

ICSU Statement for UNESCO General Conference

Statement given by Carthage Smith (Deputy Director, ICSU) at the Commission for Natural Sciences, 2 November 2011

Mr President, distinguished delegates, ladies and gentlemen,

ICSU - the International Council for Science - is a non-governmental organisation representing the international science community, with a global membership of 120 national scientific bodies representing 140 countries and 30 international scientific unions representing 30 different disciplines.

ICSU and UNESCO have a long history of collaboration, which continues to this day and is embedded in a formal Framework Agreement. Currently we are working together on a number of projects, the most notable being preparations for Rio+20, and the Earth System Sustainability Initiative.

As you will know, the Rio+20 conference will take place from 4 to 6 June in Rio de Janeiro, Brazil. ICSU has a key role to play in Rio+20, as it is co-organising partner for the 'Scientific and Technological Community' Major Group, together with the World Federation of Engineering Organizations (WFEO). ICSU therefore participates alongside governments and UN agencies in the conference and its preparations.

In preparation for Rio+20, ICSU and UNESCO have partnered on the organisation of 5 regional science and technology workshops, for Asia Pacific, Latin America and the Caribbean, Africa, the Arab States, and Europe.

These workshops brought together natural scientists, social scientists and engineers from across each region, along with high level policy-makers and representatives of other stakeholder groups.

The objective was to prepare joint positions and concerted inputs for the Rio+20 intergovernmental regional preparatory meetings, with the overall aim of integrating region-specific knowledge, issues and concerns from the scientific and technological community into the Rio+20 conference.

Further information and the reports from the workshops can be found in the handouts that have been made available to this Commission (annexed).

In the Rio context, UNESCO and ICSU are also collaborating on the organisation of a Forum on science, technology and innovation for sustainable development, which will be held in the days just prior to the Rio+20 conference in Rio de Janeiro, Brazil.

This forum will provide a space for interdisciplinary scientific discussions, and dialogue between scientists, policy-makers, Major Groups and other stakeholders. Key messages will be transmitted to the Rio+20 conference.

The forum is a partnership between ICSU, UNESCO, the International Social Science Council (ISSC), the World Federation of Engineering Organizations (WFEO), the Brazilian Ministry of Science and Technology, and the Brazilian Academy of Sciences.

The second major collaboration between ICSU and UNESCO is on the Earth System Sustainability Initiative - or ESSI – on which we are working together with ISSC, funding agencies, UNEP and UNU.

This is a major 10-year initiative on global change research for sustainable development, which will foster the generation, delivery and exchange of the knowledge and solutions needed to respond to the most pressing societal and environmental challenges.

It will actively engage the natural sciences, social sciences and humanities, to provide a full understanding of the environmental, social and economic aspects of global change, and societal responses.

In line with the UNESCO objective of fostering policies and capacity-building in science, technology and innovation, this initiative will also invest in regional capacity building through the development of a global scientific network of regional knowledge nodes. These can more effectively identify and respond to needs and priorities of decision-makers at regional and national scales. At the same time, regional research and analysis is increasingly needed to understand Earth system functions, human impacts, and potential responses.

Most importantly, the initiative represents a new way of developing policy-relevant research. Thanks to UNESCO and the other partners involved, for the first time on a global scale we can talk about effectively co-designing research on global sustainability, with researchers, donors and users working hand-in-hand to define goals and priorities upfront. This will ensure a step-change in international research coordination.

The ESSI initiative will be launched at the aforementioned Forum on Science, Technology and Innovation at Rio+20 in 2012.

We look forward to continuing our productive collaboration with UNESCO as these and other projects, for example on disaster risk and ecosystem services, develop. Strengthening our partnership is important both for ICSU and UNESCO.

Thank you.

ICSU-UNESCO

Rio+20 Regional Science and Technology Workshops

In 2011 ICSU and UNESCO organised five Rio+20 regional science and technology workshops, for Asia Pacific, Latin America and the Caribbean (LAC), Africa, the Arab States and Europe.

Background to Rio+20 and the Regional Workshops

The concept of sustainable development brings together the economic, social and environmental domains, developed and developing countries, governments, businesses and civil society, scientific knowledge and public policy, and present and future generations. It has created the awareness that the environment and development are two faces of the same agenda. The Rio+20 conference that addresses this agenda will take place in June 2012, in Rio de Janeiro, Brazil. To guarantee the input of the science and engineering community, ICSU and UNESCO have organised five regional science and technology workshops. These are designed to provide input for the five Rio+20 intergovernmental Regional Preparatory Meetings (RPMs) being held in the run up to the Rio+20 conference.

Overall Aims of the Regional Workshops

- To give natural scientists, social scientist and engineers from the different regions the opportunity to prepare joint positions and concerted input for the Rio+20 RPMs.
- To organize a science – policy dialogue at the regional level.
- To organize a multi-stakeholder dialogue with other ‘Major Groups’ (civil society stakeholders), including business & industry.

