



# TIAS Quarterly

No. 2/2010 June / July

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

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

ISSN 2077-2130

## In This Issue:

- Feature p. 1
- TIAS Highlights p. 4
- Courses p. 4
- News p. 5
- Events p. 6
- New Publications p. 6
- Job openings p. 6



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.

## Feature

### Enhancing adaptive capacity in the Chinyanja triangle of South-East Africa

By Jörg Krywkow, University of Osnabrück / Institute for Environmental System Research.

#### The Project

In April 2010, BMZ and GTZ<sup>1</sup> launched the project *GTZ Chinyanja*: „Enhancing adaptive capacity to climate change impacts through well-managed water use for aquaculture integrated with small-scale irrigation in the Chinyanja Triangle in Africa.“ The triangle is a sub-region of the Zambezi River Basin including parts of Malawi, Mozambique and Zambia. (see Fig. 1).



Figure 1: The Chinyanja triangle, (© S.P. Kam, WorldFish)

Scientists from the WorldFish Center, the International Water Management Institute (IMWI), the Institute of Environmental Systems Research (USF) and Seeconsult are investigating the implications of the introduction of fish ponds in rural communities on the water balance of sub-catchments in the region. Furthermore, the impact on the local and regional markets as well as the potential for social conflicts among rural communities are central issues in the project. Since Sub-Saharan Africa is vulnerable to droughts, a closer look at the consequences of climate change on the water availability in the region will be included in the research. In addition to insights into the interactions and dependencies of human activities, water availability and food market dynamics of this region, a decision support system for regional water managers and national resources management organisations will be developed. For this reason close collaboration with the governmental and non-governmental organisations who are responsible for the management of resources and the interaction with farming communities has been established from day one.

<sup>1</sup> BMZ: Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung (the German Federal Ministry for Economic Cooperation and Development); GTZ: Deutsche Gesellschaft für Technische Zusammenarbeit (German Association for technical Collaboration)

## Regional issues

According to the World Fact Book (CIA, 2010) Malawi is one of the most densely populated (130/km) and least developed countries in the world, with 85% of its population living in rural areas. Agricultural production is the major sector, constituting 35% of GDP. About 53% of the population lives below the poverty line. The population growth rate is about 2.76%, and is significantly higher than the other two countries involved in this study.

Although Zambia's copper mines contributed to significant economic growth during the early 2000's, poverty levels are higher than in Malawi. Industry has a higher share (31%) of GDP than agriculture (19%), but the latter plays a significant role in the Eastern province. By 2004, over 87% of the population lived below the poverty line (The World Bank, 2010). The population density, however, is significantly lower than in Malawi (16/km), with a growth rate of 1.6%.

Mozambique has about 55% of the population living below the poverty line, with about 63% living in rural areas. The population density is (27/km) with a growth rate of 1.8%. In addition to the low income levels, the Chinyanja region is characterised by high illiteracy rates, low levels of education as well as significant health care problems.



Figure 2: Irrigated fields in the Southern province of Malawi, (© X. Cai, IWMI)

The main agricultural products of the region are sugarcane, cotton, tea, corn (fig. ), potatoes, cassava (tapioca), sorghum, pulses, groundnuts, Macadamia nuts, tobacco, as well as cattle, goats, poultry, milk and eggs. Corn is an essential part of the regional diet. The geographic conditions are heterogeneous throughout the region: whereas the Eastern province of Zambia and Tete are dominated by flat savannah landscapes, the Central and Southern provinces of Malawi are dominated by hills and mountains. Soils range from very sandy and heavily eroded soil types to volcanic soils in irregular pattern all over the Chinyanja triangle. The same heterogeneity applies to the water supply. The main water supplies are: 1) irrigation water derived from tributaries and 2) ground water in wide valleys near mountains. The region is part of the sub-tropical climate zone with a rainy season between November and March, with irregular precipitation patterns and occasionally prolonged drought periods.

