



Toward a Century of Water: IGES Approach to Water Issues

"WWF3 Pre-session: Water Quality Monitoring and Modeling-The Present Situation and Partnership for the Future" held on Oct. 16-17, 2002.

The 21st century has been dubbed the 'Century of Water'. By 2025, an estimated 3.5 billion people will live in areas suffering from serious water stress. That's 6.5 times the figure for 2000. Today, at least 1.1 billion people lack access to safe drinking water and 2.5 billion live without adequate sanitation. Halving the proportion of people unable to obtain safe drinking water by 2015 was a goal of the UN Millennium Declaration. At the Johannesburg Summit, increasing the supply of safe drinking water and access to sanitation was among major issues raised from the perspective of eradicating poverty. Water resources are essential to sustaining life on earth and socio-economic development, but population growth, global economic development and global and regional environmental deterioration are expected to make water issues increasingly complex and serious. They will command greater international interest in 2003 is the UN designated 'International Year of Freshwater' with the Third World



Water Forum (WWF3) taking place in Kyoto in March.

For the Asia-Pacific, home to 60% of the world's population and about 70%

of its poor, water resource management is important for achieving sustainable development. It has been recognized as a priority at international and regional conferences, including the recent Ministerial Conference on Environment and Development hosted by the UN Economic and Social Commission for Asia and the Pacific (UN/ESCAP). IGES understands the importance and urgency of addressing regional water resources issues. Its Urban Environmental Management Project promotes research on urban water problems through activities like organizing partnership seminars on urban water management. The Environmental Education Project has put together a package of educational materials for people concerned with wetland conservation. The Capacity Building Program is developing eLearning courses on water problems during fiscal 2003.

As a contribution to WWF3, IGES, the Ministry of Environment, the Japan Society on Water Environment and the United Nations University (UNU) will co-host a session in Kyoto themed on water quality monitoring, which is essential for addressing water environment issues. A preparatory meeting "WWF3 Pre-session: Water Quality Monitoring and Modeling - The Present Situation and Partnership for the Future" was held at the UNU in Tokyo on Oct. 16-17, 2002. It

was attended by officials from Indonesia, Malaysia, Thailand and Vietnam, as well as people representing the Japanese government, academia and NGOs. Reports were presented on the current situations and problems being faced in each area. In addition, IGES is expected to contribute to the upcoming WWF3 Sub-group Meeting of the Ministerial Conference.

IGES plans to take a more intensive approach to water resources management issues by launching a "Freshwater Resources Management Project" during fiscal 2003. In preparation, it has formed a "Study Group on Freshwater Resources Management in Asia" comprising Japanese experts (Chairperson: Dr.

Shinichiro Ohgaki, Dean, School of Engineering, University of Tokyo) to identify problems involved and possible research themes. Considering the diversity nature of water issues, the new project will launch a strategic research on sustainable and integrated water resources management in the region, in collaboration with other IGES projects.

See p.3 for results from IGES partnership seminar on urban water management.
See p.2 for details on eLearning courses on water issues.
For results from WWF3 Pre-session:
http://www.iges.or.jp/jp/itp/activity_wwf3.htm

Coming Soon:

IGES eCourses on Freshwater Resources -Dialogue of Policy Makers and Educators-

We live at the time of the largest ever youth population on Earth: more than one fourth (1.7 billion) of the world population is between 10-24 years, predominantly living in developing countries¹. Their aspirations - based on their current lifestyle and education - play a critical role in what decisions they make about freshwater and other natural resources, economic and social development. Their decisions will significantly influence the sustainability of development at global scale. Do key actors - policy makers and educators - have the needed capacities to provide youth with appealing quality of life? There has never been more pressing need for innovative policies and an education that is relevant to life.

