



# TIAS Quarterly

September/October 2009

The newsletter of *The Integrated Assessment Society (TIAS)*

<http://www.tias-web.info>

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Courtesy of D. Günther

## 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.

## TIAS Highlights

### Outreach Activities

As an outcome of the annual meeting in April, TIAS is seeking funding to launch a pilot of a web-based seminar ('webinars') or interactive learning event. If successful, these webinars could become regular events, directed at members, but also open to a broader network. Lectures and other results of the webinars may be transformed into material for a newly formed IA journal. Many potential themes are being explored. One timely topic is the Bellagio Principles for assessing progress towards sustainable development. Members are invited to suggest themes to Dirk Günther: [di.guenther@googlemail.com](mailto:di.guenther@googlemail.com)

Since some TIAS members are already profiled on LinkedIn, the association will take advantage of this online networking tool by starting a 'group' on LinkedIn. This will be a by-invitation-only forum for members. The group will be established in November and is not limited to one group, but can expand as new themes emerge.

### Amendment to the TIAS constitution

At our annual members meeting in April, a small but important amendment to the TIAS Constitution was proposed in order to improve the association's eligibility to undertake funded research activities. This addition will allow TIAS to work with several agencies that have expressed an interest in collaborating with us. Changes to the Constitution, must be accepted by three-quarters of voting members. We have therefore established an online voting forum, and members will receive a short description and the URL shortly. Please take a minute to cast your vote.

For more information, contact Dirk Guenther, [di.guenther@googlemail.com](mailto:di.guenther@googlemail.com)

## News

### A Message from World Water Week in Stockholm to the COP-15 in Copenhagen

In August, the Stockholm Statement from World Water Week sent a strong message to the United Nations Climate Change Conference taking place in Copenhagen in December this year. The statement urged that COP-15 negotiations aim for "a strong and fair agreement on future global commitments on climate change measures—both mitigation and adaptation—is crucial in order to secure future water resource availability." The specific messages emphasized the importance of IWRM and adaptation measures, the integration of water with land and forest management, ecosystem protection, effective sharing of higher-quality information, vulnerability assessments and risk management, and additional funding for developing adaptive strategies for vulnerable groups and ecosystems. For specific messages visit: [www.worldwaterweek.org](http://www.worldwaterweek.org).

### The Stiglitz-Commission delivers final report to French President.

At a high-level conference in Paris the Commission on Measuring Economic Performance and Social Progress delivered its final report to President Nicolas Sarkozy. The Commission was created at the beginning of 2008 by the French government to look at the entire range of issues surrounding the adequacy of current measures of economic performance, in particular those based on GDP figures. The Commission is chaired by Joseph E. Stiglitz, and co-chaired by Amartya Sen.

For further information on the commission and the report see: <http://www.stiglitz-sen-fitoussi.fr/en/index.htm>

## **Preparation of the 4th United Nations World Water Development Report and World Water Scenarios**

The World Water Assessment Program (WWAP) is proceeding the preparation of the 4th United Nations World Water Development Report (WWDR4). The report is scheduled for publication March 2012.

To express interest please communicate with the WWAP Coordinator Olcay Unver (o.unver@unesco.org) or lead author Richard Connor (r.connor@unesco-wwap.org).

To contribute to the WWDR4 the World Water Assessment Program is preparing **World Water Scenarios** - scenarios for global futures, as well as some downscaled versions at national, regional or basin levels. This program will be completed by the end of 2012. Interested individuals may contact Olcay Unver (o.unver@unesco.org) or Bill Cosgrove (wjcosgrove@unesco-wwap.org).

WWAP website: <http://www.unesco.org/water/wwap>

## **Linking stakeholders and modellers in scenario studies**

For those who have been involved in integrative scenario studies, linking narrative storylines and quantitative models can prove difficult. A recently published article by Mathijs van Vliet, Kasper Kok and Tom Veldkamp demonstrates the potential use of a mix of qualitative, semi-quantitative and quantitative methods within a participatory scenario development framework. The authors state that the use of semi-quantitative methods to structure participatory output provides a solid foundation for quantification, and also facilitates communication between stakeholders and modellers. In their study, the use of a semi-quantitative method (Fuzzy Cognitive Maps) provided a structured understanding of the system perceptions of the participants. The method was judged by participants to be easy to understand and use in a short period of time. The article concludes that Fuzzy Cognitive Maps can be highly effective in participatory scenario development and that this framework can help to bridge the gap between storylines and models.

