Integrated Assessment Society

The

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In This Issue:



Courtesy of J. Newig

Feature

The Society

The Integrated Assessment Society is a not-for-profit entity created to promote the community of inter-disciplinary and disciplinary scientists, analysts and practitioners who develop and use integrated assessment. The goals of the society are to nurture this community, to promote the development of IA and to encourage its wise application.

Integrated Assessment Defined

Integrated Assessment (IA) can be defined as the interdisciplinary process of integrating knowledge from various disciplines and stakeholder groups in order to evaluate a problem situation from a variety of perspectives and provide support for its solution. IA supports learning and decision processes and helps to identify desirable and possible options for addressing the problem. It therefore builds on two major methodological pillars: approaches to integrating knowledge about a problem domain, and understanding policy and decision making processes. IA has been developed to address issues of acid rain, climate change, land degradation, water and air quality management, forest and fisheries management and public health.

Experts Workshop, Brussels, 6-7 November 2008 Summary of Results: A Methodological Review of Recent Global Assessments

In the past few years, a rich group of global environmental assessments have been released. They include a broad assortment of approaches in terms of ownership, governance and rules for the acceptance of their content (see Box for list of assessments). Taking advantage of this unique point in time, the Integrated Assessment Society held a small Experts Workshop: Methodological Review of Recent Global Assessment on November 6-7, 2008. The workshop was hosted by DG-Environment of the European Commission in Brussels and core funds were provided by the Netherlands Environmental Assessment Agency.

The workshop was the next step in a process TIAS initiated with a session at the University of Maryland, May 2007, formulating expectations for the four major environment-related worldwide assessments that were then some months to a year from publication. The present workshop focused on the usefulness of these assessments to, and uptake by, policy in practice.

The participants were each involved in one or more of the assessments. Others who were unable to attend provided additional contributions beforehand or by teleconference during the workshop (the names of participants and those who provided input before the workshop or by teleconference link are available upon request). In order to enable a frank discussion, not only of successes but also of challenges and difficulties, the workshop adopted the Chatham House rules "When a meeting, or part thereof, is held under the Chatham House Rule, participants are free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed".

The workshop was structured around a series of specific questions:

- How successful have assessments been?
- How have assessments tried to deal with the often disjunctive perspectives among those involved – in terms of interests, time horizon, culture, problem perception and so forth?
- Have assessment processes included efforts to build up or improve the capacity to undertake the assessment if so, how?

- How have assessments tried to deal with the inherent uncertainties about the future?
- How have assessments tried to deal with the multi-scale character of worldwide developments and problems to be addressed?

Each of these questions generated quite a bit of discussion and brought the complementarity of experiences in the assessments to the table. In addition, some of the assessments are periodic, with large intervals, allowing a look back over past editions and forward to possible sequels. The key points that came out of these discussions were:

There is a move from problem definition to action in assessments

- A trend can be seen, in assessment practice as well as in the demand articulated by users, to move from defining priority problems to defining and exploring priority actions.
- Such a shift means that future assessments will have to move to even more controversial issues. Therefore, the need to deal with disjunctive perspectives will likely become even bigger than it has been so far. Therefore, process design, rules for acceptance and review of information as well as clearly defined relation with policy users will become even more important.
- As one specific example, there is a need for more training on how to do global environmental assessments. This is not only related to content knowledge, but also on such skills as process

facilitation and conflict resolution on the part of convening lead authors, who are pivotal figures in the process and often selected primarily for their seniority in content terms.

The assessments show a diversity of purpose and must be judged accordingly

- The question whether assessments have been a success unsurprisingly unearths a diversity in strategic purposes. From the point of view of the mandating body, this diversity ranges from awareness raising, to consensus building, to consolidating evidence.
- Generating new knowledge, scientifically, is not the primary role of assessments, but synthesis of existing knowledge and the forward-looking components of the assessments will often create a new understanding of existing knowledge. Also, the reports often end up being used extensively as reference documents.
- While it remains difficult to assess the degree to which individual assessments have 'landed' in societal discourse, and comparing is not completely fair given their different goals and mandates, those with a clear, pre-defined relation with their audience seem to have done best.
- The goals and mandate of assessment affects definitions of success and choices of methods, participants, products and target groups. Choices of methods would, for example include decisions on how conservative an assessment should be towards latest insights; rules for author affiliation, review and sign-off; and scenario setup. The participants felt that at this point in time, the experience with assessments over the past decade can help to highlight the kinds of questions that need to be considered by those mandating future assessments.
- All the assessment processes contributed to building up or improving the capacity to undertake these studies, although this is more of an explicit goal in some assessments than others. Capacity building cannot be limited to the global level, but also has to get into the sub-global. Obviously, this is a long-term agenda, but it is essential for improving, over time, cross-scale integration and consistency.