IGES Capacity Building Program is dedicated to support policy makers in the Asia-Pacific region to develop innovative policies. IGES' approach represents a unique combination of traditional training workshops and eLearning including internet-based, short, self-study, free eCourses that translate policy research to training programs. Currently 40 eCourses (English and Japanese) are offered to enhance policy makers' knowledge and skills in various environmental issues and management: <http://iges.net>

IGES, however, embarks on a new eCourse design avenue in preparation for the Third World Water Forum (WWF3). The new design creates joint capacity de-

velopment opportunities for both educators and policy makers to support their communication and cooperation. The synergy of these traditionally distant and high impact actors could mobilize significant resources for societal change both in the current and next generations.

IGES is developing a computer-based interactive exercise for WWF3 to facilitate the dialogue of educators and policy makers. The exercise engages the visitors of WWF3 in a virtual discussion about priority actions about freshwater resources. The elements of the discussion are drawn from various resources, mainly from the recommendations of the International Freshwater Conference², Bonn, December 2001 which constitute the basic reference material for WWF3 in Kyoto, March 2003.

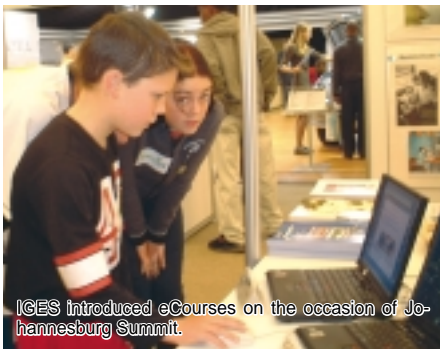
What roles researchers could play to better support policy making, sustainable governance and improve education and training? What roles educators and policy makers should play in these changes? How can we make education relevant to young people's life?

Given the choice, 10-14 year Japanese students would spend less than a day per week with teacher-led, classroom-based studies to learn about their community. They would rather learn by gathering information from the internet (22%), hands-on scientific measurements in a laboratory (21%) and in natural environments (19%). 82% of these young people prefer learning with their peers only, without mixing with other generations.³ These eager young people know real learning happens through a variety of real life experiences. They do not seem to know, however, the value and joy of inter-generational learning. Trans-generational, indigenous knowledge could be soon lost for them ...

These are the issues IGES eCourses on Freshwater Resources will address.

This exercise is a precursor of a series of eCourses on freshwater resources for policy makers and educators, complete with case studies, concrete data and multi-stakeholders' quotes from

the Asia-Pacific region. The content of these future eCourses - to be published in 2003-2004 - will be based on the research findings and policy recommendations of IGES "Freshwater Resources Management" project.



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¹Population Reference Bureau: http://www.prb.org/Content/NavigationMenu/Measure_Communication/Documents/The_Worlds_Youth_2000.htm

²Bonn Recommendations: http://www.water-2001.de/outcome/BonnRecommendations/Bonn_Recommendations.pdf

³IGES Capacity Building Program's research (2002)

The Launch of a Japan-originated GEF project

Hiroya Kotani
Executive Director of International Lake Environment Committee

ILEC: an NGO working for the promotion of international knowledge exchange and research in pursuit of sound management and sustainable development of global lake environments. "Lake Basin Management Initiative" was introduced as a Japan-originated GEF project at a side event jointly hosted by the Japanese government and IGES during the second GEF General Assembly in Beijing last year.



Mr. Kotani presented "Lake Basin Management Initiative" as a Japan-originated GEF project at a side event during the second GEF Assembly.

Aiming for adoption at the Third World Water Forum scheduled for March 2003, the International Lake Environment Committee (ILEC), a Japanese NGO, is promoting the development of a "World Lake Vision" that would provide guidelines for the sound and sustainable management of the world's lakes. In collaboration with Shiga Prefecture and UNEP/IETC, ILEC has approached and called on Japanese government and United Nations organizations, as well as major global NGOs concerned with water environment, to work together to achieve the goal. The proposed vision aims to apply the idea of "Integrated Water Resources Management (IWRM)," endorsed at the Second World Water Forum held at The Hague, Netherlands in 2000, specifically to lakes, which are the clearest manifestation of the existence of global water resources, and present concrete action guidelines.

