



United Nations
Educational, Scientific and
Cultural Organization



Management of
Social Transformations
Programme

Policy Research Tool

Background, Design Methodology and Application

November 2007

MOST Policy Research Tool provides online speedy access to policy-relevant comparative information and enables users to obtain customized replies to trans-disciplinary questions by drawing on select content from original documents. Owing to innovative interactive functions, scientifically comparable categories are used to assess the relevance of policy options available from different case studies.

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1. Knowledge and Policy

The significance of the Internet as a powerful tool for sharing knowledge was emphasized as early as 1999 by the former chief economist of the World Bank, Joseph Stiglitz, who advocates as his main thesis the approach to “scan globally, reinvent locally”. In other words, the global knowledge acquired from the existing repositories such as major libraries, databases and other sources must be internalized, rediscovered and made accessible for translation to local conditions if it is to be usefully applied for policy and development [STIGLITZ 1999]. Precisely, online knowledge systems and networks in the broad area of international development are dedicated to the sharing of existing knowledge and the discovery of new knowledge, and its application for the advancement of developing nations and regions. The key to their popularity and initial success is the realization that all participants, both developed and developing countries and institutions, can and should learn from each other, and can and should cooperate to benefit the capacity for relevant knowledge creation, aggregation and exchange [NATH 2000].

The Management of Social Transformations (MOST) Programme at UNESCO is initiating a no-fee online policy research service which is expected to further new modes of decision-making, based on actual evidence from realities on the ground. As a matter of fact, the increasing need for relevant knowledge to inform international and national decision-making has overtaken current capacities of access, retrieval, organization and interpretation. The explosion of information and published material on policy and international development is both a danger and an opportunity. The danger is that a vast and accelerating quantity of conceptually unstructured, difficult to access, and largely unevaluated material has less utility for research and policy analysis. Conversely, there is a clear opportunity that the investment of so much knowledge capital shall dramatically advance new paradigms for embarking on trajectories toward development and sustainability. This is a particularly acute problem for the social sciences. If social sciences results are to be useful to policy, they need to be accessible for comparison and verification. Without ready access to quality research conclusions, timely, focused and effective policy responses may be severely impeded at both national and international levels [UNESCO 2006].

The knowledge needed to design effective policy must thus be made available to decision-makers in *forms* they can use. The currently fashionable call for “evidence-based” policy specifies what constitutes “effective”: policy designed by reference not to common sense or to ideological preconceptions but to prior practical experience. Evidence-based policy, in other terms, assumes both a strong comparative knowledge base and effective and transferable implementation models that can be calibrated based on the characteristics of particular cases. Thorough comparison of individual cases examined in detail is indeed one practical way to expand the experience of those engaged in social action and thereby to equip them better to judge the possibilities and constraints of their own specific situations [UNESCO 2007].

Given the complexity of the objective, there is a need for new systems based, among others, on a new information architecture that includes new languages, categories, and metaphors to identify and account for *contexts, issues and solutions*; on a new technical architecture that is more social, transparent, open, flexible, and respectful of the individual users; on a new application architecture oriented toward problem-solving and representation, rather than output and transactions [LANG 2001]; and on a new institutional architecture with organizational processes that extract the most out of the synergistic combination of information technology, knowledge and the creativity and innovation capacity of human beings [RAGHAVAN 2007].

2. MOST Tool Contributions to Policy-making

The MOST tool has been designed to produce a specific policy knowledge system around which a set of distinct but interconnected dynamics are to emerge – between research and policy, between the local and global levels, and between the interventions and the target communities. As a matter of fact, the Tool’s knowledge base will update and enrich as it is used on the ground and feedback on experiences is made available; the follow-up and evaluation of the experiences will allow for alternative approaches to be assessed over time, through the tracking and mapping of the applications. Policies shall link gradually to one another, since initiatives are based on shared experience (lessons learned, mutual benefits) and finally, the responsiveness of the interventions to the issues they seek to address is made accountable, traceable and adjustable. This is substantially different from most of the currently available databases of best practices that generally propose de-contextualized options for replication [MAUGIS 2003]. Indeed, a failure here may perfectly be a success there, and *vice versa*. Precisely in policy one size seldom, if ever, fits all.

