



Concept Note

UNESCO High Panel on Science and Technology for Development

Introduction

The Director-General of UNESCO, Mme. Irina Bokova, has recently assembled a group of highly distinguished experts from around the world to assist the organization in further refining its vision for science and technology for sustainable development. The group is expected to be particularly useful in helping UNESCO to identify emerging trends in international science and engineering, and to further refine its strategies for poising the institution to contribute to sustainable development and poverty eradication. The mandate of the group is quite broad; it will cover all of the efforts at UNESCO in the natural sciences and engineering, as well as in the social sciences. The group is also expected to offer insight into new prospects for linking our work in the sciences to the efforts of other branches of UNESCO, including culture, education and communications and information, as well as to the work of additional potential new partners worldwide.

The first meeting of the High Panel on Science and Technology for Development will take place in Paris at UNESCO headquarters on 15 and 16 September 2011. The activities on 15 September will focus on in-depth discussions between the members of the panel and the senior leadership of UNESCO. On 16 September, the High Panel will engage in a session with the Permanent Delegations of Member States, which will also be open to the general public.

Background

Since UNESCO's creation in 1945, science, the "S" in UNESCO, has always been a vitally important part of our mandate; indeed we are the only specialized UN agency with an explicit focus on science. A recently published overview, entitled "60 Years of Science at UNESCO", provides a comprehensive history of our efforts. A brief synopsis is that over the years we have concentrated on two qualitative sets of activities.

The first focuses on mobilizing the international scientific community around key challenges that intrinsically require international cooperation. Notable examples initiated and housed at UNESCO include the Intergovernmental Oceanographic Commission (IOC), the International Hydrological Programme (IHP), the Man and the Biosphere (MAB) Programme, the International Geosciences Programme (IGCP), and the Management of Social Transformations (MOST) Programme.

Our second main role has been to focus on policy advice and on capacity building in science and engineering, particularly in the developing world. Our capacity building work includes extensive contributions to science, technology and innovation (STI) policy, to institutional capacity building, particularly in the developing world, to science and engineering education, and to programmes that promote popular participation and understanding of science worldwide. In both of the qualitative functions described above, we seriously embrace UNESCO's overarching responsibility for "building peace in the minds of men". The sciences at UNESCO are also deeply committed to UNESCO's overarching priorities of Africa and gender equity.

UNESCO's programmes have benefited recently from two external review processes. The first, undertaken starting in 2007, was a study of the natural and social sciences sectors. That report can be found at: <http://unesdoc.unesco.org/images/0015/001502/150264E.pdf>. The second, undertaken in 2010, was an overall review of UNESCO operations. A link to its results can be found at: <http://www.unesco.org/new/en/member-states/resources/independent-external-evaluation-of-unesco/>). A specific recommendation of the review of natural and social sciences was the creation of an external body to provide advice to UNESCO leadership; the appointment of our new High Panel on Science and Technology for Development stems from this original recommendation.

Objectives of the High Panel on Science and Technology for Development

UNESCO's Director-General had multiple objectives in the creation of the High Panel on Science and Technology for Development. She hopes the panel will:

- Provide UNESCO with enhanced insight into the rapidly evolving world of international science and engineering;
- Assist the organization in further refining its strategies for targeting science to sustainable development and poverty eradication, with particular attention to the unique challenges and opportunities offered by our status as an intergovernmental organization;
- Think creatively about prospects for new partnerships, including with private sector, civil society, and academia;
- Share their thoughts and insights with the Permanent Delegations of our Member States.

Participation: Panel members

Panel members were chosen on a variety of criteria. First and foremost, each is an individual of extraordinary personal qualities and professional accomplishment. Secondly, we have drawn broadly geographically to attain good representation from around the world. We have also been careful to assemble a group with extensive disciplinary diversity, and with experience in multiple sectors of the scientific enterprise, including academia, governmental research labs, industry and civil society. In total, 24 individuals have accepted the Director-General's invitation to participate in the panel. Of these, 16 will be available to join us at the first meeting of the Panel on September 15 and 16, 2011.

Format of the first meeting

The first meeting of the High Panel on Science and Technology for Development is structured in the following manner. The first day, 15 September, will be devoted to in-depth discussions between the panel members and senior UNESCO leadership. As this is the first meeting, it is important that the panel receive a broad overview of sciences at UNESCO, covering both the natural sciences and engineering as well as the social sciences. This day will also offer the panel the opportunity to share their thoughts on emerging trends in international science and engineering, as well as to engage in discussion with UNESCO staff on the critical challenges facing science worldwide, as well as challenges and opportunities specific to UNESCO. It is expected that subsequent meetings will have more specific topical foci.

On the second day, 16 September, the panel will engage in a session with the Permanent Delegations from UNESCO's member states, a session which will also be open to the general public. This session will be divided into two sequential panel discussions, moderated by Prof. Jose Mariano Gago, recently ex-Minister of Science, Technology and Higher Education of Portugal. The themes for the two interactive panels are: "Mobilizing international science to address pressing interdisciplinary challenges facing our societies" and "Models for capacity building in science, technology and innovation".

Critical questions

The following is a partial list of the vitally important questions we expect to be addressed by our highly distinguished panel.

- What models are effective in increasingly targeting the energies of the international scientific community to the intrinsically interdisciplinary and practical challenges facing humanity?

- What are the most effective roles for UNESCO, as the UN specialized intergovernmental agency with a unique mandate for the sciences?
- How can innovations in science and engineering education be coupled to advancing a collective international research agenda?
- How can we be more effective in mobilizing participation of the private sector and non-governmental organizations?
- What models have proven most effective in promoting popular understanding, participation and support of science, particularly from groups that have been historically marginalized?
- What approaches have proven most effective in linking science and technology to local economic development and job creation?
- How can we work to incorporate the contributions of local and indigenous knowledge systems more effectively and equitably into the international scientific enterprise?
- What unique roles can UNESCO play in advancing international collaborations on science, technology and innovation policies for sustainable development?
- In North-South, South-South and North-South-South partnerships, what models are most effective in overcoming disparities in access to resources, in preventing brain drain, and in promoting institutional capacity development?
- What should the role of UNESCO be in promoting international cooperation in emerging areas such as climate change and the impacts of ocean processes on global climate?"

Expected Outcome

We are confident that the first meeting of the High Panel on Science and Technology for Development will be effective in providing substantial new insight to UNESCO leadership on basic issues facing international science as our community strives to be more responsive in addressing pressing global challenges. We are also confident that the meeting will be effective in providing the panellists with a comprehensive understanding of the sciences at UNESCO, and the challenges and opportunities facing us. We also hope the meeting will lay the groundwork for subsequent meetings, including some decisions on topics and format. A document summarizing the discussions and results of the first meeting will be prepared by the UNESCO Secretariat, distributed to panel members for their input, and circulated to the broader community.