



United Nations  
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Cultural Organization

Organisation  
des Nations Unies  
pour l'éducation,  
la science et la culture

## UNESCO Forum on Higher Education, Research and Knowledge

# Global Research Seminar Sharing Research Agendas on Knowledge Systems

UNESCO, Paris, 28-30 November 2008

## Terms of Reference

### I. Introductory Remarks

This paper seeks to set the context for the Global Research Seminar of the UNESCO Forum, which will be held at UNESCO, Paris from 28-30 November 2008.

The UNESCO Forum on Higher Education, Research and Knowledge is an initiative focusing on research in and on higher education and knowledge systems, and was initiated by UNESCO in 2001 as a follow-up action of the two world conferences on Higher Education (1998) and Sciences (1999), financed by the Swedish International Development Cooperation Agency (Sida). The Forum provides a platform for researchers, policymakers and experts to engage critically with research issues and research findings. The objective is to widen our understanding on systems, structures, policies, trends and developments in higher education, research, and knowledge with a special focus on low and middle income countries. Since 2001, the UNESCO Forum had some 60 seminars, 2 major colloquia, 50 publications, a Global Archive listing 300 research papers, 250 partner institutions associated with regional and global activities such as World Bank, UNU, OECD, NEPAD, UNDP, IAU, ICSU, ICSS, etc.

Another major activity launched by the UNESCO Forum is the Special Initiative, which has mapped research systems in 52 middle and low income countries. This has led to the development of a country review template, which proposes a methodology on how to review national research systems in low and middle income countries. Other activities include special events with partners and commissioned papers, which focus on specific issues of research systems at the international level.

All these activities have contributed to forging a distinct identity for the UNESCO Forum as a platform for research and researchers from all regions.

This year the UNESCO Forum will provide an open venue *for and with* researchers worldwide to discuss and compare notes on systems of higher education, research and knowledge. This will link the research community closer to the UNESCO's regular programme with the potential of mutual benefits.

In each biennial period, the UNESCO Forum foresees two major and complementary activities: a Global Research Seminar with researchers as the main target group and a Global Colloquium which aims at linking research to policies by gathering the research communities, policy-makers and practitioners to discuss challenges and different practices. At the Global Research Seminar, topics could be suggested for further discussion at the Global Colloquium.

The Terms of Reference below thus orient the Global Research Seminar itself and its modalities of work.

## **II. Terms of Reference: Key Questions and Answers**

### ***What is the aim of the UNESCO Forum Global Research Seminar?***

The objective is to provide an arena for researchers to present and discuss new and ongoing research, identify research gaps and suggest new research agendas on systems of higher education, research and knowledge with a view to forging closer links between the research communities and UNESCO in these fields.

Another objective of the seminar is to discuss how to study knowledge systems and to give feedback on the methodology suggested by the Draft Country Review Template for Mapping National Research Systems (see annex), which was developed by the Forum's Special Initiative at an experts' symposium held in January 2008.

### ***What is the Target Group/Area?***

The primary target group is researchers and research organisations worldwide, which are actively studying **systems** of research and knowledge (or components of these systems – structures, policies, developments etc.) in key fields such as higher education, science and technology, innovation, social sciences, health and agriculture.

The secondary target area is UNESCO's regular programme, where activities and projects will be able to link up with the research community in relevant fields.

### ***What is the Primary Content?***

The seminar aims to work across different disciplines and sectors related to systems of higher education, research, innovation and knowledge including health and agriculture research systems, since they are important elements of the national research systems in low and middle income countries. The perspectives will be global, regional and national in scope.

### ***Key research areas of interest for the seminar:***

- How to study Knowledge Systems? – Conceptual and methodological concerns
- Mapping Knowledge Systems – Case Studies and Comparative Analysis
- Specific Dimensions of Knowledge Systems:
  - Research governance and policies

- Human Resources (employment, brain drain, brain circulation)
- Funding (public or private; national and international)
- Investment in Research
- Research output (postgraduates/publications/citations/patents)
- Co-operation (bilateral, regional and international scientific agreements)
- Tensions and challenges (the social applications of science, the ethics and values of science)

**NB:** Research Abstracts should describe your research: areas, methodology, research partners, outcomes to date, future perspectives (2-3 pages maximum).

***What are the Expected Results of the Seminar?***

- Enhanced linkage between the research community and UNESCO's Regular Programme activities
- Improved networking among researchers from different disciplines
- Identification of research gaps and the suggestion of new research agendas
- Substantive feedback to the Draft Country Review Template which resulted from the Forum's initiative project entitled Mapping National Research Systems
- A Report that captures both the results of the Global Research Seminar discussions and an annotated list of participants and their research.