The tool thus delivers user-tailored, issue and location-specific, policy-relevant material through a specially designed search function. It is accessible in multiple languages, starting with English, French and Spanish with a view to expanding to the rest of the United Nations working languages. Its focus is on enabling easy access to high quality, comparative social science research for decision-making. This service shall enable new policies to be the “best possible” of options: evidence-based and linked to location-specific dynamics (context-sensitive), and also documented with assessments of similar experiences (best-informed). The primary objective is to enhance potential for successful implementation and outcome, ensuring action will be better tailored to suit the specific needs of the populations concerned, which shall in turn experience improved living conditions.

The tool is modeled on a classic legislative research service to perform policy-oriented information research, analysis, processing and custom writing. Such services indeed exist and work well in most of the industrialized countries, for example in the United States (the Library of Congress Research Service [ANNUAL REPORT 2003, 2004, 2005]), the United Kingdom and the Nordic European Countries. Needless to say however that most of the less developed countries

simply cannot afford to implement such services. It is also to be noted that current policy information research mainly focuses on knowledge production and dissemination, and that information technology and knowledge management research and development mainly focus on industry and business applications.

With expertise in the main issues of current social transformation and development analysis, and with long established networks and partners in the research, policy and advocacy fields in the areas of multiculturalism, urban and local governance, globalization and poverty eradication, ageing, and regional integration, MOST is indeed best placed for efficiently designing, developing and implementing such modalities that facilitate policy cooperation, knowledge sharing and international cooperation, provide a platform for disseminating research results and policy initiatives from all parts of the globe, and facilitate research-policy linkages [MOST 2001].

3. Design Methodology

The content of the MOST tool consists of a set of policy documents (expert “Policy Papers”) that are written in a normalized format (a template). There exist obvious basic reasons that justify the use of normalized documents (cognitive cost reduced through enhanced localization of information, ease of reading improving with familiarity of the format, etc.), and indeed a number of institutions and organizations in the policy arena are already producing and disseminating normalized policy documents.

Most of these peers however do not take full advantage of this approach, especially in terms of exploiting content connectivity potentials (only few have implemented basic electronic systems linking together some parts of the documents). Furthermore, it is to be noted that most of the “policy” documents produced by peer institutions should not exactly be considered “policy” but rather “learning” documents, in the sense that they generally tend to aggregate and synthesize the necessary in-depth knowledge gained directly from practical experience.

3.1 Knowledge Mapping

The normalized format of MOST Policy documents results from the mapping of several theoretical studies and educative materials [COLLINS; GIL 1981; JANSSEN 1999; RICHAN 1996; SEGAL & BRZUZY 1998], documents by policy institutions [OECD; UNRISD; THE BROOKINGS INSTITUTION; COLUMBIA INTERNATIONAL AFFAIRS ONLINE; JOSEPH ROWNTREE FOUNDATION] and guidelines for reporting on best practices [UN-HABITAT; AGORA 21]. Knowledge mapping is about generating an ontology (a formal description of the concepts and relationships that can exist for an agent or a community of agents [GRUBER 1993]) of the subject matter at hand -- *social transformations and policy* -- according to some select principles. When completed, the ontology consists of key features (or descriptors) of the subject matter at hand that are integrated into a coherent knowledge system [CHOUCRI 2007].

Our approach to the mapping process consists of:

- (a) Defining the policy dimensions, characterizing the issues arising in specific contexts, on the one hand and the range and nature of policy experiences to date, on the other;
- (b) Organizing the content of social transformations issues and framing these in terms of different types or domains – from the most general level of aggregation to the most specific granularity for individual components or component manifestations thereof;
- (c) Determining the interconnections (or intersections) among and between domains and dimensions.

The resulting full-ontology is a multidimensional representation of the subject matter at hand – by dimension, domain and intersections.

Policy Dimensions:

Table 1
Policy Dimensions

<ol style="list-style-type: none">1. Context and issue<ul style="list-style-type: none">• What is the context• What is the issue2. Policies and programmes<ul style="list-style-type: none">• Policy framework in place• Programmes and projects3. Research results<ul style="list-style-type: none">• Research methodology• Key findings4. Recommendations<ul style="list-style-type: none">• Change(s) initiative• Plans for actions5. Operational aspects<ul style="list-style-type: none">• Resources• Preliminary evaluation• Further recommendations
--

Social Transformations Domains:

- As particular types of issues, these are content-dependant and require that a dedicated knowledge model be produced for each thematic application. The various thematic applications are listed in section 6 below; for illustration purposes, the domains knowledge model for an application on research and higher education is shown in Appendix I.

