



Asia-Pacific Network for Global Change Research

Fourth IHDP Workshop - globalisation and food systems: a global environmental change perspective

Final report for APN project 2004-15-NSY-Xu

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**Fourth IHDP Workshop - Globalization and Food
Systems: A Global Environmental Change Perspective**

2004-15-NSY-Xu

Final Report submitted to APN

Overview of project work and outcomes

Non-technical summary

The Fourth International Human Dimensions Workshop (IHDW), officially titled the 'IHDP-IAI Global Environmental Change Institute on Globalization and Food Systems, Scientific Workshop and Science-Policy Forum' took place from October 24 to November 6, 2005 in Costa Rica. It was the first time that IHDP organised its biennial capacity building event in close collaboration with a regional agency – IAI -, and within a less developed country. Over the course of the two weeks 25 international participants were introduced to general concepts of global environmental change, globalisation and food systems. The Institute concluded with a Science-Policy Forum in which in addition to the participants of the workshop 75 representatives from the regional science and policy community participated. The Science Policy Forum concentrated on a dialogue about the specific problems of Food Systems in Central America.

Objectives

The main objectives of the project were:

1. to identify young scientists, who have the potential to take a leading role in the scientific analyses of the human dimensions of GEC and to encourage their participation in global and regional scientific networks (like IHDP, APN and IAI) through the promotion of research on the themes of the workshop.
2. to inform young scientists from developing countries and countries in transitions on the funding opportunities available to support projects dealing with global environmental change and food systems and training in successful proposal writing.
3. to stimulate a scientific dialogue between scientists and political decision makers.
4. to stimulate joint international and multidisciplinary research proposals.
5. to connect local and regional professionals and institutions worldwide with related initiatives and networks.

Amount received and number years supported

TOTAL: 15,000 US\$

Status of financial transactions:

- 12,000 US\$ transferred on the 3rd of August 2004
- 3,000 US\$ transferred on the 20th May 2005

Number of years supported: 1 year

Activity undertaken

The capacity building institute focusing on global environmental change, food systems and globalization was composed of two main components: a scientific workshop, which was held over 13 days and a science policy forum, which was held on the penultimate day of the workshop. In a competitive international selection process 25 young scientists and policy and decision makers from 22 countries in Africa, Asia, Eastern Europe and Latin America were chosen. During the course of the workshop they were introduced to general concepts of global environmental change, globalisation and food systems.

Representatives from the IHDP core projects and from the Food Systems project were invited to introduce their projects through the food systems and globalization “lens”. Throughout the workshop the participants were working together in small working groups on specific questions at which they looked at from changing perspectives, e.g. regional and disciplinary perspectives. In the second week the participants had the chance to work on possible research topics for project proposals. The discussion about potential research proposals was accompanied by presentations given by representatives from funding agencies highlighting important aspects for successful proposal writing. The scientific workshop was complemented by two field trips. The first excursion was held on the very first day of the workshop and led to one of Costa Rica’s national parks. It had the intention to facilitate socializing among participants, organizers and speakers and to explore the regional environment. The second field trip to a rice farm was designed to complement the scientific agenda of the workshop.

The science-policy forum at the end of the workshop was attended by all the international workshop participants plus about 70 representatives from the regional science and policy community. It was opened by the Minister for Science and Technology of Costa Rica and concentrated on a dialogue about the specific problems of food systems in Central America. A focus was laid on the science policy interface and the use of scientific information in policy and decision-making processes.

Results

At the end of the workshop 6 proposal groups were formed. Only one participant decided to work on an individual research project. All other groups were made up of multidisciplinary teams, which were mainly grouped by regions (e.g. Africa, Asia etc.). All teams expressed strong interest to carry their proposal forward. The speakers, impressed by the quality of the proposal, agreed to mentor specific teams. Naturally the success of these proposals can only be evaluated after a certain period of time. (The first evaluation will be carried out in October 05). As intermediate result one can conclude that the proposal work was an excellent tool to train the young scientists and policy makers in working in international and multidisciplinary teams.

During the workshop the participants were encouraged to submit panels to the Open Meeting of the Human Dimensions Global Environmental Change Research Community `05. Two sessions submitted by participants funded through APN have been accepted (Suruchi Bhadwal and Lilibeth Acosta-Michlik). The participants were further encouraged to apply for the pre-Open Meeting training seminar on “Understanding Vulnerability and Resilience”.

A list server has been set up to facilitate communication among the group of workshop participants and mentors. A CD with the presentations held during the scientific workshop was produced and handed out to the participants in Costa Rica. The workshops' homepage (www.institutes.iai.int) gives information on the workshop and its outcomes.

A series of publications is currently being prepared (see “Publications” below).

Relevance to APN scientific research framework and objectives

The biennial capacity building workshops are one of the most effective tools of IHDP designed to identify a new generation of qualified young human dimensions researchers of developing countries and countries in transition and to promote their inclusion within our global networks. Furthermore the Costa Rica Institute was designed to foster the communication between scientists and policy makers. These objectives of the Institute directly correspond to the core elements of APN's mission, which are to "increase developing country participation in global research in the Asia Pacific region and to strengthen interactions between the science community and policy makers".

The Costa Rican Institute contributed to the following goals defined by APN:

- Goal 1 "supporting regional cooperation in global change research on issues relevant to the region"
- Goal 2 "strengthening the interactions among scientists and policy makers, and scientific input to policy-decision making and scientific knowledge to the public"
- Goal 5 "cooperating with other global change networks and organizations"
- Goal 6 "facilitating the development of research infrastructure and the transfer know-how and technology"

Self-evaluation

The organizers of the workshop were able to identify high-level participants. The workshop was very successful in creating enthusiasm and interest in human dimensions themes and IHDP projects. The future will have to show whether the participants were able to integrate the new knowledge and networks into their own work. It will be very important to offer future possibilities for further involvement with the GEC community.