## Resource management issues

Almost two decades ago the WorldFish Center established a regional office in Malawi and has undertaken research on aquaculture, providing valuable knowledge of on regional specifics ranging from appropriate fish farming techniques to cultural issues and social behavioural patterns. Collaboration with agencies of the national agricultural research system (NARS), including fisheries departments, as well as with farmers is close. Local implementation of integrated aquaculture in small-scale agriculture (IAA)

was successful with a clear increase in household food consumption and farm income. More recently a WorldFish office was opened in Zambia. Additionally, the governments of the three countries support aquaculture production and commercial fish farming, while irrigation farming is also encouraged in order to gain more independence from vulnerable rain-fed agriculture. As a consequence of increased water uptake for irrigation and aquaculture, scientists and experts from regional water and resources management organisations expect higher competition for irrigation water as well as significant downstream effects during dry seasons. Projected and already experienced climate change impacts such as more intense precipitation along with floods during the rainy season and prolonged droughts during the dry seasons (Actionaid, 2006; McSweeney et al., 2008) can aggravate social tensions especially in times of water scarcity.



Figure 3: Harvesting fish at the WorldFish test site in Zomba, (© J. Krywkow, USF)

Encouraged by governmental organisations as well as WorldFish, knowledge on introducing and maintaining IAA is well established, and smallholders are able to adapt to specific local conditions such as water availability, soils and social networks. However, the implications of a region-wide introduction of IAA on a (sub) basin level are not known. Although South-East African governments have already realised the relevance of irrigation and aquaculture and launched programmes such as the *Integrated Water Resources Management Strategy and Implementation Plan for the Zambezi River Basin*, the respective governments are insufficiently equipped to deal with governance and management, particularly of widely-dispersed SSI systems reflecting multi-stakeholder interests. Research on water governance in Eastern and Southern Africa has mainly focussed on large irrigation systems at the river basin level (Franks and Cleaver, 2007; CGIAR, 2010). However, previous approaches have demonstrated that governance and adaptive water management that involve dispersed small-scale irrigation for multiple water use including aquaculture are more effective and sustainable than top-down IWRM planning.

## Methodology

In order to introduce adaptive management with the objective of improving the livelihoods of rural communities on the one hand, and coping with climate change impact and regional market fluctuations on the other, innovative participatory approaches including role-playing games (RPG) in conjunction with agent-based modelling (ABM) will be applied as a core methodology. The project *Re-thinking water storage for climate-change adaption in Sub-Saharan Africa* provides guidelines for coping with uncertain water availability from the perspective of small holders (International Water Management

Institute (IWMI), 2009). Furthermore, the WorldFish Center's long-term research on farm-level IAA technologies and practices have demonstrated benefits to household food security, improved child nutrition and improved assurance of production during drought years (Brummett, 2004). Additionally, broader basin-scale research focusing on water resources allocation and management demonstrate the virtues of integrated water resources management with innovative strategies of benefits-sharing among water users while ensuring that the environmental flows are maintained for sustainable use of the water resources (CGIAR, 2010).

The GTZ Chinyanja project endeavours to bridge the research approaches mentioned here. The research effort is divided into five main activities:

1. As a first step, an elaborate literature study as well as a survey of both socio-economic data and hydrologic and climatic data within the Chinyanja triangle will be performed. The WorldFish Centre has two branches each in Zambia and in Malawi including offices and laboratories. These regional offices have established co-operative arrangements with regional farmers and NARS during previous research activities;

2. As a result of activity 1, water use as well as the distribution of benefits of IADFS (Integration of Aquaculture into Diversified Food production Systems) are quantified; user constituency, appropriate aquaculture practices, and the strategies for improving water yield of degraded catchments are identified;

3. Activity 2 delivers data to allow the subsequent steps: quantify the water budget at sub-basins and landscape scale, determine climate change scenarios, develop simulation and mapping tools to depict scenarios of water use and develop an Agent-based model to integrate knowledge and represent interactions among water users within a well-defined environment;

4. Based on the models as described in activity 3, explore water use and allocation scenarios with stakeholders using RPG as participatory companion tool. Together with stakeholders, identify strategies for water allocation and management and facilitate dialogues incorporating local-level realities into water governance policy at the catchment level;

5. Provide training on the use of decision-support tools, and involve key partners in participatory use of the tools developed in this project.