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Mathijs van Vliet, Kasper Kok and Tom Veldkamp. 2009. Linking stakeholders and modellers in scenario studies: The use of Fuzzy Cognitive Maps as a communication and learning tool. *Futures*. 42 (1). (Adapted from the article abstract with permission of the authors).

## **Events**

### **November 12, 2009: SCITECH EUROPE 2009: Innovation across Europe, Brussels / Belgium.**

SciTech Europe is a one-day networking conference aimed at the Science and Technology sectors from around the world and will bring together industry stakeholders, academic experts and key policy makers to outline a collaborative approach to European science and technology frameworks.

The conference will be attended by up to 300 delegates from across Europe and the wider scientific and technology community and offers those taking part the opportunity to create new networks, promote debate and propose a better understanding of how initiatives can benefit science and technology strategies, knowledge and prosperity.

For more information: <http://publicservantevents.org.uk/4HD-1FWB-SAYPL-GRW8-1/c.aspx>

### **November 2-3, 2009: China Energy and Environment Summit, Beijing / China.**

The Financial Times and the China Chamber of International Commerce (CCOIC) are organizing one of the last major international gatherings of senior environmental decision-makers and strategists before the crucial Climate Conference in Copenhagen. The Summit will discuss the massive environmental challenges facing China, the latest developments in its clean energy policy, and the potential not only for agreement in Copenhagen but also for longer-term international cooperation to ensure the renewable energy solutions being developed can reach their full potential. Website: <http://www.ftconferences.com/chinaenergy>

### **July 5-8, 2010: International Congress on Environmental Modelling and Software, Ottawa/ Canada.**

The fifth biennial meeting of the International Environmental Modelling and Software Society (IEMSS), will focus on the theme "Modelling for Environment's Sake."

Details on the many sessions and workshops proposed, as well as past Congress proceedings can be found at [www.iemss.org/iemss2010](http://www.iemss.org/iemss2010). The topics include agricultural sustainability and food safety, adapting to a shifting climate, water resources management, ecosystem service issues, sensor networks, integrated modelling approaches, modelling and software frameworks, decision-support systems issues, and capacity-building in less developed countries and regions.

Sessions comprise reviewed 7-page papers and 20 minute presentations. A workshop involves collaboration on a position paper to be published in the journal *Environmental Modelling & Software* (IF 2.659). Please send session or workshop proposals to [dswayne@cis.uoguelph.ca](mailto:dswayne@cis.uoguelph.ca)

### **July, 3-7, 2010: 24th International Congress for Conservation Biology (ICCB) of the Society for Conservation Biology (SCB), Edmonton, Alberta / Canada**

The theme of the meeting is "Conservation for a Changing Planet" and will highlight the importance of multidisciplinary and interdisciplinary approaches to conservation.

The SCB's Social Science Working Group (SSWG) encourages social scientists to consider this invitation, in the hopes of widening SCB's international network of social and policy researchers who are doing work in applied conservation. SSWG is a global community of conservation professionals interested in the application of social science to the conservation of biological diversity. For more information: [www.conbio.org/2010](http://www.conbio.org/2010)

### **September 29 - October 1, 2010: Deltas in Times of Climate Change, Rotterdam / The Netherlands.**

The Dutch research programmes Climate changes Spatial Planning and Knowledge for Climate, the City of Rotterdam and the Cooperative Programme on Water and Climate invites scientists, politicians, policymakers and practitioners to share their experience and knowledge at this conference. Two days will be dedicated to science, and one day to policy issues and international cooperation between Delta institutions. For more information visit the conference website: <http://www.climatedeltaconference.org>.

