow humanity to achieve the UN Millennium Development Goals. A concerted global effort among the world’s scientists, engineers, and medical experts is needed to identify successful strategies and to help implement effective programs. Sustained progress in reducing poverty and related problems will require strengthened institutions for science, technology, and innovation throughout the world, including in each developing nation.”
UN Commission for Sustainable Development

• To review and enhance progress in the implementation of Agenda 21, Johannesburg Plan of Implementation.

• Annual meetings convene government ministers, heads of UN agencies, and leading representatives of industry and civil society.

• Operates on two-year cycles of work, with specific ‘thematic clusters’ for each cycle.

• In 2006-07, themes include climate change, energy, air pollution and industrial development.
CSD ‘Major Groups’

- Women
- Youth
- Indigenous People
- Non-governmental Organizations
- Local Authorities
- Workers and Trade Unions
- Business and Industry
- Farmers
- Science and Technology (ICSU and WFEO)
Why Participate in CSD?

• S&T is a necessary (though not sufficient) foundation for sustainable development.
• Communicate existing scientific knowledge (and uncertainties) to key stakeholders
• Develop a participatory research agenda for Sustainable Development
• Build mutual trust and understanding with the end-users of scientific research
• Ensure that science is recognized, and supported accordingly, as having a central role in SD
Universality of Science

• The Principle of Universality of Science
  – Freedom and Responsibility in science

• Reaching out to all countries:
  – Access to Data and Information
  – Regional Offices
The Principle of Universality of Science

ICSU Statute 5:

• Founding principle of ICSU
• Stipulates non-discrimination and equity in the conduct of science
• Shared responsibility for all scientists in promoting and upholding the principle
• Freedoms also imply responsibilities
Equitable Access to Scientific Information

• Policies:
  – Full and open access to scientific data
  – Universal and equitable access to scientific publications

• Mechanisms, eg International Network for the Availability of Scientific Publications (INASP)

• Coordination and partnerships– develop a multi-stakeholder Scientific Data and Information Forum (SciDiF)
ICSU Regional Offices

• ICSU Regional Office for Africa inaugurated in September 2005
• Agreement reached with Malaysia for the Asia and Pacific region
• Further Offices to follow soon in Latin America/Caribbean (Brazil) and Arab regions

Aim:
To ensure that the voice of developing countries influences the international agenda setting and that scientists from the South are fully involved in the research
Strategic Partners

• The UN System, including:
  – UNESCO Sectors of Natural and Social Sciences, Education and Communication
  – UNEP and its Science Initiative
  – UN Commission for Sustainable Development (CSD)
  – WMO, re climate change, IPY and Natural Hazards

• The Academy of Sciences for the Developing World (TWAS)

• The technological community
In Conclusion

“Strengthening science for the benefit of society can only be achieved if scientific knowledge is used not only to stimulate innovation and development of new technologies but also to inform decision making….Scientists and their representative organizations have to accept increasing responsibility and develop new mechanisms to share their understanding with many different stakeholders in society.”

_Draft Strategic Plan p. 44_