Potential for further work

The participants will continue to work together in the coming months with the aim to submit the proposals to calls that had already been identified prior to the workshop. The lecturers will assist them in the final preparation of the proposals.

The planning for the next capacity building workshop has already started. IHDP has approached APN to ask whether APN would be willing to act as a co-organiser of the IHDW 06, which will take place in Asia.

Publications

The IHDP Newsletter 01/2005 has a thematic focus on the theme of the workshop including contributions from the workshop participants and speakers. A workshop report is currently under preparation. Additionally a book on the Science-Policy Forum which will be printed in English and Spanish is currently being prepared. All publications will be released by October 2005.

References

- Atkins, Peter, and Ian Bowler. 2001. *Food in society: Economy, culture, geography*. London: Arnold Publishers.
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- O'Brien, K. and R. Leichenko. 2000. Double Exposure: Assessing the Impacts of Climate Change within the Context of Economic Globalization. *Global Environmental Change* 10: 221–232.

Acknowledgments

First of all we would like to acknowledge the scientific chair, Karen O'Brien (CICERO, Norway) and the co-chairs of the workshop, Robin Leichenko (Rutgers University, USA) and Eduardo Viola (Universidad de Brasil).

We gratefully acknowledge the sponsors of the Institute: Asian Pacific Network (APN), Food and Agriculture Organization of the United Nations (FAO), Inter-American Institute Global Change Research (IAI), the International Food Policy Research Institute (IFPRI), International Institute for Applied System Analysis (IIASA), International Social Science Council (ISSC/UNESCO), Norwegian Research Council, START and the Third World Academy of Science (TWAS).

Additionally we thankfully acknowledge the local hosts of the science workshop: the "Centro Mesoamericano para el Desarrollo Sostenible del Trópico Seco (CEMEDE) of the Universidad Nacional de Costa Rica (UNA). Furthermore a set of local and regional institute have to be acknowledged for the organization and hosting of the Science Policy Forum: The Development Observatory (OdD) of the Universidad de Costa Rica (UCR), the National Environmental Forum (NEF) of the National Center for Advanced Technology (CENAT), the National Academy of Science of Costa Rica (NAS-CR), the Inter-American Institute for Cooperation in Agriculture (IICA) and the Comité Regional de Recursos Hidráulicos (CRRH)/Sistema de Integración Centroamericana (SICA).

Technical Report

Preface

The “IHDP-IAI 2004 Global Environmental Change Institute on Globalization and Food Systems: Scientific Workshop and Science policy Forum” was the fourth in a series of biennial human dimensions workshops organized by the IHDP secretariat since 1998. From October 24 to November 6, 2005 a multidisciplinary group of 25 young scientists and politicians from developing countries and countries and transitions met in Costa Rica, where they studied and analyzed the inter-linkages of global environmental change, globalization and food systems. Among them were 5 Asian participants, whose participation was made possible by an APN grant.

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1.0 Introduction

As global environmental change is just beginning to be analyzed from a social science perspective, IHDP cannot build on established and well-organized research communities. Therefore the programme must invest substantially in networking and capacity building. One important pillar for the extension of IHDP’s scientific network is the theoretical and methodological training of young researchers. Particularly in developing countries there is an urgent need for training in the human dimensions of global environmental change. IHDP’s capacity building efforts aim at identifying young scientists, who have the potential to take a leading role in the scientific analyzes of the human dimensions of GEC and to promote their participation in IHDP’s networks through presentations at international conferences, publications, membership in national committees and endorsement of their research projects. Finally, the most qualified researchers are selected for IHDP’s government bodies.

In its capacity building efforts IHDP collaborates closely with the ESSP project START (System for Analysis, Research and Training) as well as with intergovernmental organizations, such as the Asia-Pacific Network for Global Change Research (APN) and the Inter-American Institute for Global Change Research (IAI). Furthermore, IHDP is increasingly cooperating with development-oriented organizations (e.g. FAO, IFPRI, IFS, TWAS, UNEP, UNU-EHS, UNITAR), broadening IHDP's institutional alliances. Together with all these partners, IHDP identifies urgent demands for training, agreeing on whole series of capacity building activities. In the last three years a broad range of capacity building activities have been (co-)sponsored and (co-)organized by IHDP.

1.1 Objectives of the International Human Dimension Workshops

The main capacity building event organized by the secretariat is the biennial **International Human Dimensions Workshop (IHDW)**. Taking place every two years, the IHDWs create a forum for young scientists from developing countries as well as from countries in transition, to present and discuss their work and receive training in selected issues of IHDP research. The fourth Human Dimensions workshop was titled "***IHDP-IAI 2004 Global Environmental Change Institute on Globalization and Food Systems: Scientific Workshop and Science-Policy Forum***".

In order to embed the IHDW in a more effective way in the regions and facilitate follow-up networking, IHDP decided to organize the IHDW 2004 jointly with a regional capacity building organization and invite a university and a research institution in the region to host the workshop and forum. For the 2004 IHDW, IAI and the University of Costa Rica were chosen in order to strengthen networks in Latin America; for the IHDW 2006, negotiations with APN and a research institution in Asia are already underway.

Another novelty in 2004 was a focus on the science – policy interface. This thematic focus was implemented by the inclusion of policy and decision makers as participants of the science workshop and the organization of a Science Policy-Forum.

1.2 Description of the IHDP-IAI 2004 Global Environmental Change Institute on Globalization and Food Systems: Scientific Workshop and Science-Policy Forum

1.2.1. The Scientific Workshop was held over 13 days (see Appendix A: Programm and Appendix C: Speakers List). In a competitive international selection process 25 young scientists and policy and decision makers from 22 countries in Africa, Asia, Eastern Europe and Latin America were chosen (see Appendix B: Participant List). During the course of the scientific workshop they were introduced to general concepts of global environmental change, globalisation and food systems.