The combination of survey and modelling techniques with participatory methods promises a 'realistic' analysis of current irrigation and aquaculture practices, and may help to design more accurate climate scenarios in order to identify appropriate adaptation strategies throughout the entire Chinyanja triangle. This methodological framework builds upon companion models such as reported in: Berger et al. (2007); Rouchier et al. (2001); Barnaud et al. (2008).

The overall objective of the project is to enhance the benefits of integrating aquaculture and small-scale irrigation by reducing conflicts over water use and improving capacity for adapting to drought and flood occurrences, specifically through:

1. Scientific appraisal of IADFS and resulting livelihood benefits, with respect to water use and availability within catchments;

2. Strategies and guidelines for improving water yield and productivity of IADFS specific to location and conditions across the landscape;

3. A suite of diagnostic and participatory tools developed, tested and refined;

4. Options for formal and informal institutional arrangements and policy implications for improved governance and management of small-scale irrigation systems;

5. Increased capacity of NARS and other development agencies to engage in multi-stakeholder approaches.

The project may be seen as a combination of scientific analysis, capacity building and decision support. To date many insights in aquaculture as well as irrigation technologies on a local level have emerged. Moreover, management strategies on a catchment level are well known. The GTZ Chinyanja project endeavours to combine the two levels of management to provide adaptive agriculture, irrigation and aquaculture strategies. The implications of irrigation and aquaculture on river basin water budgets should be identified as a result of project activities. Furthermore, an appropriate water management regime that is capable of coping with climate change impact, especially droughts, on the one hand, and avoiding conflicts among irrigation and aquaculture communities on the other, is the ambition of this project. The active involvement of local farmers and regional NARS is crucial for the success of this project and a sustainable water use in the entire region.

## References

- Actionaid (2006). *Climate change and smallholder farmers in malawi: Understanding poor people's experiences in climate change adaptation*. Technical report, Actionaid International, London, Johannesburg.
- Barnaud, C., Promburom, P., Trébuil, G., and Bousquet, F. (2008). Interactive models to catalyze collective water management : A companion modeling approach in northern Thailand. In 2nd *International Forum on Water and Food*, volume 2 of Forum International sur l'Eau et l'Alimentation, page 6, Addis Abeba, Ethiopia. CGIAR-CPWF.
- Berger, T., Birner, R., McCarthy, N., Díaz, J., and Wittmer, H. (2007). Capturing the complexity of water uses and water users within a multi-agent framework. *Water Resources Management*, 21(1):129–148. DOI: 10.1007/s11269-006-9045-z.
- Brummett, R. E. (2004). Integrated aquaculture in subsaharan africa. *Environment, Development and Sustainability*, 1(3–4):315–321. DOI 10.1023/A:1010087108029.
- CGIAR (2010). CGIAR Challenge Program on Water and Food. <http://www.waterandfood.org/about-cpwf.html>.
- CIA (2010). **The World Fact Book**. <https://www.cia.gov/library/publications/the-world-factbook/index.html>.
- Franks, T. and Cleaver, F. (2007). Water governance and poverty: a framework for analysis. *Development Studies*, 7(4):291 – 306.
- International Water Management Institute (IWMI) (2009). Flexible water storage options: for adaptation to climate change. **IWMI Water Policy Brief 31**, IWMI, Colombo, Sri Lanka. [http://www.iwmi.cgiar.org/Publications/Water\\_Policy\\_Briefs/PDF/WPB31.pdf](http://www.iwmi.cgiar.org/Publications/Water_Policy_Briefs/PDF/WPB31.pdf).
- McSweeney, C., New, M., and Lizcano, G. (2008). **UNDP Climate Change Country Profiles: Malawi**. Technical report, School of Geography and Environment, University of Oxford, Oxford, UK. <http://country-profiles.geog.ox.ac.uk/index.html?country=Malawi&d1=Reports>.
- Rouchier, J., Bousquet, F., Requier-Desjardins, M., and Antona, M. (2001). A multi-agent model for describing transhumance in north cameroon: Comparison of different rationality to develop a routine. *Journal of economic dynamics and control*, **Journal of Economic Dynamics and Control**. 25(3–4):527 – 559.
- The World Bank (2010). **The World Bank Open Data**. <http://data.worldbank.org/>.