There remain some key methodological issues for assessments

- In the various assessments attempts have been made to relate global and regional findings to the reality on the ground, nationally and locally and vice versa. In spite of these efforts, broadly accepted concepts and methods for handling multi-scale linkages in the assessments are still largely missing.
- Methods for dealing with uncertainties in a structured way exist, but are not consistently applied. The way uncertainty has been dealt with seems to have created discomfort for some of the assessments. It also may become more important for future assessments, as they move from uncertainty in natural systems 'only' to include uncertainty in, and different views on, the behaviour of social systems.
- Real integration is still a weak aspect in assessments (as in science, development strategy and policy formulation and planning, management and implementation, etc). Crossing the interface between physical, social and human systems is still very difficult. For example, see the volumes on Human Choice and Climate Change by Rayner and Malone. More emphasis could be put on seeking solutions in this direction, for example by more actively trying to get more social scientists on board.

There is a need for some form of coordination among the various assessments

- A diversity of views was expressed on the issue of coordination among future assessments related to the global environment.
- On the one hand, the not-so-open question is: how many assessments is enough? Or, from the point of view of the expert: can't these processes be coordinated in such a way that key people do not spend all their time, paid as well as unpaid, in preparing and making these reports for years on end?
- On the other hand, if these assessments are part of a process of integration of environmental considerations in global and regional policy, attempts to streamline them in terms of content and knowledge production will miss the point.
- The size of the assessment processes remains a reason for concern and some are more efficient than others. One difficulty for all big assessments seems to be that there is almost never time for true integration across chapters and volumes within the same study – for example, between retrospective and forward-looking analyses.
- A light form of coordination operated among the various secretariats of a number of the assessments during 2006 and 2007. It served to exchange information on timing of process steps such as review and pre-publication; to identify possible contradictory messages and understand the reasons of the contradiction; to jointly inform the envisaged audiences, explain complementarity and provide a joint time table for review and publication. This ad-hoc arrangement was found to be valuable and should be kept in mind for the future.

The discussions during the workshop and the interest shown by those who were not able to attend, make it clear that there are more insights to be gained that can contribute to the improvement of future assessment processes. Therefore, a follow-on workshop, at which there will be broader representation, is now in the works. This meeting will take place in Brussels in April 2009.

Overview of the Major Global (Environmental) Assessments

Intergovernmental Panel on Climate Change (IPCC) URL: http://www.ipcc.ch/	
<u>Reports</u>	IPCC First Assessment Report 1990; IPCC Second Assessment Report 1995; IPCC Third Assessment Report 2001; Climate Change 2007: Fourth Assessment Report
Administered by	United Nations Environment Programme/World Meteorological Organisation secretariat, and Working Groups of the IPCC Technical Support Units
<u>Main</u> <u>Goals/Objectives</u>	to provide the decision-makers and others interested in climate change with an objective source of information about climate change
<u>Intended audiences/</u> <u>clients</u>	Government negotiators (United Nations Framework Convention on Climate Change / Subsidiary Body for Scientific and Technological Advice), national policy makers

Millennium Ecosystem Assessment (MA) URL: http://www.millenniumassessment.org	
<u>Reports</u>	Millennium Ecosystem Assessment (2005)
Administered by	UNEP and board of key 'users'
<u>Main</u> <u>Goals/Objectives</u>	to assess the consequences of ecosystem change for human well-being and the scientific basis for action needed to enhance the conservation and sustainable use of those systems and their contribution to human well- being, and to contribute to improved decision- making
<u>Intended audiences/</u> <u>clients</u>	CBD, CCD, Ramsar, and the UN Convention on Migratory Species; national governments; UN agencies; civil society representatives (incl. indigenous peoples); and the private sector

UN World Water Development Report (WWDR) URL: http://www.unesco.org/water/wwap/wwdr	
<u>Reports</u>	UN World Water Development Reports: Water for People, Water for Life, 2003; Water: A Shared Responsibility, 2006 Water in a Changing World, to be published 2009
Administered by	UN-Water's World Water Assessment Programme (WWAP) under UN-Water, the inter-agency coordination mechanism re. freshwater resources.
<u>Main</u> Goals/Objectives	Provide a global assessment of the world's freshwater resources and their use including water management methodologies, strategies, policies, transfer of knowledge and advice, advocacy and capacity development
Intended audiences/ clients	all those involved in the formulation and implementation of water-related policies and investment strategies, as well as to professionals at all levels

Global Environment Outlook (GEO)