The scientific leadership responsibilities were shared by Karen O'Brien (CICERO, Norway), Eduardo Viola (University of Brasilia, Brazil) and Robin Leichenko (Rutgers University, USA). This team designed the theoretical framework of the workshop, which focused on interactions between processes of globalization and global environmental change, and the implications of these interactions for food systems and food security (see Appendix A: Agenda). Globalization has been a very powerful driving force in the world since the early 1980's, leading to economic, social, institutional and cultural changes that

influence food systems in myriad ways. These changes are transforming the production and storage of food, the movement and trade of food, access to and consumption of food, and the quality and safety of food. Global environmental change is concurrently altering both the physical and social conditions that underpin terrestrial and marine food systems. The transformation of food systems in a globalising world is likely to interact synergistically with global environmental change. The goal of the Institute was to explore this critical interaction and consider implications for food security, particularly in areas characterised either by poverty and food insecurity or by growing per capita incomes and rapidly changing demands for food. The envisioned outcomes of the workshop were collaborative research proposals developed by multi-disciplinary, international groups of the participants under the guidance of international experts. With these the workshop aimed to contribute to the development of a lasting network of researchers that can address some of the critical research issues related to globalization of food systems and the human dimensions of global environmental change.

The first week of the workshop was dedicated to the presentation of methodological and theoretical frameworks. Representatives from the IHDP core projects and from the Food Systems project were invited to introduce their projects through the food systems and globalization “lens”. The theoretical frameworks of the core projects were illustrated by case studies. Four representatives of the core projects – Stefan Wirsenuis (IT), Leslie King (IDGEC) Karen O’Brien (GECHS) and Alejandro Leon (LUCC) – dedicated four days to teach the group and guide group activities in the afternoon. In changing group constellations (regional, multi-disciplinary etc.) the participants were asked to elaborate definitions and outlines for research proposals etc. A series of evening lectures followed by a wind down talk finalized the intensive daily program. Mahendra Shah (IIASA) and Sarah Cline (IFPRI) illuminated the global interweavement of local and regional processes in questions of sustainable development and water-food linkages. Furthermore three participants presented their advanced case studies on vulnerability and local governance. A public lecture held in Spanish by Eduardo Viola on “Market, democracy and globalization” opened the seminar to the local scientific community, which filled every last seat of the auditorium, an active discussion followed his presentation.

In the second week the participants had the chance to work on possible research topics for potential project proposals. The week started with the presentation on one of the joint project of the Earth System Science Partnership (E-SSP), which dedicates its research agenda to food systems: Global Environmental Change and Food Security (GECAFS). Barbara Huddleston introduced concepts and definitions and guided the group activities in the afternoon. The remaining days were mainly dedicated to the elaboration of the group proposals. Lectures and discussions related to professional development, including issues of applying for external funding, proposal writing, presentations, and networking complemented these group activities. Jose Gutierrez from the International Foundation for Science (IFS) and Paul Filmer from the National Foundation for Science (NSF) gave valuable insights on the ingredients for successful proposals. Prior the workshops calls for international proposals related to the workshop subject were identified and collected in a “Directory of Funding Opportunities. At the end of the workshop 6 proposal groups had been set up and most of them were dedicated to keep on working in their groups.

Two field trips facilitated socializing among the group and gave insight to the regional environment and the farming industry.

1.2.2. *The Science-Policy Forum* was held on the penultimate day of the workshop (see agenda science-policy workshop, Appendix A). It focused on the science-policy interface and the use of scientific information within the policy and decision-making processes. 70 representatives from the regional science and policy community were invited to engage in a dialogue about the specific problems of food systems in Central America. The participants of the scientific workshop participated in different roles: as commentators, rapporteurs and critical audience. A focus was laid on the science policy interface and the use of scientific information in policy and decision-making processes. It was opened by the Minister for Science and Technology of Costa Rica, Mr Fernando Gutierrez.

Four keynote papers were presented at the forum:

- *The New Axle of Food Security*--Gustavo Gordillo De Anda, Assistant Director-General Regional Representative of FAO for Latin America and the Caribbean, Chile
- *Global Environmental Change and Agriculture in Central America*--Manuel Jimenez Umana, Coordinator Secretaria Consejo Agropecuario Centro-America (CAC), Costa Rica
- *Globalization of food Production and Consumption: A Central America perspective*-- Anna Victoria Romania, Instituto de Nutricion de Centro America y Panama (INCAP), Guatemala
- *Diversification versus Specialization: Challenges for Rural Livelihoods in a Changing World*-- Carlos Pomareda, Presidente del Servicios Internacionales para el Desarrollo Agro-Empresarial (SIDE S. A), Costa Rica

The presentation of the keynote paper was followed by critical remarks of two commentators: one from the scientific community, chosen from the participants of the workshop and the other from the policy.

1.3. Aims of the Institute

The longer-term goal of the Institute will contribute to the development of a lasting network of researchers who will be equipped to address some of the critical research issues related to globalization of food systems and the human dimensions of global environmental change. It is in particular anticipated that the implementation of research proposals will connect the researchers to the ongoing projects of IHDP.

Another goal was to strengthen the science-policy interface. The institute aimed to stimulate partnerships among governments, industries and communities; connect local and regional professionals and institutions worldwide with related initiatives and networks; and inform local and regional professionals on the funding opportunities available to support projects dealing with global environmental change and food systems. The topic of the workshop is extremely relevant to policy and the policy-making process. The emphasis on linkages between global environmental change and globalization through studies of food systems illuminated both the opportunities and challenges of policies related to food, agriculture, social safety nets, climate change, biodiversity, and other areas. Several of the workshop lectures directly addressed policy implications, and participants were encouraged to develop policy aspects within their proposals. The Science-Policy Forum focused on the science-policy interface and the use of scientific information into the policy and decision-making processes.