# TIAS Highlights

## TIAS welcomes Advisory Board

The society elected a new board of advisors at the Annual General Meeting in April. TIAS extends a warm welcome to new members:

- Carole Crumley, Dept. of Anthropology, Univ. of North Carolina, US
- Rik Leemans, Environmental Systems Analysis Group, Wageningen University, NL
- Jill Jäger, Sustainable Europe Research Institute (SERI), AT
- Pim Martens, International Centre for Integrated Assessment & Sustainable Development, NL

and to our returning members:

- Matt Hare, Seeconsult, GbmH, DE
- Tony Jakeman Integrated Catchment Assessment and Management Centre, ANU, Aus
- Paul Jeffrey, Centre for Water Science, University of Cranfield, UK
- Carolien Kroeze, Environmental Systems Analysis Group, Wageningen University, NL
- Laszlo Pinter, International Institute for Sustainable Development, CAN
- John Robinson, Institute for Resources, the Environment and Sustainability, UBC, CAN
- Jan Rotmans, Dutch Research Institute for Transitions, NL
- Anne van der Veen, International Institute for Geo-Information Science and Earth Observation, NL

Several of our advisory members are already collaborating actively on new and ongoing TIAS activities. We all look forward to a productive year.

TIAS also wishes to thank our outgoing advisory members for their commitment and support, in several cases, for more than one or two terms: Bruce Beck, Hadi Dowlatabadi, Bill Easterling, Alex Haxeltine, Leen Hordijk, Dagmar Ridder, John Schellnhuber, and Jeroen van der Sluijs.

## Reconnecting: The IA Community

The Annual General Meeting of the Society, held on April 29, provided us with the opportunity to connect with some of the members of the Society and hear their current perspective on Integrated Assessment. Although IA seems to be less of a buzzword these days, the methods and tools that comprise Integrated Assessment are certainly not out of fashion. Moreover, the use of IA tools appears to be stronger than ever. The more popular sustainability community (of which TIAS is also a part) has a significant interest in integrated analysis and how integrated assessment can support decision-making processes and policy design.

Until recently, the society's IA journal was the major vehicle for communicating with the broader IA community. However, with the pressure to publish quickly in journals with high impact factors, the competition among the multitude of journals with overlapping themes related to IA, and the resulting challenge of attracting high quality submissions, the sentiment is that now may not be the right time to reinvent our journal. Hence, the decision was taken at this meeting to step over to a TIAS report/working paper series which is still peer-reviewed. Such a series complements - and can use the outputs of the TIAS webinar series - and has the advantage of a quicker turn-

over time, and it can be disseminated easily and widely at little cost. It may be more attractive to the practitioners whom we wish to draw into our community. We can publish special issues as a result of major activities/events, such as workshops and conferences. If successful, it may also prove to be a springboard to top-quality publications. Suggestions for themes and papers are welcome from both members and others with an active interest in Integrated Assessment.