Content comparability is thus achieved through the resulting matrix of descriptors, allowing for fairly sharp analyses. This scientifically sound policy analysis grid has been experimented with various knowledge producing entities from different research areas; it can be adjusted to serve the needs of virtually any domain or subject area.

3.2 Knowledge Networking

For clarification purposes in the sense of knowledge networking: the above *dimensions* correspond to the template elements framing each case-study (table of contents), and *domains* correspond to the policy-sensitive criteria defined for each thematic application (categories). Coupled with the search and retrieval functions of a relational database, this matrix of descriptors allows for systematic comparability of knowledge as well as for content recombination.

As a matter of fact, each element of the normalized format acts as an individual knowledge item (a document *per se*): each knowledge item is unique as it is described by its own specific set of dimension(s), domain(s) and geographical location(s)ⁱ; moreover, all knowledge items are complementary as they are inter-linked through the matrix of descriptors. The tool's operational base is thus the network of all knowledge items, and the system's utility increases with each new submission as each new knowledge item is linked with the rest corresponding knowledge items (margin contributions). Once critical masses are achieved for specific subject areas, database analysis shall also enable to identify trends and concomitances in the subject matter at hand as well as gaps and redundancies in the availability of the corresponding knowledge [RAGHAVAN 2004].

Finally, each knowledge item can be extracted from any document and collected across all documents in order to produce customized reports. Some elements of particular relevance to information research have also been added to the policy dimensions/normalized format: a summary (abstract), key facts and figures, and a bibliography.

4. Functionality

Functionality design process for the MOST tool directly originates from a study by the Global System for Sustainable Development (GSSD -- a knowledge laboratory at the Massachusetts Institute of Technology's Political Science Department). For this study focusing on how GSSD relates and links to other 'peer' institutions' knowledge systems, ten systems were analyzed in terms of focus (institutions activities and systems objectives), content (knowledge framework characteristics), delivery (access and retrieval mechanisms) and outreach (search-engines outcomes). An overview sample of the key features of these systems is shown in [Appendix II](#).

The results obtained from analyses of different levels and linkages provide better understanding in the nature of such knowledge systems (content and context, and connectivity) as well as in their relative position and behavior within their environment (ecology); and also enabled to identify redundancies, gaps to be filled, potentials for synergy or niche focus, etc. This study indeed aimed at providing foundations for developing and implementing a next-generation knowledge networking strategy [MAUGIS 2004].

ⁱ These may consist of select individual country-ies, sub-region(s), region(s) or custom sets thereof.

The MOST tool will thus offer value-added functionality specifically tailored for policy advice to decision-makers:

Table 2
Tool Functionality

- Policy-sensitive domains knowledge mapping
- High level of inter-country and inter-experience comparability
- Exploration and interpretation support:
 - Dynamic visual interface (maps, graphics, animation)
 - Identification of trends, concomitances and emerging issues
 - Identification of communities of thoughts and practice (cross-referencing and enhanced visibility of authors)
 - Identification of gaps and redundancies in knowledge availability
- Intelligent search and retrieval
- Content recombination and customization
- Contextual access to relevant indicators and news

It seeks to provide users with optimal policy information, enabling them to assess the relevance of the available policy options through comparative knowledge exploration and the production of customized reports. Reports constitute compilations of focused experiences from around the globe, containing only the very information relevant since selected by the user, integrating context-specific dynamics and also pointing to the relevant data; these can be easily produced in only a couple of clicks.

5. Practical Illustration

For instance, one may want to find out what countries have policies related to decent work, what specific kinds of policies are there, and how they went about implementing them.