2.0 Workshop Outputs

An assessment of the previous IHDW's had shown that a solid follow-up strategy for the capacity building workshops is essential in order to ensure a long-term success of the investments. In conjunction with the IHDW 2004 a broad range of follow-up activities have been initiated. Below they are listed in chronological order of their appearance:

1. The **workshops' homepage** (www.institutes.iai.int) gives information on the workshop and its outcomes.
2. A **list server** was set up in order to facilitate communication among the workshop participants and speakers (IHDP-IAI-Institute-2004@giub.uni-bonn.de). IHDP also uses this server to pass on information on related conferences and job announcements.
3. A **CD** with all workshop presentations was distributed to all workshop participants at the end of the workshop.
4. A special issue of the **IHDP newsletter - Update 01/05** - containing articles of speakers and four participants of the workshop was printed in April '05 (www.ihdp.uni-bonn.de/html/publications/update/pdf-files/IHDPUpdateFood1_05.pdf). Within this newsletter two of the APN funded participants, Thanh Vo and Lilibeth Acosta Michlik, published an article on their research findings.
5. A **workshop report** is currently being edited by selected workshop participants and the scientific chair of the workshop (foreseen publication: Oct. 05)
6. A **report on the Science Policy Forum** in English and Spanish is currently being edited by selected workshop participants (foreseen publication: Oct. 05)
7. The participants were encouraged to submit **panels and papers to the 6th Open Meeting of the Human Dimensions of the Global Environmental Change Research Community**, October 2005 in Bonn, Germany (<http://openmeeting.homelinux.org/>). Two sessions submitted by participants funded through APN have been accepted (Suruchi Bhadwal and Lilibeth Acosta-Michlik). Additionally they were encouraged to apply for the training seminars held back to back with the Open Meeting.

3.0 APN-Funded Participants

The funds were used to cover the full costs for travel, accommodation, meals and teaching material for four participants. Additionally one participant, Lilibeth Acosta-Michlik, was funded partially by START, which covered the flight costs and APN, which took over the remaining costs (see final budget, Appendix D).

Please find below the full contact details of the APN funded participants plus an approximately 100-word abstract from them outlining their fields of interest and how the IHDP workshop was valuable for their career agendas, and specifically for networking with other participants and capacity building

3.1.Lilibeth Acosta-Michlik

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Abstract:

Lilibeth Acosta-Michlik is an agricultural economist with strong interest in globalization and climate change, and a strong background on the application of various quantitative techniques and models such as econometrics, equilibrium models, fuzzy logic tools, and multiagent-based systems. She has years of research experience in evaluating the impacts of global and regional trade agreements on domestic consumption and production structures. She has participated in several foreign-funded projects investigating human vulnerability to climate change. Her current research work focuses on the dynamic links between globalization and climate change in the assessment of vulnerability. Through the IHDP workshop in Costa Rica, she gained valuable knowledge that further improved her conceptualization of this issue and established good scientific links to experts in this field.

3.2. Suruchi Bhadwal

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Abstract:

I have been working with the Centre for Global Environment Research in TERI since four and a half years now on climate change and related issues. I am currently involved in case study based projects on vulnerability and adaptation. The two core long-term projects that I had been handling and have worked on are 1) Vulnerability and Adaptation to Climate Change (VACC) in India and 2) Vulnerability of Indian agriculture to climate change and economic globalization (V & A in agriculture).

Since I have been working on similar issues relating to sectoral impacts of Global Environmental Change (GEC) on agriculture, the experience gained from the IHDP-IAI Global Environmental Change Institute on Globalisation and Food Systems has been quite useful, wherein the course structure that had been planned in this workshop focused in discussing several of the issues that are crucial to understand and consider while conducting research in similar lines. Some of the topics that were of interest include discussions on cultural aspects, institutional dimensions, frameworks being used internationally on mapping vulnerability, and the linkages involved. I enjoyed lectures delivered by the faculty going into indepth details on the subject. One main reason I guess for this is the fact that the workshop was spread over two weeks and the discussions on each subject were quite elaborate. In the evenings discussions continued during dinner as well and we were encouraged fully to raise our concerns and reflect our views in many cases. During the discussions country

representatives participating in the workshop discussed many examples crucial with regard to regions/ countries. The workshop served as a platform for many to discuss country specific issues and a greater understanding on regional variation of vulnerability and differing capacities. Besides, it also has resulted in the building of a strong network of people belonging to different continents – Africa, Latin America, Europe, and Asia.

3.3 Jiehua Lu

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Abstract:

Besides economics of population and business demography, my recent research interest also includes the interactions among population, economy and environment. I am sure that it will be of great value for me in near future after I participated in the Costa Rican workshop, because I am trying my best to write research proposals regarding the impacts of growing population and changing food production patterns on food security in China for both domestic and international funding sources in order to conduct more academic research on this emerging issue. My participation in the Workshop has not only offered a great opportunity to build up research networking with other participants such as India, Bangladesh, etc., but also bridged the link with some scientists (lecturers of the workshop) from the developed world, which will be a great benefit for long-term research capacity building.

3.4 Thanh Vo

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Home Institution: Department of Science & Technology of Thua Thien Hue province

Abstract:

My academic interests are the impacts of globalization on agriculture and rural sustainable development, specifically in finding implication for environmental and natural resource policies. Firstly, the Workshop has supplied and widen my view and field of interests in the following ways:

- It brought me the conceptual framework of the “double exposure effect” of rural communities under globalization and global environmental change.

- The systematic view of a food system, rather than agriculture as production, and only rural community.
- The issues of vulnerability, resilience and transformation of social ecological system under many different view technological, social, cultural and institutional dimension.

These above are important parts, which I am incorporating into my research for my dissertation. It also underlines my long-term academic and professional interest. The workshop also helped me to have direct interacting with many different senior scholars from over the world with many different experiences and perspectives. These interactions have strengthened by other interactions with my peers during the workshop, preparing the proposal and the science policy forum. Finally, through working with other participants in the workshop, I learned more about what I am pursuing, particularly with those from the same regions (China, Sri Lanka and India and the Philippines).