Contact: Caroline van Bers (cvbers[at]usf.uos.de) or Dirk Günther (di.guenther[at]googlemail.com)

## TIAS webinars

The first TIAS webinar (online seminar) took place in mid-February 2010. *Getting into the Right Lane for 2050*, by Jan Bakkes of the Netherlands Environmental Assessment Agency, and Per Sandberg of the World Business Council for Sustainable Development were presented as two recent examples of using visioning and backcasting as a means of influencing the (policy) changes that are needed to get societies and governments in the right track now for moving towards sustainability in 30 or 40 years. As an outcome of this event, most of those who participated have started an initiative to undertake a comparison of various visioning/backcasting projects for the purpose of not only sharing approaches, but also informing policy. Resources are being secured for running an experts workshop in February 2011. The outcomes will be published in Spring 2011 in the form of a guidance document for the benefit of those undertaking similar exercise. For more information see [www.tias.uos.de/webinars.php](http://www.tias.uos.de/webinars.php)

## TIAS Quarterly Book Reviews

TIAS is planing to publish on a regular basis, book reviews in the TIAS Quarterly Newsletter. Beginning with the next issue in September, we plan to have one or two book reviews each issue. TIAS members may order review copies of books in the name of TIAS to publish a review in the newsletter. If you are interested in contributing a book review please contact:

Dirk Günther (dirk.guenther[at]googlemail.com)

## Courses

Center for Sustainable Development Online Learning Course **Project Architecture: Planning for Impact** July 13 - August 30, 2010.

The catalogue of Online Learning Courses: Summer/Fall 2010 is available and gives a complete list of these courses: <http://www.csd-i.org/online-learning/>

**Master of Research in Engineering Sustainability and Resilience.** University of Birmingham, UK

<http://www.eng.bham.ac.uk/civil/research/mres-engineering-sustainability-resilience.shtml>

## **RESCUE Forward-Look**

On June 14 and 15, four of our members participated in the TIAS co-sponsored experts workshop on “Requirements for Methodologies and Data in Global Environmental Change (GEC) Research.” The workshop was an activity of the European Science Foundation and COST foresight initiative, *Responses to Environmental and Societal Challenges for Unstable Earth* (RESCUE). One of the main results was a set of recommendations identifying gaps and innovations needed in methodologies and data for global environmental change research. The results of the initiative as a whole will be used to help guide European funding for GEC research. Results of this workshop and related RESCUE activities, such as an online survey and expert interviews, will be made available in the late summer on our site: [www.tias.uos.de/rescue.php](http://www.tias.uos.de/rescue.php)

## **Stockholm University receives €22 million for a new world-class transdisciplinary research institute.**

Stockholm University received the largest environmental research grant ever distributed in Sweden. The €22 million is to be invested in a new international transdisciplinary institute for research and policy dialogue on sustainable development. The new institute is supported by the Centre for Transdisciplinary Environmental Research at Stockholm University, the Stockholm Environment Institute, and the Beijer International Institute of Ecological Economics at the Royal Swedish Academy of Sciences. The new institute will conduct research on how human welfare and viable ecosystems can develop together, and also act as a platform for dialogue between politicians, authorities and resource users all over the world. In this way, research results can be turned into practical solutions and contribute to sustainable societal development.

## **New Climate Library**

Climate Deal announce the launch of a new Climate Library, which is open and free to anyone to access and post climate-related documents. Over the last two years there has been an explosion of climate change-related information. As more individuals and organizations document every aspect of climate change, from adaptation strategies on local communities to international climate policy frameworks, the challenge of searching, querying and determining the relevance of content becomes more complex. The library aims to facilitate this task by compiling the most relevant links to documents related to climate change an online and open library so that anyone interested in climate change can find them easily, and hence, save time.

Furthermore the Climate Library allows any individual to submit relevant documents such as reports, research papers or even master or PhD thesis.

The Climate Library can be found in the following link: <http://www.climatedeal.org/index.php/climate-library>

## **ICARUS Lands Standing—A new international social science research network on climate and society**

The Initiative for Climate Adaptation Research and Understanding through the Social Sciences (ICARUS) held its first international workshop, ICARUS-I, hosted by the Social Dimensions of Environmental Policy Initiative (SDEP) of the Department of Geography, the School of Earth Society and Environment and the Beckman Institute at the University of Illinois, Urbana Champaign.