Figure 1: Searching categories and accessing documents

- We perform a search for keywords “decent work” or for categories “human rights”, “poverty”, etc. (subject categories as they appear below are illustrative);
- The system gives an overview of the volume and geographical distribution of the case studies available and shows a list of the corresponding documents:

The screenshot shows a search results interface. On the left, under the heading "POVERTY & HUMAN RIGHTS", there is a list of categories: "Food, Housing and Clothing", "Safe Environment", "Health and Social Services", "Education and Training", and "Decent Work". The "Decent Work" category is selected, indicated by a plus sign icon. Below the categories is a world map with four numbered circles (1, 2, 3, 4) highlighting specific regions. To the right of the map is a list of document titles, each preceded by a checkbox icon. The titles are: "Empowering marginalized adolescent girls in **Bangladesh, India, Nepal** and **Pakistan** to become agents of social transformation", "Poverty eradication through sustainable tourism development in **Central Asia** and the **Himalayas**", "A comprehensive skill training and capacity building program to improve the socio-economic opportunities for marginalized youth in four **Arab countries**", "From subsistence living to small-scale enterprises to eradicate poverty in **Eastern and Southern Africa**", "Fighting against poverty through sustainable development of tourism in the **Sahara**", "Integrated approaches using formal and non-formal education as catalysts for poverty reduction among young girls in **Cambodia, Indonesia** and **Nepal**", and "Involving youth in community tourism, cultural and natural heritage preservation for poverty eradication in the **Caribbean**". The interface also includes "..." icons at the bottom left and bottom right of the document list.

- One can open papers from the list individually;
- One could also zoom in the different regions, sub-regions, countries, or change the search categories etc.

Figure 2: Creating a personal collection of documents

- Documents from the list can be individually added to a personal collection, out of which select content items will be later extracted so as to form a customized report;
- We may want for instance to make up a personal collection with documents 2, 5 and 7, as they relate more specifically to tourism activities in three different areas:

Decent Work

- Empowering marginalized adolescent girls in **Bangladesh, India, Nepal** and **Pakistan** to become agents of social transformation
- Poverty eradication through sustainable tourism development in **Central Asia** and the **Himalayas**
- A comprehensive skill training and capacity building program to improve the socio-economic opportunities for marginalized youth in four **Arab countries**
- From subsistence living to small-scale enterprises to eradicate poverty in **Eastern and Southern Africa**
- Fighting against poverty through sustainable development of tourism in the **Sahara**
- Integrated approaches using formal and non-formal education as catalysts for poverty reduction among young girls in **Cambodia, Indonesia** and **Nepal**
- Involving youth in community tourism, cultural and natural heritage preservation for poverty eradication in the **Caribbean** .../...

Figure 3: Producing a custom comparative report

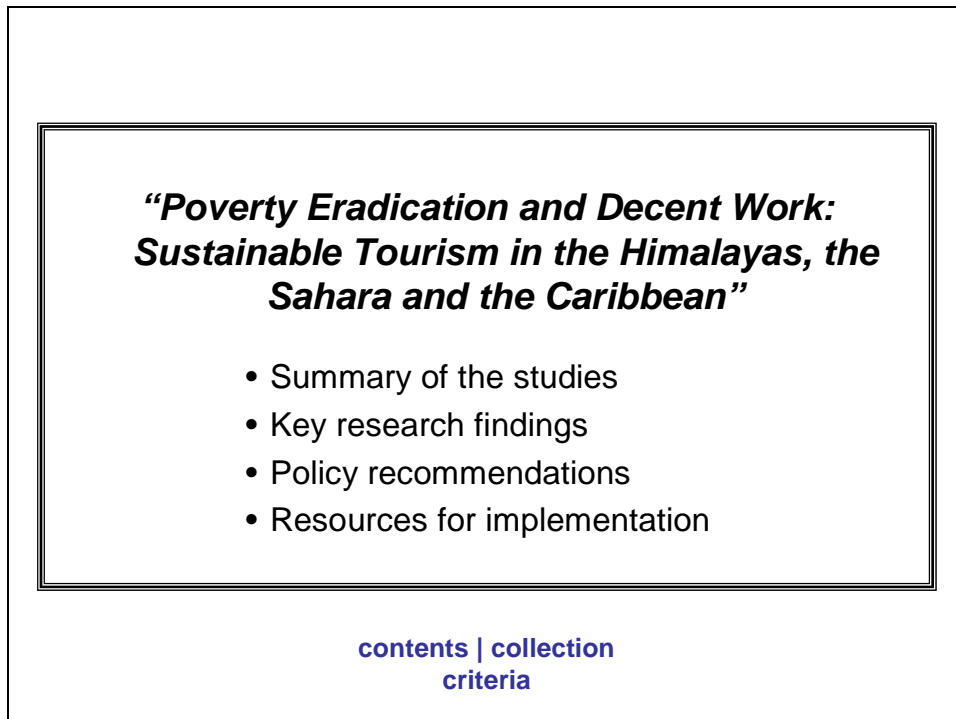
- Items to be extracted from the documents format (sections and sub-sections) are simply selected by checking the corresponding boxes;
- We may choose for example to produce a report containing only the items: Summary, Key findings, Recommendations and Resources -- from those 3 papers in the above personal collection:

<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Summary <input type="checkbox"/> Key facts <input type="checkbox"/> Context and issue <ul style="list-style-type: none"> <input type="checkbox"/> What is the context <input type="checkbox"/> What is the issue <input type="checkbox"/> Programmes and projects <ul style="list-style-type: none"> <input type="checkbox"/> Current policy framework <input type="checkbox"/> Current programmes and projects <input type="checkbox"/> Research results <ul style="list-style-type: none"> <input type="checkbox"/> Research methodology <input checked="" type="checkbox"/> Key findings 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Recommendations <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Change(s) initiative <input checked="" type="checkbox"/> Plans for action <input type="checkbox"/> Operational aspects <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Resources <input type="checkbox"/> Preliminary evaluation <input type="checkbox"/> Further recommendations <input type="checkbox"/> Bibliography <ul style="list-style-type: none"> <input type="checkbox"/> Related Policy Papers <input type="checkbox"/> Sources <input type="checkbox"/> Suggested readings
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- These items will be retrieved for all documents in the personal collection so as to form a customized report; the resulting report's structure is shown next.

Figure 4: Viewing the report/Exploring further

- The resulting report is a compilation of focused experiences (options) from around the globe, containing only the very information relevant since selected by the user:



- At any time in the search/exploration process one can modify the structure of her/his report, add or remove papers from the collection, and refine or modify the search criteria -- without losing her/his original selection.

What is not shown here however is the contextual integration of the relevant indicators and news. As a matter of fact, the MOST tool will also draw upon:

- The UNESCO Institute for Statistics' Data Centre in a dynamic fashion, so that comparative tables with the available corresponding indicators are automatically produced together with the custom reports. Users will be able to also customize the data tables and to view them as different types of graphics and charts.
- The relevant news aggregation services to include select thematic up-to-date news feeds in the custom reports.

6. Knowledge Base

The MOST tool's knowledge base consists of cross-cutting, trans-disciplinary, comparative policy analyses on issues of social transformations by expert social scientists worldwide. MOST first started by integrating content from various UNESCO units as well as from select partners and networks, to outsource quality-control efforts while at the same time achieving quick critical

masses in various subject areas. The Programme is currently drawing upon its Scientific Advisory Committee to set up a dedicated international expert review committee.

Processing a specific subject area requires adjusting the methodology (designing a dedicated domain knowledge model), and preparing the corresponding content. Content development (producing policy documents) is generally achieved through extracting and re-structuring research report findings; Pre-structuring of contents can be achieved through inclusion of the policy analysis grid in up-coming research contracts signed with partner institutions.

Status as of November 2007

Current thematic application:

- Research and Higher Education

Applications under development:

- Poverty Eradication and Human Rights
- Evaluation of Social Policies and Programmes

Planned or under discussion:

- Democratic Innovation and Urban Development
- Youth Development and Prevention of Violence
- Population, Environment and Development
- International Migration and Multicultural Policies
- Health, Development and Equity

7. Implementation and Next Steps

The “version 1” (single thematic application and basic functionality) of MOST policy research tool has been launched on the UNESCO portal right after the Organization’s 34th General Conference in November 2007. The tool will gradually publish more documents from various thematic areas related to social transformations and will also be regularly upgraded to offer improved support to decision-making

While version 2 of the Tool corresponds to the implementation of the more sophisticated functions (visualization, indicators and news, user profiles, etc.), the next phase of research and development will seek to combine knowledge networking methods with the application of computer simulation and other computer-based methods (semantic analysis, agent-based modeling) for the analysis and representation of social and policy systems and processes at all levels or scales of complexity. It will aim at addressing cognitive challenges specific to governance where practical questions include for example: determining common goals for conflict resolution and work in cooperation; identifying possible measures based on aims, and assess side-effects prior to implementation; suggesting appropriate measures; identifying which goals are most important, and which results are replicable and transferable [MAUGIS 2006].