***What is the Time Schedule for the Global Research Seminar in 2008-2009?***

**2008**

- **April/May:** establishment of a Steering Group composed of experts from the Forum's new Interim Scientific Advisory Board to monitor the organization of the Global Research Seminar
- **25 May –20 September:** the Call for research abstracts (2-3 pages) will be widely disseminated
- **21 September-15 October:** selection of key presentations by the Steering Group (**Note: Some financial support may be available for participants from middle and low income countries who are selected to present Research Abstracts.**)
- **1 November:** deadline for registration
- **28-30 November:** holding of the Global Research Seminar (UNESCO, Paris)

**2009**

- **March:** Finalization of a Summary Report and the annotated list of participants and their research areas

**Annex**

**Draft Country Review Template**  
**for Mapping National Research Systems**

Developed by  
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<b>Category</b>	<b>Description</b>	<b>Nature of data</b>
1. Contextualization of the science system within broader political, economic, educational and social systems	This section contains a brief narrative description of the political and socio-economic “status” or “climate” of the country highlighting significant strengths, weaknesses and major events and developments.	Historical narrative
	In addition a set of uniform tables listing demographic (6), social (8), economic (4) and technological indicators (8).	Statistical indicators
2. Some considerations about the History of science in the (country, region) under review and especially the development trajectory	Date (decade) of establishment of first research institute (s), of first public university, Scientific journals, Academy of science and/or first professional societies, Ministry for science, research and/or higher education, Science policy documents	Descriptors (listing)
	Description of specific models of scientific organization and governance as influenced by colonial and other powers historically Major periods in the institutionalization of science in country Major events shaping the development of HE and science in country	Narrative
3. The governance of science in the country and available policies (especially S&T, R&D and HE)	List of science policy, research strategy and HE documents as well as formal reviews and commissions into HE and research in the country	Descriptors (listing in chronological order)
	Research and science priorities as identified in science policy documents	Narrative

	Diagrammatic representation of science governance	Visual descriptor
4. Knowledge and R&D performers (Establishments/ Institutions/ Universities/NGO's)	Names of public universities, Names of private universities, Key university/college research centres, Key government funded research institutes/ centres, Key internationally funded research institutes/ centres Key private sector research facilities	Descriptor (listing)
	Description of strengths and weaknesses of the university system Niche areas of research in the system and at universities Modes of knowledge production undertaken in various sectors of the system	Narrative
5. Informal S&T structures (Academies, Associations, Journals) = Scientific Community)	National scientific journals Scientific societies and associations Academies of science	Descriptor (Listing)
	Status of main journals (still being published or not) (Historical) description of information structures	Narrative
6. S&T Human Resources (Description/s Statistics + The Profession of researcher: status, salaries, etc)	Number of researchers/ scientists in country * gender Number of academics in HE institutions * gender Nr of academics by scientific field (6) * gender Nr of Graduate enrolments * field * gender Nr of M and D graduates by field of study (Natural/ Agric/ Engineering/ Health/Social/Humanities) Inbound/outbound student mobility rates Number of researchers per million of labour force	Indicators
	Profession and status of academics and knowledge workers Remuneration compared to other public professions Scientific mobility and brain drain challenges	Narrative
7. Research Funding (Public or private; National and international; Trends)	R&D intensity (GERD/GDP) Expenditure on R&D per researcher Expenditure by sector Source of funding (incl. overseas agencies) – actual values and proportions Expenditure by scientific field (6)	Indicators

	<p>Role of government and other domestic agencies in funding research</p> <p>Role of international donor and funding agencies in funding and steering research in the country</p>	Narrative
8. Research Output (post-graduates/ publications/ papers/ patents)	<p>Total output in ISI-journals (by scientific field) Total output in local journals (by field) Nr of PG theses/dissertations Nr of patents Citation impact statistics</p>	Indicators
	<p>Description of specific policies (funding, incentive) and initiatives to encourage participation in innovation, technological learning, and research publications locally and internationally</p>	Narrative
9. Scientific cooperation and agreements	<p>Nr of bilateral scientific agreements Nr of multilateral and regional agreements Nr of international agencies operating in country Degree of scientific collaboration as measured through share of foreign co-authors of papers Nr of bilateral scientific agreements Nr of multilateral and regional agreements</p>	<p>Descriptors (Listing)</p> <p>Indicators</p>
	<p>Main international and regional scientific partners</p>	Narratives
	<p>Main institutional collaborators</p>	
	<p>Domains and topics of scientific research</p>	
10. Tensions, dynamics & challenges	<p>Social inscription of science The ethos's of science (values) Science and the state/ contract Legitimacy/ credibility/trust/ accountability Science and its publics Usefulness of science?</p>	Narratives