The first meeting brought together 55 social science researchers from ten countries for three days of intensive discussion and debate. It focused on “Climate, Vulnerability, and Adaptation,” with balanced attention to theories and case studies. Researchers, practitioners and other thinkers discussed the applicability of these writings to climate-related stresses, crises and responses.

During the workshop participants identified many new areas of focus for social science research. These include climate and social stratification, metrics of vulnerability and adaptation, society-climate theory and meta-theory, dynamics of adaptive knowledge, and climate change and institutions.

For more on ICARUS past and upcoming events, see [www.icarus.info](http://www.icarus.info).

## **Survey: World Commission on Dams - 10 Years On**

UNEP is undertaking an online survey and invites interested people involved in the sustainable development and operation of dams to participate.

Ten years after publication of the final report of the World Commission on Dams (WCD), UNEP is seeking feedback on the degree to which the recommendations of the WCD have been adopted and put into practice. The results will be presented at World Water Week in Stockholm in September 2010, and will be used as the basis for a chapter to a special WCD+10 issue of the journal “Water Alternatives” to be published later in 2010.

The survey is online in English, French and Spanish at <http://fluidsurveys.com/surveys/dam/wcd/langen/> or also accessible from <http://www.unep.org/dams/>

## **New book series on Earth System Governance**

Published by the MIT Press, this book series will cover a variety of disciplinary perspectives, at different levels of governance, and with a plurality of methods to advance one common aim: analyzing current systems of earth system governance with a view to increased understanding and possible improvements and reform.

The series is related to the long-term international research effort “Earth System Governance Project,” a core project of the International Human Dimensions Programme on Global Environmental Change. For more information on the submission of proposals and manuscripts see [www.earthsystemgovernance.org](http://www.earthsystemgovernance.org)

## **Aquawareness Policy Forum 2010 "Water 2030 - who cares?"**

The Policy Forum was held in Brussels within the premises of the Representation of Saxony Anhalt to the EU on World Water Day, 22nd March 2010. This event brought together more than 100 high-level professionals to discuss concrete action recommendations to realize the Water Vision for Europe which was initiated by the European Water Partnership (EWP) in 2008. The Water Vision for Europe serves as guidance to achieve joint actions in the different partnerships on advanced water management and to solve European and global water problems. During the Aquawareness Policy Forum 2010 panels and small working groups set out practical ideas on actions needed to be taken on European level in order to realize the Vision aims and thus achieve sustainable water management.

To read more about the Policy Forum, the Water Vision for Europe and our projects, please visit the EWP website [www.ewp.eu](http://www.ewp.eu)

## Events

**29 Sept – 1 Oct. 2010.** International Conference '**Deltas in Times of Climate Change**'. Rotterdam, Netherlands. Registration now open: [www.climatedeltaconference.org](http://www.climatedeltaconference.org)

**1-3 November 2010.** The 8<sup>th</sup> **Globelics International Conference Making Innovation Work for Society: Linking, Leveraging and Learning**. The Global Network for the Economics of Learning, Innovation, and Competence Building Systems (Globelics) University of Malaya. <http://umconference.um.edu.my/globelics2010>

**17-19 November 2010.** EASY-ECO Conference: **Sustainable Development Evaluations in Europe: From a Decade of Practices, Politics and Science to Emerging Demands**. Brussels. More info: [www.sustainability.at/easy](http://www.sustainability.at/easy)

**4 December 2010.** First International Scientific Conference (ISC) "**Sustainable Future for Human Security**" or 'Sustain' 2010. Ohbaku Plaza, Uji, Kyoto University, Japan <http://ppi-kyoto.org/about>

## New Publications

Background report for the scientific workshop: **Biodiversity, Ecosystem Services and Resilience Governance for a Future with Global Changes Biodiversity, ecosystem services and governance – targets beyond 2010**. Tjärnö, Sweden, 4-6 September 2009.