8. References

- Agora 21: "Fiche-type" for submission to Agora 21's "Bonnes Pratiques pour le Développement Durable" (Database).
- Choucri, N. *et al.* (2007): "Mapping Sustainability. Knowledge e-Networking and the Value Chain" (Section 1). Alliance for Global Sustainability Bookseries. Springer.
- Collins, S.: "Problems in International Political Economy: Globalization" (Course requirement at Washington University).
- Columbia International Affairs Online: "Policy Briefs".
- Congressional Research Service (2003, 2004, 2005). US Library of Congress (Annual Report).
- Gil, D. (1981): "Unraveling Social Policy" (Chapter 1).
- Gruber, T. (1993): "What is an Ontology?".
- Janssen, B. (1999): "Becoming an effective policy advocate".
- Janssen, B. (1999): "Social Welfare Policy: from theory to policy practice" (Chapter 1).
- Joseph Rowntree Foundation: "Findings".
- Lang, J.C. (2001): "Managerial concerns in knowledge management". Journal of Knowledge Management.
- Maugis, V. (2003): "The Potentials of Best Practices". Center for e-Business, Massachusetts Institute of Technology (Working Paper).
- Maugis, V. (2004): "Knowledge Networks in Sustainability and Development: Key Findings from Domain Mapping". Global System for Sustainable Development, Massachusetts Institute of Technology (Working Paper).
- Maugis, V. (2006): "Addressing Cognitive Complexity in Policy-making". UNESCO (International Forum on the Social Science – Policy Nexus).
- MOST (2001): "Bridging Research and Policy". UNESCO (Annual Report).
- Nath, V. (2000): "Knowledge Networking for Sustainable Development". Sustainable Development Networking Program (SNDP).
- OECD: "Policy Briefs".
- Raghavan, A. (2007). In: Choucri, N. *et al.*: "Mapping Sustainability. Knowledge e-Networking and the Value Chain" (Section 9). Alliance for Global Sustainability Bookseries. Springer.
- Richan, W. C. (1996): "Lobbying for Social Change" (Chapter 7).
- Segal, E. and S. Brzuzy (1998): "Social Welfare Policy, Programs, and Practice" (p. 254-256).
- Stiglitz, J. (1999): "Scan Globally, Reinvent Locally: Knowledge Infrastructure and the Localization of Knowledge"
- The Brookings Institution: "Policy Briefs".
- UNESCO (2006): "International Forum on the Social Science – Policy Nexus".
- UNESCO (2007): "From Research to Policy to Action".
- UN-Habitat: "Submission Guide and Reporting Format" for the UN-Habitat "Best Practices Database".
- UNRISD: "Research and Policy Briefs".

APPENDIX I

Knowledge model: *Domains* (see Section 3.1) for the application on research and higher education:

Knowledge for Research and Higher Education Policy

POLICIES AND AGREEMENTS

- Innovation policies
- Science and technology policies
- Education policies
- General Agreement on Trade in Services (GATS)

RESEARCH IMPACT AND DEVELOPMENT

- Relevance and utility of research
 - Local relevance and utility (solutions to local problems)
 - Social relevance and utility
- Research for development
- Capacity strengthening in research and education

RESEARCH PRODUCTIVITY AND DELIVERY

- Research results, dissemination and application
- Monitoring, evaluation and quality assurance

RESEARCH CAPACITY

- Innovation strategies
- Investment in research
- Human resources in science (incl. social science) and technology
 - Gender and youth
 - Status of researchers/faculty
- Infrastructure
- Research autonomy and academic freedom
- History, philosophy and governance

COOPERATION, PARTNERSHIP AND NETWORKING

[*National | International*]

- Between universities / research centers
- Between universities / research centers AND industry
- Between universities / research centers AND policy
- Between universities / research centers AND NGOs / civil society
- Between universities / research centers AND the UN system

KNOWLEDGE DEVELOPMENT AND MANAGEMENT

Information and communication technologies
Interdisciplinarity
Cognitive skills development
Informal structures of knowledge production