## New Publications

In 2007, seven large environmental research organizations in Europe, formed the Partnership for European Environmental Research (PEER) to undertake two studies on climate change mitigation and adaptation. The two publications resulting from these studies (Swart et al. and Mickwitz et al.) have now been published and brief abstracts for each are presented here:

Swart, Rob et al. (2009). **Europe Adapts to Climate Change: Comparing National Adaptation Strategies. PEER Report No 1.** Helsinki: Partnership for European Environmental Research.

"After focusing mainly on mitigation for almost two decades, Europe was rather slow in picking up the challenge of adaptation. From 2005 onwards, however, climate adaptation strategies accelerated rapidly. This poses a great challenge to the scientific community ...to direct the way through targeted impacts and adaptation research. And while there are many differences between regions in Europe, the report also shows many commonalities. It focuses on six important cross-cutting dimensions: drivers of adaptation policy, the interactions between science and policy, communication and awareness raising, policy integration, multi-level governance, and implementation and evaluation. Most of the current strategies are still rather general, setting the stage for the next steps towards development and implementation of adaptation actions. The report gives an overview of the current strategies, provides suggestions for the next steps, and identifies priority knowledge gaps."

Mickwitz, Per et al. (2009). **Climate Policy Integration, Coherence and Governance. PEER Report No 2.** Helsinki: Partnership for European Environmental Research.

"Policy makers need to place greater emphasis on climate-related issues than is currently the case in the planning and execution of general and sector specific policies. Annual budgets, impact assessments and spatial planning are examples of existing measures that should integrate climate concerns to a greater extent than they currently do. Addressing climate change and integrating climate concerns into other policies requires a better understanding of the economic and social processes involved in mitigation, as well as in adaptation. This requires more research specifically focused on these processes and the role of policies within them. In addition, there is a huge need for increased policy and programme evaluation from a climate change perspective. This should provide new insights into how best to implement measures and develop them further."

UBUNTU Forum Secretariat (2009). **Reforming International Institutions. Another World is Possible.** London: Earthscan Books.

"There is now considerable unanimity that international organizations such as the United Nations, the World Trade Organization (WTO), Bretton Woods Institutions and the international economic architecture need to be reformed in order to achieve greater democratic governance to tackle

the myriad of challenges facing the world. The book provides a diverse and rich resource on all aspects of the reform of international organizations. It introduces the reader to the main organizations of the international multi-lateral system, presents proposals for reform and provides an analysis of the political action required to achieve global democratic governance."

Jackson, Tim. (2009). **Prosperity without Growth: Economics for a Finite Planet.** London: Earthscan Books.

"In this book, Tim Jackson acknowledges that society faces a profound dilemma: economic growth is unsustainable; but 'de-growth' - or economic contraction - is unstable. The prevailing 'escape route' from this dilemma is to try and 'decouple' economic activity from its impacts. But there is no evidence at all that this is working. Global resource consumption is still rising. Meeting climate change targets will require reductions in carbon intensity two orders of magnitude higher than anything achieved historically. Faced with this challenge, the book engages in a critical re-examination of the economic structure and social logic of consumerism. *Prosperity without Growth* calls for a new vision of a shared prosperity: the capability to flourish as human beings - within the ecological limits of a finite planet. Fulfilling that vision is the most urgent task of our times."

Hattermann, Fred F. and Zbigniew W. Kundzewicz (2009). **Water Framework Directive: Model supported Implementation - A Water Manager's Guide.** London. IWA Publishing.

"This book is one of the concrete outcomes of the EU supported Harmoni-CA concerted action. It provides a framework for model-supported participatory planning of measures at various river basin scales and practical guidance to water managers and other interested stakeholders on the model-supported implementation of the WFD. The objective of the book is to offer guidance to water managers on the model-supported implementation of the Water Framework Directive at the level of a river basin district and at other levels (such as sub-basins, national and international scales). It should help water managers to better understand how models may be used for planning purposes, while special attention is given to the problem of predicting an uncertain future."

Davoudi, Simin, Jenny Crawford and Abid Mehmood (2009). **Planning for Climate Change. Strategies for Mitigation and Adaptation for Spatial Planners.** London: Earthscan Books.