[http://www.se2009.eu/polopoly\\_fs/1.12832!menu/standard/file/Biodiversity,%20Ecosystem%20Services%20and%20Resilience.pdf](http://www.se2009.eu/polopoly_fs/1.12832!menu/standard/file/Biodiversity,%20Ecosystem%20Services%20and%20Resilience.pdf)

"**Climate, disasters and international development**" is the theme of a "Policy Arena" in the "Journal of International Development" issue recently published (vol. 22, no. 2, March 2010).

<http://www3.interscience.wiley.com/journal/5102/home>

Tarbara, J. D., Dai, X., Jia, G., McEvoy, D., Neufeldt, H., Serra, A., Werners, S., and West, J. J. 2010. '**The Climate Learning Ladder. A pragmatic procedure to support climate adaptation**'. Environmental Policy and Governance. 20:1-11.

**31<sup>th</sup> issue of the Circular of the Network for Cooperation in Integrated Water Resource Management for Sustainable Development in Latin America and the Caribbean** is available online. <http://www.eclac.org/drni/noticias/circulares/9/38169/Carta31in.pdf>

**Final report from the Aquawareness Policy Forum 2010 "Water 2030 - who cares?"**, held in Brussels within the premises of the Representation of Saxony Anhalt to the EU on the World Water Day, 22nd March 2010. To read more about the Policy Forum, the Water Vision for Europe and the project, please visit the website [www.ewp.eu](http://www.ewp.eu)

Ifejika Speranza, Chinwe (2010): **Resilient adaptation to climate change in African agriculture**. Bonn: Deutsches Institut für Entwicklungspolitik / German Development Institute (Studies 54).

Available online at: <http://www.die-gdi.de>

## Job openings

**Postdoctoral fellowships: Marie Curie Fellowships in Italy:** Interdepartmental Centre IDEAS at University Ca' Foscari of Venice (UNIVE, [www.unive.it](http://www.unive.it)) is seeking candidates with a background in social sciences, and research experience in public participation methods for natural resource management. The core research of IDEAS focuses on coastal zones, water basins and urban areas. Deadline: 17.08.2010  
More information: <http://esa-esn.org/2010/05/marie-curie-opportunity.html>

**JI Assistant Ukraine** at Global Carbon ([www.global-carbon.com/en](http://www.global-carbon.com/en))  
Deadline for Applications: open  
Contact Person: Tineke Minjon via e-mail: [info@global-carbon.com](mailto:info@global-carbon.com)  
For more information see at: <http://www.global-carbon.com/en/careers/current-vacancies.html>

**Research Director at Climate Strategies**, Cambridge, UK ([www.climatestrategies.org](http://www.climatestrategies.org))  
Special Requirements: Candidates must be eligible to work in the UK  
Deadline for Applications: Ongoing – Summer 2010  
Contact Person: Grace Stobbart, c/o University of Cambridge, 13-14 Trumpington Street, Cambridge, CB2 1QA, UK; [grace.stobbart@climatestrategies.org](mailto:grace.stobbart@climatestrategies.org)  
For more information see at: <http://www.climatestrategies.org/job-vacancies/research-director.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)) or Dirk Günther ([di.guenther\[at\]googlemail.com](mailto:di.guenther[at]googlemail.com))

### *The TIAS Quarterly*

*The TIAS Quarterly* is the newsletter of The Integrated Assessment Society.

ISSN: 2077-2130

Editor: Claudia Pahl-Wostl

Associate editors: Caroline van Bers, Dirk Günther

Layout: Dirk Günther

Postal Address:

TIAS Secretariat

c/o Institute of Environmental Systems Research (USF)

Barbarastr 12

University of Osnabrück

D-49069 Osnabrück

Germany

Phone: +49 (0)541 - 969 3349

E-Mail: [info\[at\]tias-web.info](mailto:info[at]tias-web.info)

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

TIAS Membership fees:      Individuals: € 50 / \$65 annually  
   Students € 15/ \$ 20 annually  
   Institutions: € 200/ \$250 annually