SPECIAL AND EMERGING ISSUES

Traditional knowledge and scientific knowledge
Knowledge gap North-South and the brain drain
Non-innovation and imitation
Diploma-only interest of students
Language barriers

Role of the market
Role of the media

Globalization of education
Massification of education
Standardization of education
Privatization/commercialization of education

Access to high level higher education
Teaching quality
Links between research and teaching/learning
Academic and student mobility
Participation of communities and minority groups

Situations of emergency and reconstruction

APPENDIX II

Overview sample of key features of ten major knowledge systems in the area of international development and sustainability

Knowledge systems

A	Global System for Sustainable Development (GSSD)
B	International Institute for Sustainable Development (IISD) Research Tools
C	Development Gateway Development Topics
D	Eldis
E	Sustainable Development Topics
F	IISD Linkages
G	Resilience Alliance Resource Library
H	Directory of Sustainability in Practice
I	Sustainable Development Reference Links
J	WWW Virtual Library: Sustainable Development

Table A. – 10 Knowledge Networks in Sustainability and Development

Basic characteristics

- These principally originate from international third-party agencies (*B, C, E, F, H*), universities (*A, E, K*), and research or consulting organizations (*G, I*) which activities center on sustainability, development, and social and environmental research;
- Only one originates from the private sector: consulting/software (*I*);
- The goal of the system as well as the target audience are usually clearly stated;
- Access is generally free; only one system requires registration (*H*);
- Most systems were established around the year 2000 (first est. 1996, last 2003);
- Volume of documents available spans from a hundred to over 17.000 (total exceeds 47.000 documents).

	A	B	C	D	E	F	G	H	I	J
Established	2000	N/a	2001	N/a	N/a	1999	1999	2001-3	2003	1996
Size (documents)	2.000+	17.000+	11.500+	11.500+	1.200+	N/a	3.000+	100+	100+	650+

Table B. – Date established and system size

Knowledge framework

- 5 systems respond to a specific focus for knowledge integration in the domain of sustainable development: “Domains, dimensions, interconnections” (*A*); “Policy, principles, resources” (*B*); “Conventions” (*F*); “Dynamics of complex adaptive socio-ecological systems” (*G*); “Good practices” (*H*).

* In: Maugis, V. (2004). “Knowledge Networks in Sustainability and Development: Key Findings from Domain Mapping” (Section 3). Global System for Sustainable Development (Working Paper).

	A	B	C	D	E	F	G	H	I	J
Knowledge focus	√	√				√	√	√		
Framework / ontology	√	√						√		
Glossary / definitions	√	√					√			
Meta-site (documents)	√	√	√		√				√	√
Community (topics)			√	√			√			
Non-proprietary (documents)	√	N/a	√	√	√	√				√
Editorial policy	√	N/a	√	√			√	√		
Abstract	√	N/a	√	√			√	√		
Search-engine	√	√	√	√				√		
Multilingual (KB)	√		√	√	√					
Account for dates (KB)	√	√	√	√		√				
Temporary topics			√							
IT topic				√	√				√	
Localization (access/content)	√		√							

Table C. – Key Features

Knowledge content representation

- 3 systems are based on a specific conceptual framework or ontology;
- 3 systems propose a glossary or definitions of key concepts.

Knowledge policy

- 6 are *meta-systems* (they link to documents from and located on different sites);
- 3 systems have their content managed by an “editor”, “guide” or “entry partner” (topics are called “community pages”);
- 3 systems propose only proprietary documents (i.e. documents they created themselves);
- 5 systems have a strict editorial policy (content submission, review and publishing).

Knowledge delivery

- 5 systems propose abstracts (the others link directly to final documents);
- 5 systems propose access via search-engine (the others only offer subject indices);
- 4 systems are multilingual (knowledge base – we differentiate between website interface and knowledge base), the rest are English-only. The total array of languages include: Arabic, Chinese, English, French, Spanish, Portuguese, and Russian.

Other features

- 5 systems account for dates in their base (document created and/or submitted);
- 1 system presents temporary topics (i.e. topics focusing on temporary issues or specific events, and therefore likely to either become a permanent topic or disappear);
- 3 systems propose a topic dedicated specifically to IT and knowledge networking for sustainability and development;
- 2 systems only account for local-global considerations (access and content provision).



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