"This book sets out the economic, social and environmental challenges that climate change raises for urban and regional planners and explores current and potential responses. These are set within the context of recent research and scholarly works on the role of spatial planning in combating climate change. Addressing both mitigation measures for reducing greenhouse gas emissions and adaptation to the effects of climate change, the book provides an overview of emerging practice, with analysis of the drivers of policy change and practical implementation of measures."



Cohen, Stewart J and Melissa Waddell. 2009. **Climate Change in the 21<sup>st</sup> Century**. Montreal: McGill-Queens University Press.

“The authors explain and clarify the different ways of approaching the study of climate change and the fundamental ideas behind them. From a history of climate change research to current attempts to mitigate its impact such as the Kyoto Protocol and carbon trading, they explore key ideas from many fields of study, outlining the environmental and human dimensions of global warming. [The book] goes beyond climate modeling to investigate interdisciplinary attempts to measure and forecast the complex impacts of future climate change on communities, how we assess their vulnerability, and how we plan to adapt our society. The book explores the impact of climate change on different ecosystems as well as what the social and economic understanding of this phenomenon can tell us.

Munasinghe, Mohan (2009). **Sustainable Development in practice. Sustainomics Methodology and Applications**. Cambridge University Press. Available online: <http://cup.msgfocus.com/c/11AxhZOpeTdEt9BLZq>

“This book provides a rigorous and practical analysis of sustainable development prospects today by applying the sustainomics framework. Developed by the environmental scientist Mohan Munasinghe, sustainomics explores the practical steps in making the transition from the risky business-as-usual scenario to a safe and sustainable future. Its main message is optimistic – although the problems are serious, an effective response can be mounted to make development more sustainable if initiated immediately. The book explains the key principles underlying sustainomics cogently, concisely and with minimum technical jargon. It illustrates the methodology with empirical case studies that are practical and policy-relevant over a wide range of time and geographic scales, countries, sectors, ecosystems and circumstances.”

Neuhoff, Karsten (ed. 2009). **International Support for Domestic Climate Policies in Developing Countries**. London: Earthscan Books.

“This volume examines how international cooperation can support implementation of domestic climate policies in developing countries. Six case studies explore the domestic drivers and barriers for policies with climate (co-)benefits in developing countries and show that international support can help to overcome these constraints by providing additional resources for incremental policy costs, technical assistance, and technology cooperation to build local capacity. Cooperation can also contribute to robust institutional frameworks and government policies that facilitate increased private sector investment, which supports low-carbon production and consumption. Any such cooperation has to be anchored in domestic initiatives - building on stakeholder support for policies with climate co-benefits. The studies also examines the important role played by policy indicators in successful policy implementation and how they can be linked to international incentive schemes.”

## Job openings

### Post-doc Position: Management of Water Resources in Kenya using an Integrated Assessment Approach

The Department of Urban and Regional Planning and Geo-Information Management at the International Institute of Geo-Information Science and Earth Observation (ITC in Enschede, Netherlands) is seeking a post-doctoral researcher to participate in a 4 year project to integrate the results of five sub-projects and build an Integrated Assessment (IA) framework. The research is intended to enhance sustainability in the management of water resources and the environment using Lake Naivasha in Kenya as a pilot case and adopting an IA approach to generate lessons and best practices that can be replicated in other catchments in Kenya and East Africa. Major inputs to the assessment include participatory processes and physical and economic models combined with data derived from remote sensing techniques.

The successful candidate will possess the following:

- A doctoral degree
- A broad multidisciplinary view, capable of communicating with the 5 PhD researchers as well as with local stakeholders
- Experience in Integrated Assessment approaches and/or systems analysis and modelling
- Good mathematical & programming skills (C++, Java)
- Knowledge of GIS, natural resources management, socio-economics and participatory processes are assets
- Fluency in English oral and written
- Willingness to travel to Kenya

More information:

<http://www.itc.nl/Pub/vacancies/Postdoc.html>

## 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\[at\]usf.uos.de](mailto:cvbers[at]usf.uos.de)

### The TIAS Quarterly

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