3.5 Kanthi Wijetunge

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Abstract:

Being a public officer who is working at the decision making level, I always find opportunities to interact with people at high-level policy making bodies. I found that the workshop was very important and useful in several ways. Now I am confident enough to advocate on suitable policy measures to mitigate vulnerability to climate changes and globalization. Also this knowledge is useful in my work as a trainer.

Having been exposed to those issues at the workshop, participants were able to discuss the matters considering their own contexts and do comparative studies to identify appropriate coping strategies to minimize vulnerability of different communities. Through group work we were able to interact closely with each other and build networks with people who shared common interests.

After participating in this workshop it is my duty to utilize my experience for the benefit of my own country. On my return, I shared my experience with the relevant officials who are involved in related policy issues and also published a paper article highlighting the importance of linking science and policy and also dissemination of information on the outcome.

Being representing the Ministry of Information and Media at the moment I am now in the process of coordinating with National Science and Technology Commission in Sri Lanka to organize a series of discussions on these issues with scientists, researches and policy makers through electronic media so that policy makers and general public will aware of the research findings in different fields. Since Sri Lanka faced a terrible natural disaster, like Tsunami two months ago, it is high time to focus on climate change issues and its impact on food systems.

4.0 Conclusions

The workshop was very successful in creating enthusiasm and interest in human dimensions themes and IHDP projects among the participants. The future will have to show whether the participants were able to integrate the new knowledge and networks into their own work. It will be very important to offer future possibilities for further involvement with the GEC community.

4.1. Evaluation of participants

At the final day of the workshop a questionnaire was distributed to all participants of the Institute. It was designed to elicit anonymous feedback on the general level of satisfaction with the scientific workshop and the science policy forum. 22 out of 25 participants delivered a completed questionnaire. Questions to the following aspects were asked: Application and selection process, logistical arrangements, reading material, lectures, mix of participants, group activities, scientific field trip, science policy forum and relevance of the institute for the participant's future career planning.

Furthermore a group discussion chaired by Karen O'Brien on the final day provided an open platform for spontaneous feedback on the science policy forum. This was followed by a group discussion on the pros and cons of holding these kinds of capacity building institutes in a developing country with a regional focus.

To summarize the results of the questionnaire and group discussion it can be concluded that the overall impression of the institute was very positive. Among others the participants were asked the following question:

“How would you rate the institute overall (considering substance, programme development, organization, performance of coordinators and participants)? Please use a rating from 1 (poor) to 5 (excellent) to answer the question.”

The average rating given was a 4,1. This positive evaluation is reinforced by the point that 19 participants would recommend the institute to other people. A more comprehensive analysis can be found in the workshop report, which will be edited by October '05.

4.2. Outlook

IHDP would like to continue the successful set up of the capacity building workshop for the year 2006. The IHDP Scientific Committee approved the proposal of holding the next IHDW in Asia with a focus on the Asian region and with the majority of participants coming from the region. IDGEC has shown strong interest in taking the lead in the organization of the next workshop. The workshop will focus on institutional dimensions of water and trade. The IDGEC SSC identified both topics as emerging issues for a potential second phase of IDGEC and it therefore would be an excellent opportunity to explore the issues through the workshop. During the IDGEC SSC meeting, which will take place in June in Bali, the IDGEC SSC members will discuss the curriculum in detail. Louis Lebel, Unit for Social and Environmental Research (USER) at the Chiang Mai University, Thailand, has offered to act as chair and local host of the workshop. Please find in Appendix E a preliminary concept note on the workshop. IHDP had approached APN in order to ask whether APN would be interested to be the co-organiser of the

workshop along the same lines as IAI had been co-organiser of the IHDW 04. APN showed strong interest in the activity and IHDP will submit a proposal under CAPABLE Programme.

5.0 References

Below you find a list of books and book chapters as well as journal articles, which were included in a reader, send out to the participants prior to the workshop. The book “Food in Society” by Atkins and Bowler was send to the participants via Amazon prior to the workshop.

5.1. Books and book chapters

- Atkins, Peter, and Ian Bowler. 2001. *Food in society: Economy, culture, geography*. London: Arnold Publishers.
- Held, David, Anthony G. McGrew, David Goldblatt and Jonathan Perraton. 1999. *Global Transformations: Politics, Economics and Culture*. UK: Polity Press
- Held, David, and Anthony McGrew. 2000. The great globalization debate: An introduction. In (David Held and Anthony McGrew, eds.) *The Global Transformations Reader: An Introduction to the Globalization Debate*, Oxford, UK: Polity Press, pp. 1- 45.
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5.2. Journal articles

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6.0 Appendix

Conferences/Symposia/Workshops

Agenda/Programme (including title, date and venue)

Participants list (comprising contact details of each participant, including organisation, address, phone number, fax number, and email address)

Appendix A: Programme

Titel of the Workshop: “Global Environmental Change, Globalization, and Food Systems: An International Workshop and Science-Policy Forum”, Costa Rica

October 24-November 6, 2004

Venue of the Science workshop (October 24-November 4):

Centro Mesoamericano de Desarrollo Sostenible del Trópico Seco (CEMDE)
Campus Omar Dengo
1 km south from Nicoya downtown,
road to Samara
Apdo.: 38-5200
Nicoya, Costa Rica, C.A.