International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD) (aka AgAssessment) URL: http://www.agassessment.org/		
<u>Reports</u>	International Assessment of Agricultural Knowledge, Science and Technology for Development, 2008	
Administered by	Initiated by FAO, GEF (Global Environment Facility), UNDP, UNEP, UNESCO, the World Bank and WHO. IAASTD Secretariat based at the World Bank offices (Wash DC)	
<u>Main</u> Goals/Objectives	to assess the impacts of past, present and future agricultural knowledge, science and technology on development and sustainability / UN Millennium Development Goals: reduction of hunger and poverty: improvement of rural livelihoods and human health; and equitable, socially, environmentally and economically sustainable development	
Intended audiences/ clients	a range of stakeholders: government policy makers, private sector, NGOs, producer and consumer groups, international organizations and the scientific community	

URL: http://www.unep.org/GEO/		
<u>Reports</u>	Global Environment Outlook 1(GEO-1) – Global State of the Environment 1997; Global Environment Outlook 2000 (GEO-2); Global Environment Outlook 3 (GEO-3), 2002; Global Environment Outlook: environment for development, (GEO-4), 2007	
Administered by	UNEP Division of Early Warning and Assessment, GEO Section	
<u>Main</u> <u>Goals/Objectives</u>	Fundamental goal : Implementation of UNEP's core mandate to keep under review the state and trends of the world's environment, identify emerging issues that require international attention and provide guidance for policy making, action planning and resource allocation.	
<u>Intended audiences/</u> <u>clients</u>	Main audience: UNEP's governing bodies and policy advisors in relevant government ministries. Other target audiences: UN organizations, IGOs and NGOs, civil society, education & scientific communities, media, the private sector and the general public	

OECD's Environmental Outlook to 2030 URL: http://www.oecd.org/environment		
<u>Reports</u>	OECD Environmental Outlook to 2030 published in 2008	
Administered by	The OECD Secretariat	
<u>Main</u> Goals/Objectives	To highlight main environmental challenges facing OECD countries, BRIC, and the rest of the world to 2030 and to provide policy recommendations for addressing them	
<u>Intended audiences/</u> <u>clients</u>	Policy makers in member governments (Env Ministries and beyond) and in key emerging countries, industry, academia, media, and civil society	

References

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MA (2005), Ecosystems and Human Well-Being: Synthesis, Millennium Ecosystem Assessment, Island Press, Washington. OECD (2008), Environmental Outlook to 2030, Organisation for Economic Cooperation and Development, Paris. UNEP (2007), Global Environment Outlook 4: Environment for Development, United Nations, Environment Programme, Nairobi.

This article has been adapted by Dale Rothman from a workshop summary report prepared by Jan Bakkes and Dale Rothman of TIAS in November 2008.

Courses

IIASA Young Scientists Summer Program 2009

Summer Fellowship in Austria for Graduate Students in Natural and Social Sciences, Math, Policy and Engineering Each summer, the International Institute for Applied Systems Analysis (IIASA), located in Schloss Laxenburg near Vienna, Austria, hosts a selected group of graduate students, primarily doctoral, from around the world in its Young Scientists Summer Program (YSSP). These students work closely with IIASA's senior scientists on projects within the Institute's 3 theme areas. Funding is available to cover travel to IIASA and a modest living allowance. **APPLICATIONS DEADLINE: 19 JAN 2009** Detailed information about each program is on the IIASA Website: http://www.iiasa.ac.at/ General Questions: Tanja Huber, YSSP Coordinator

ysspsupport@iiasa.ac.at U.S. contact: Margaret Goud Collins, Program Director for the U.S. Committee for IIASA National Academy of Sciences mcollins@nas.edu

Job openings

Fellowships in Sustainability Science at the Center for International Development, Harvard University

Due date for applications: January 15, 2009 The Sustainability Science Program at Harvard University's Center for International Development invites applications for resident fellowships in sustainability science for the University's academic year beginning in September 2009. The fellowship competition is open to advanced doctoral and post-doctoral students, and to midcareer professionals engaged in research or practice to facilitate the design, implementation, and evaluation of effective interventions that promote sustainable development.

For more information on the fellowships application process: http://www.cid.harvard.edu/sustsci/grants/fellows/09_fellows_RFP.htm .

New Publications

David W. Schindler and John R. Vallentyne: **The Algal Bowl. Overfertilization of the World's Freshwaters and Estuaries.** November 2008. In The Algal Bowl explains the science and strategies essential to understanding and protecting whole water systems from eutrophication and massive algae blooms.

Slobodan P. Simonovic: Managing Water Resources

Methods and Tools for a Systems Approach. November 2008. Managing Water Resources describes the 'systems approach' and its application to contemporary water resources management, focusing on simulation, optimization and multi-objective analysis.