Objectives of the Regional Workshops

- To ensure that the best available natural and social science is integrated into policy recommendations resulting from the RPMs and Rio+20.
- To incorporate specific regional concerns and priorities into the global agenda of Rio+20.
- To identify where support is needed by the S&T community, at national and regional levels.
- To highlight the major contributions from S&T to sustainable development.
- To identify the roles of civil society and the private sector in S&T activities at national, regional and local scales, and their needs from the S&T community.

Participants

Around 60 participants, primarily from countries in the region:

- Natural scientists, social scientists and engineers, including young scientists and engineers
- High-level policy makers/ government representatives
- Representatives of civil society (Major Groups)
- Co-sponsors

Dates and Locations

Region	Date	Location
Asia Pacific	16 – 18 April 2011	Kuala Lumpur, Malaysia
Africa	30 May – 1 June 2011	Pretoria, South Africa
LAC	3 – 5 August 2011	Mexico City, Mexico
Arab States	12 – 14 October 2011	Cairo, Egypt
Europe	12 – 14 October 2011	Helsinki, Finland

Organisers

The regional workshops were jointly organized by ICSU’s and UNESCO’s regional offices, except the Europe workshop which was organised by the European Group of ICSU National Members. All workshops were held in cooperation with the World Federation of Engineering Organizations (WFEO), the International Social Science Council (ISSC) and regional stakeholders.

About ICSU and UNESCO

The non-governmental International Council for Science (ICSU) represents the global science community, coordinates global interdisciplinary research programmes, and is co-organising partner of the Scientific and Technological Community Major Group for Rio+20.

The United Nations Educational, Scientific and Cultural Organization (UNESCO) is a specialised UN agency with unique transdisciplinary competencies in education, the sciences, culture and communication and information.

Recommendations and key issues

The participants at the five regional workshops asserted the importance of such regional meetings for the S&T community, their commitment to S&T for sustainable development, and their aspirations for Rio+20. The following recommendations and key issues are among those highlighted during the discussions.

Overarching issues from across the five workshops:

- The Rio+20 outcome must be commensurate with the urgent need to move humanity to a sustainable development path.
- Human induced global environmental change is occurring at an increasing rate and intensity across all regions. Fundamental changes in the human drivers affecting the Earth system and actions to enhance the resilience and decrease the vulnerability of human communities are essential.
- Current economic patterns are responsible for many of the interlinked and growing social, environmental and economic crises unfolding across all regions. Economic sustainability, human development, poverty eradication and environmental sustainability must be addressed in an integrated fashion.
- Rio+20 is a forum at which governments can recognise, enhance and map out the crucial relationship between policy-making and science, technology and innovation.
- Strengthening science-policy links at national, regional and global levels is essential in efforts to improve the institutional framework for sustainable development.
- Commitments are needed to large-scale investments in targeted transdisciplinary research that addresses the integrated environmental, social and economic pillars of sustainable development.
- Concrete and challenging targets should be set that can be translated into international and national law.
- Improving science education and capacity-building is essential, with attention to gender issues.
- Rio+20 should be a fundamental milestone in the development of a new compact between science and society, with particular attention to women, vulnerable communities and indigenous peoples and their knowledge.

Asia Pacific:

- New indicators of sustainability and development, which include environment and human wellbeing
- The need for changes in social values and practices, as well as technical solutions, for a green economy
- Data harmonization, access and sharing to enhance the knowledge-base for sustainable development
- Key challenge: rapid urbanization

Africa:

- Science, engineering and technology for transforming Africa's economy from 'brown' to 'green'
- The importance of traditional knowledge within sustainability research and education systems
- S&T capacity building, efforts towards 'brain gain', and the transfer of technologies
- Key challenges: food and water security, health and energy security, climate change and disaster risks

Latin America and the Caribbean:

- Research on cultural, socio-economic and political change needed for the transition to green economy
- Setting up specific mechanisms for providing S&T advice at national and regional levels
- Designing reward systems for targeted interdisciplinary scientific research
- Key challenges: biodiversity loss, waste management, natural disaster risks, urbanization, renewable energy

Arab States:

- A coordinated policy and research agenda for sustainable development in the Arab States
- Capacity building, networking and governmental support for the region's scientific community
- Formal inclusion of civil society in decision-making, governance and research; science education
- Key challenges: water security, food security, energy access, biodiversity, climate change, resource conflicts

Europe and North America:

- Consumption patterns in the North having economic, social and environmental impacts at a global level
- Participatory sustainability assessments of new technologies, such as nanotechnology and geo-engineering
- Facilitating technology and knowledge transfer from Europe
- Key challenges: climate change, anthropogenic and natural hazards, populations and lifestyle, resource use