Tel.: (506) 260-9119

e-mail: alope@una.ac.cr

Web site: <http://www.una.ac.cr/CEMEDE>

Venue of the Science-Policy Forum (November 6):

National Environmental Forum (NEF) of the Centro Nacional de Alta Tecnología “Dr. Franklin Chang Díaz,” (CENAT)
1,3 km North of the U.S. Embassy
Barrio Rohrmoser
P.B. Box 1174 – 1200 Pavas, San José
Tel.: (506) 232-3605
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A. Programme of the Science Workshop

Nicoya, October 24th to November 4th and San José, November 6th (half day)

Saturday, October 23	All day	Arrival of participants at hotel in San José, Costa Rica
Sunday, October 24	All day	Field trip
	19:00	<i>Welcome Barbecue in Nicoya</i>
Monday, October 25	8:30	<i>Departure from hotel</i>
	9:00-10:30	Welcome by CEMEDE/UNA (local host), IHDP and IAI Alexander López, CEMEDE Paulo Manso, IAI Maarit Thiem, IHDP
	10:30 – 11:00	<i>Coffee Break</i>
	11:00 – 12:30	Welcome by Scientific Chairs: Introduction of workshop rationale, goals, objectives, structure Karen O'Brien, CICERO, Norway Robin Leichenko, Rutgers University, USA Eduardo Viola, University of Brazil, Brazil Short introductions by participants
	12:30 – 14:00	<i>Lunch</i>
	14:00 – 17:00	Introduction: Globalization, global environmental change and food systems: Concepts and theoretical frameworks Karen O'Brien Robin Leichenko Eduardo Viola
	19:00	<i>Dinner</i>
	20:30	Evening Talk: Sustainable development and globalization: Mobilizing diversity and science for policy actions Mahendra Shah, IIASA Chair: Eduardo Viola
Tuesday, October 26	8:30	<i>Departure from hotel</i>
	9:00-12:30	Characteristics of the food and agriculture system: AN industrial transformation perspective (IT project) Stefan Wirsenius, Göteborg University, Sweden
	10:30 – 11:00	<i>Coffee break</i>
	12:30 – 14:00	<i>Lunch</i>

	14:00 – 17:00	Group activity related to IT project
	15:30 – 16:00 19:00	<i>Coffee Break</i> <i>Dinner</i>
	20:30	IFPRI Presentation: Water-food linkages on a global scale Sarah Cline, IFPRI Chair: Mahendra Shah, IIASA
Wednesday, October 27	8:30	<i>Departure from hotel</i>
	9:00 – 12:30	Globalization and land use change: Globalization, agricultural changes and desertification in Argentina and Chile (LUCC project) Alejandro Leon, University of Chile, Chile
	10:30 – 11:00	<i>Coffee break</i>
	12:30 – 14:00	<i>Lunch</i>
	14:00 – 16:00	Group activity related to LUCC project
	16:00 – 16:15	<i>Coffee break</i>
	16:15 – 17:00	Research in action: Lilibeth Acosta-Michlik presents her START project on vulnerability
	19:00	<i>Dinner</i>
Thursday, October 28	8:30	Departure from hotel
	9:00 – 12:30	Vulnerability and food security in a globalizing world (GECHS Project) Karen O'Brien Robin Leichenko
	10:30 – 11:00	<i>Coffee break</i>
	12:30	<i>Lunch</i>
	14:00 – 17:00	Group exercise on GECHS related themes
	15:30 – 15:45	<i>Coffee break</i>
	19:00	<i>Dinner</i>
	20:30	Evening Talk: The challenge of local governance in the rural world Rodolfo Oliveira, FAO (workshop participant) Carlos Icaza, FAO (workshop participant)
Friday, October 29	8:30	<i>Departure from hotel</i>
	9:00 – 12:30	International agreements, governance and food systems (IDGEC project)

	10:30 – 11:00	Leslie King, University of Manitoba, Canada <i>Coffee break</i>
	12:30	<i>Lunch</i>
	14:00 – 16:00	Group activity related to IDGEC
	16:00 – 16:30	<i>Coffee break</i>
	16:30 – 17:30	Wind-down talk: Networking Maarit Thiem, IHDP
	18:30 – 19:30	University lecture (in Spanish): Mercado, democracia, medio ambiente y globalización: Un análisis comparativo de Brasil, Argentina, Chile, Paraguay, Venezuela, Mexico y Costa rica Eduardo Viola, University of Brasilia, Brazil
	20:00	Reception hosted by CEMEDE
Saturday, October 30	All day	Excursion to rice farm
Sunday, October 31	All day	Free day (optional beach trip)
Monday, November 1	8:30	<i>Departure from hotel</i>
	9:00 – 13:00	Globalization and food systems (GECAFS project) Barbara Huudleston, FAO
	10:30 – 11:00	<i>Coffee break</i>
	13:00 – 14:00	<i>Lunch</i>
	14:00 – 17:00	Integrating decision-support tools into GECAFS science (guided activity)
	15:30 – 16:00	<i>Coffee break</i>
	19:00	<i>Dinner</i>
	20:30	Evening Panel: Proposal writing and research funding I José María Gutierrez, IFS
Tuesday, November 2	8:30	<i>Departure from hotel</i>
	9:00 – 10:30	Proposal Writing and research funding II Paul Fimer, NSF
	10:30 – 11:00	<i>Coffee break</i>
	11:00 – 12:30	Proposal development
	12:30 – 14:00	<i>Lunch</i>
	14:00 – 17:00	Proposal development

	15:30 – 16:00	<i>Coffee break</i>
	19:00	<i>Dinner</i>
	20:00	Wind-down talk: Proposal development
Wednesday, November 3	8:30	<i>Departure from hotel</i>
	9:00 – 12:00	Proposal development (cont.)
	10:30 – 11:00	<i>Coffee break</i>
	12:00 – 14:00	<i>Lunch</i>
	14:00 – 17:30	Presentation of proposals (6 groups)
	19:00	<i>Dinner</i>
Thursday, November 4	8:30	<i>Departure from hotel</i>
	9:00 – 12:30	Preparation for science-policy forum: Finalize project summaries, work on commentaries for the science-policy forum Karen O'Brien
	10:30 – 11:00	<i>Coffee break</i>
	12:30 – 13:30	<i>Lunch</i>
	14:00	<i>Departure to San José</i>
Friday, November 5	8:30 – 18:00	Science-Policy Forum
Saturday, November 6	10:00 – 12:00	Wrap-up Session: Reflection on Science-Policy Forum and evaluation Karen O'Brien, CICERO Maarit Thiem, IHDP
		Free afternoon in San José
	20:00	Farewell party
Sunday, November 7	All day	Departures