Cary Krosinsky and Nick Robins (ed.): **Sustainable Investing: The Art of Long-Term Performance.** November 2008. Sustainable Investing is fast becoming the smart way of generating long-term returns. This book charts how this agenda has evolved, what impact it has today, and what prospects are emerging for the years ahead. Darcy Hitchcock and Marsha Willard: **The Step-by-Step Guide to Sustainability Planning: How to Create and Implement Sustainability Plans in Any Business or Organization.** November 2008. This practical guide to designing and implementing a customized sustainability plan is suitable for businesses, organizations or government departments of any type and scale.

Volume 8 (No. 2) of the Integrated Assessment Journal is available online. The issue covers a variety of themes ranging from the appropriateness of public participation in IWRM to a social perspective on sustainable transport policy. Also included are two papers presented at the TIAS Global Assessment Workshop in Washington in 2007. The journal articles can be downloaded from: http://journals.sfu.ca/int_assess/index.php/iaj/issue/current

Events

April 23-24, 2009: **EMAN 2009: Environmental Accounting and Sustainable Development Indicators.** Prague, Czech Republic

The conference will be focused at Environmental Accounting and Sustainable Development Indicators both at micro and macro levels. It aims to bring together around 250 experts, academics, statisticians and officials. The event is being organized under the auspices of Eurostat Director General, Minister of the Environment, and President of the Czech Statistical Office among others. **Deadline for Abstracts extended to January 31, 2009**. Please register at: http://www.ea-

sdi.ujep.cz/en/conference-2009/registration.html For more information please visit: www.ea-sdi.ujep.cz If you have any questions and comments contact us on conference@ea-sdi.ujep.cz

June 2009: **International Conference Water Policy 2009**, Prague, Czech Republic.

The conference is organized jointly by ICA (EU) and NASULGC (USA) at the Czech University of Life Sciences (CULS).

For more information or registration, please visit: http://www.fzp.czu.cz/wp2009/index.php.

January 30th – February 1, 2009: **Inter- and transdisciplinary research on sustainable resource use** – **Experiences, Methods & Instruments**, Leipziger KUBUS at the Helmholtz-Centre of Environmental Research (UFZ), Leipzig, Germany.

The Workshop is organised by the specialist group "Dryland Research" of the German Society of Ecology and promoted and financially supported by the Helmholtz Interdisciplinary Graduate School for Environmental Research HIGRADE at the UFZ. http://www.ufz.de/index.php?en=17271

May 28-29, 2009: **4th International Symposium on Information Technologies in Environmental Engineering (ITEE 2009)**, Thessaloniki, Greece The 4th International Symposium on Information Technologies in Environmental Engineering aims to present recent success stories in ecoinformatics, promising ideas and new challenges, demonstrating new paradigms for problem solving and decision making. Hosted by the Intelligent Systems and Software Engineering Lab (ISSEL) of the Department of Electrical and Computer Engineering at the Aristotle University of Thessaloniki.

http://www.itee2009.org

News

The Water Directors of the Euro-Mediterranean and Southeastern European Countries met on 21 and 22 July 2008, in Athens (Greece) to prepare the special ad hoc Euro-Mediterranean Ministerial Conference on Water planned in Jordan, on 29 October 2008 and the related civil society event on 28 October. Based on the conclusions of the 4th Conference of the Water Directors (10-11 December 2007, Bled), the Ministerial conference steering group prepared the first draft documents for the Ministerial, i.e. 4 thematic papers (Effective Water Governance, Water and Climate Change Adaptation, Water Financing, Water Demand Management and Efficiency and Non-Conventional Water Resources) and 'State of Play' technical papers. These documents are open for comments on the Ministerial conference website.

Under the Patronage of HE Dr Mahmoud Abu Zeid President of the Arab Water Council and Egyptian Minister of Water & Irrigation, IUCN (International Union for Conservation of Nature) through its West Asia Middle East Regional Office organised a **Regional Dialogue on the Future of Ground Water in the Middle East & North Africa (MENA)** Region between 12-14 July, 2008 in Cairo. Participants called for adopting the right methodologies and participatory approaches in Integrated Water Resources Management.

The WISE (Water Information System for Europe) map viewer has been updated for the World Water Day in March 2008 with thematic maps representing the reporting of data by EU Member States under the Water Framework Directive (article 8). The reporting was carried out in late 2007. It was calling for information on the national monitoring programmes and stations for both surface and ground water. Over time, these stations will be used for reporting environmental information under the Water Framework Directive, on State of the Environment as well as support requirements stemming from other Environmental legislation. The maps provide a European overview as well as individual information on each monitoring station based on interactive maps. A second update of the map viewer happened late ay, including the annual state of the Environment data (WISE SoE), as well as 2007 ata on bathing water (BWD) and data collected n urban waste water under the UWWTD in 2007.

Call for Submissions

TIAS Members are encouraged to submit feature articles and/or news items for future issues of TIAS Quarterly. Contact Caroline van Bers cvbers@usf.uos.de

The TIAS Quarterly

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