B: IAI-IHDP 2004 Global Environmental Change Institute on Globalization and Food Systems

Science-Policy Forum, November 5th, 2004, San José, Costa Rica

SCHEDULE	PRESENTATIONS
8:30-9:10	Opening Ceremony: Chair – Dr. Gustavo V. Necco, IAI Mr. Fernando Gutierrez, Minister of Science and Technology of Costa Rica Welcome by major organizers and sponsors (IAI – Dr. Gustavo V. Necco, IHDP – Ms. Maarit Thiem).
9:10-9:40	Overview of the Institute: Science Workshop (Dr. Karen O'Brien, University of CICERO, Norway/IHDP) and Science- Policy Forum (Dr. Edgar E. Gutiérrez Espeleta, Development Observatory (OdD) of the University of Costa Rica - UCR)
9:40-10:10	Introductory Keynote Talk: The New Axle of Food Security Dr. Gustavo Gordillo de Anda, Assistant Director-General Regional Representative of FAO for Latin America and the Caribbean, Chile.
10:10-10:40	Coffee Break
10:40-11:10	Topic 1: Global Environmental Change and Agriculture in Central America (Agricultura y Seguridad Alimentaria) Keynote speaker: Mr. Manuel Jiménez Umaña, Coordinador Secretaría Consejo Agropecuario Centro-Americano (CAC), Costa Rica
11:10-11:20	Commentator: Mr. Carlos Ruiz-Garvia, University of Goettingen/Germany, Bolivian
11:20-11:30	Commentator: Mr. Javier Flores, Comité Regional de Recursos Hidráulicos, Costa Rica (CRRH)
11:30-11:45	Questions / Discussion
11:45-12:00	Chair Synthesis - Ms. Lorena San Roman, PNUMA, Mexico
12:00-13:30	Lunch
13:30-14:00	Topic 2: Globalization of Food Production and Consumption: A Central American Perspective Keynote speaker: Dr. Ana Victoria Román, Instituto de Nutrición de Centro América y Panamá (INCAP), Guatemala
14:00-14:10	Commentator: Ms. Lilibeth Acosta-Michlik, Catholic University of Louvain/Belgium, Philippines
14:10-14:20	Commentator: Dr. Alfredo Alvarado (UCR), director of Agricultural Research of Costa Rica, and member of Natural Academy of Sciences
14:20-14:35	Questions / Discussion
14:35-14:50	Chair Synthesis - Dr. Alexis Vásquez, Director of INTA, Costa Rica
14:50-15:20	Coffee Break
15:20-15:50	Topic 3: Diversification or Specialization: Challenges for Rural Livelihoods in a Changing World Keynote speaker: Dr. Carlos Pomareda, Presidente Ejecutivo de Servicios Internacionales para el Desarrollo Empresarial (SIDE S.A.), Costa Rica
15:50-16:00	Commentator: Ms. Man Yu Chang, Federal University of Parana, Brazil
16:00-16:10	Commentator: Dr. Mario Samper, Instituto de Investigaciones Sociales-UCR, Costa Rica
16:10-16:25	Questions / Discussion
16:25-16:40	Chair Synthesis – Dr. Armando Rabuffetti, Director of INIA, Uruguay

16:40-17:40 **Closing Ceremony: Chair** – Dr. Pedro Leon, NEF/CENAT
General Synthesis – Dr. Gabriel Macaya Trejos, Former Rector
University of Costa Rica
**Concluding Keynote Talk: Retos científicos y políticos para la toma
de decisiones sobre cambio climático y seguridad alimentaria** – Dr.
Chelston W.D. Brathwaite, Director General of the Inter-American
Institute for Cooperation on Agriculture (IICA)
Final Remarks – Mr. Max Campos, CRRH/SICA

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Appendix D: Funding sources outside the APN

A list of agencies, institutions, organisations (governmental, inter-governmental and/or non-governmental), that provided any in-kind support or co-funding and the amount(s) awarded.

Income	
IHDP	\$20,000.00
IAI	\$30,000.00
Research Council of Norway	\$17,800.00
APN	\$15,000.00
ISSC	\$5,000.00
TWAS	\$2,000.00
TOTAL INCOME	\$89,800.00

Inkind contribution (staff salaries, telephone, etc.)	
CICERO	22,000.00
Rutgers University	10,000.00
IHDP	44,000.00
IAI	10,000.00
TOTAL	86,000.00

Appendix E: Preliminary Conceptual Note for the IHDW 2006

Regional water management and trade: an international training workshop for young researchers on the analysis of institutional change

Goals

The primary goal of the workshop would be to strengthen the analytical skills of the participants in institutional and political analysis.

A secondary goal would be to expand the IDGEC network of institutional scholars with younger researchers working on water and trade that could form the core of these new flagship activities.

Format and content

Training could be arranged around analysis of a set of case studies with theories, concepts and analytical methods introduced by using them to better understand institutional issues in the cases. Having trainers, therefore, with real-world experiences of particular cases as resource persons would be helpful in addition to more “academic” skills.

The cases would be clustered around two sets, one focussing on institutional issues in the management and governance of regional water resources, and the second on the implications of regional trade institutions for environmental change.

The set on water would consider issues of allocation among competing uses of freshwater (municipal water supply, agriculture and industry), decisions over major infrastructure (inter-basin diversions, hydro-power dams, irrigation systems, flood protection, ground water regulation) and water quality issues for fisheries, conservation, ecosystem and human health. In addition special attention would be given to some of the stronger linkages with existing global change projects dealing with water in particular the Global Water System Project and how climate change and variability interact with institutional arrangements to influence vulnerability of marginal social groups. One or two sessions would have a biophysical focus to help provide a basic grounding in the hydrological cycle, impacts of vegetation, land-use and soils on water balances, and climate variability and change impacts on water resources.

The second set on regional trade would not focus on global institutions like GATT under the WTO but instead look at well-established regional trade zones like the EU and APEC or various smaller configurations within ASEAN. Special emphasis will be made on how trade liberalization interacts with institutions for sustainable development and the environment and how these are in practice affecting vulnerability of marginal groups. Special governance challenges of long commodity chains will also be considered as part of the challenges associated with trade based on exploitation of ecosystem goods and services in one part of the world to serve consumer wants in another.

Given that the meeting is being held in Thailand, the detailed case studies on both water and trade will be drawn from the Southeast Asia region so that some of the actors directly involved in designing or re-designing these institutional arrangements can be invited as special trainers, facilitators or guest speakers.

The theoretical material would start with those topics which IDGEC has substantial experience, in particular, scale, interplay and fit. During the course of each week, however, some of the emerging elements of IDGEC framework would also be introduced, for example, on interactions between knowledge and institutional change, and the role of institutions in modifying the resilience and vulnerability of social-ecological systems.

Venue and timing

The proposal is to hold the meeting in Chiang Mai, Thailand in early October 2006. This is the start of the dry-cool season. A month later the weather would be even more pleasant. Chiang Mai is a culturally interesting and inexpensive place to visit. It would be a simple matter to arrange half-day field trips to visit sites of water conflicts, communal irrigation systems, as well as trade-related locations.

The meeting would be held in a hotel within walking distances of most main attractions in Chiang Mai and the University. A few sessions could be held in Buddhist temples and in forest or garden mountain resort areas for a change of scenery.

This would ideally be about 2 months before the IDGEC synthesis meeting tentatively scheduled for December 2006. Later in October there is an ESSP meeting expected in Beijing and this could constrain timing for some IDGEC trainers.

Participants and Trainers

Approximately 30 participants would be expected to participate in the meeting that would last 10-14 days. Around 10 trainers would be involved for periods of 2-5 days each. A few like the water or trade “leaders” and one or two tutors might be expected to attend all or most of the course..

Louis Lebel would be happy to act as “chair and local organizer” for the meeting. It would be good to have two other co-chairs to head the water and trade themes. Their jobs would be to coordinate the course materials with the other trainers in their section. They both should be able to participate for at least the half of the meeting and preferably the whole meeting.

The Faculty of Social Sciences at Chiang Mai University has a strong Faculty of engaged academics, some of whom should be involved as trainers or guest speakers during the workshop (see 6). This should help secure involvement of key state and non-state actors involved in some of the main institutional development challenges on water and trade in the region.

Budget and funding

Based on previous workshops the expectation is that a budget of around 80- 90,000 USD should be adequate. Costs in Chiang Mai are low, for example: accommodation (30 USD/night/person), meals-catering (15 USD/day/person), computer/printer rentals (25 USD/day/unit).

Value to host organization USER - CMU

USER or the Unit for Social and Environmental Research at Chiang Mai University would be interested in hosting the meeting because both themes and institutional analyses in general are among the primary interests (see www.sea-user.org).

On the water theme USER has specific research area on water governance in the Mekong region and currently coordinate a fairly significant collaborative action research agenda in the region with support from CGIAR Challenge Program on Food and Water. A key goal of this network is to support a “cohort” of young governance researchers (academic and grass-root) working on water governance in the region which is similar to the aims of this particular workshop at the international level.

USER also has worked on trade-related institutions through its work on production-consumption systems (commodity chains). Louis Lebel chairs an

international working group on this theme with a focus on developing a research and action agenda. USER also conduct research focussed on issues of comparative advantage and livelihood resilience in upland ethnic minority communities, and for these people, bilateral and other trade relations are very important challenges to livelihood security.

Appendix F: Glossary of Terms

List of Abbreviations and Acronyms

APN	Asia-Pacific Network for Global Change
CEMEDE	Centro Mesoamericano de Desarrollo Sostenible del Trópico Seco
CENAT	National Center for Advanced Technology
CICERO	Center for International Climate and Environmental Research - Oslo
CRRH	Comité Regional de Recursos Hidráulicos
ESS-P	Earth System Science Partnership
GEC	Global Environmental Change
GECaFS	Global Environmental Change and Food Systems
GECHS	Global Environmental Change and Human Security
FAO	Food and Agriculture Organization of the United Nations
IAI	Inter-American Institute for Global Change Research
IDGEC	Institutional Dimensions of Global Environmental Change
IFPRI	International Food Policy Research Institute
IFS	International Foundation for Science
IHDP	International Human Dimensions Programme on Global Environmental Change
IHDW	International Human Dimensions Workshop
IIASA	International Institute for Applied Systems Analysis
IICA	Inter-American Institute for Cooperation on Agriculture
ISSC	International Social Science Council
IT	Industrial Transformation
LUCC	Land-Use and Land-Cover Change
NAS-CR	National Academy of Science of Costa Rica
NEF	National Environmental Forum
OdD	Observatorio de Desarrollo
SICA	Sistema de Integración Centroamericana
START	Global Change System for Analysis, Research and Training
TWAS	Third World Academy of Sciences
UCR	Universidad de Costa Rica
UNA	Universidad Nacional Costa Rica
UNEP	United Nations Environment Programme
UNITAR	United Nations Institute for Training and Research
UNU-EHS	United Nations Institute for Environment and Human Security

In the Appendix section, the report may also include:

Abstracts, Power Point Slides of conference/symposia/workshop presentations

Conference/symposium/workshop reports

The final project report must follow the template outlined in this document.

Please submit the report to Linda Stevenson < l Stevenson@apn.gr.jp > by:

15th June 2005

In the following formats:

Soft Copy version (CD-ROM about 30) and

Hard copy version (about 30 bound copies) if within the available budget

Both hard and soft copies of the report should be addressed to:

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