The Global Environment Facility (GEF) and the World Bank recognize the vision as a general theory for lake

and basin management. Based on this, they are drawing up an action plan incorporating detailed policies and measures for managing water resources and their basins in the 21st century. The plan involves 13

representative world lakes on which GEF has conducted management study projects in the past, plus additional some lakes recommended by ILEC and American NGO LakeNet.

The planned project is dubbed "Towards a Lake Basin Management Initiative and a Contribution to the Third World Water Forum." This medium-scale GEF project will be conducted over about 18 months with the World Bank acting as the Implementing Agency and ILEC as the Executing Agency. It will be treated as a project in GEF category 10 (projects on water resource pollutants). Expected project results include: 1) compilation, through case studies, of data and information on experiences each lake has undergone; 2) exemplification of lessons to be learned from those experiences; and 3) presentation of methods to implement effective lake management policies on a case-by-case basis.



From the right, Mr. Yoshio Yatsu, Member of the House of Representatives, Mr. Noriyasu Yamada, Counselor, Ministry of Environment, Mr. Kazunori Tanaka, Parliamentary Secretary for Finance, Ministry of Finance, Ms. Wakako Hironaka, Member of the House of Councilors and Mr. Taka Hiraishi, Senior consultant and a member of the Board of Directors of IGES, the moderator of the session.

The World Bank is currently in the final stages of allocating the budget, but as a general rule for GEF projects, concerted outside funding is necessary for about half of the gross cost, so strong support is requested from the Japanese government during this process.

KITAKYUSHU INITIATIVE SEMINAR

Public-Private Partnerships for Urban Water Supply and Wastewater Treatment

The development of financial mechanisms for urban environmental improvement is an innovative direction that has been receiving increasing attention from local governments. Strategies are necessary to encourage public initiatives and promote private sector participation in financing urban environmental infrastructure. Towards this end, IGES organized the Kitakyushu Initiative Seminar on Public-Private Partnerships for Urban Water Supply and Wastewater Treatment in order to provide a forum for open discussions on the experiences, challenges and future plans of local governments on the theme of public-private partnerships, with a specific focus on water supply and wastewater treatment. Presentations were made by people from a variety of cities participating in the Kitakyushu Initiative.

Experts facilitated discussions on the difficulty of conducting public-private partnership (PPP) for sewerage projects in certain cities, various methods of collecting user fees, risk-sharing, application of PPP projects for water supply in rural areas, establishment of investment boards, assistance by central governments (such as providing land and assistance for relocation), methods to set tariffs, decision-making responsibilities, and the importance of market competition, as well as improvement of efficiency of public works with the participation of the private sector. Factors for successful PPP – government management capacity, technical capacity, public awareness, and attractive markets – were also discussed.

Discussions also highlighted differences between municipalities with regard to autonomy in the water sector, difficulties in changing attitudes of residents (e.g., their "willingness to pay") and integration of these attitudes into the decision-making process. Ideas for improvement were also presented with regard to a pilot project being carried out in a city in China that is aiming to introduce the participation of the private sector in wastewater treatment.

This Seminar was held on Nov. 4, 2002, at China-Japan Friendship Center for Environmental Protection, Beijing, China. The results from this seminar will be utilized as input for the case study series of the IGES Urban Environmental Management Project.

For details, please contact the IGES Kitakyushu Office at kitakyushu@iges.or.jp

UNEP/IETC: UN Environment Programme International Environment Technology Centre
For further information: see <http://www.ilec.or.jp>

The 8th Session of the Conference of the Parties (COP8) and its Significance

The 8th Session of the Conference of the Parties (COP8) to the UN Framework Convention on Climate Change (UNFCCC) was held in New Delhi, India, from Oct. 23 to Nov. 1, 2002. Previous sessions, from COP3 (Kyoto) in 1997 to COP7 (Marrakech, Morocco) in 2001, spent a great deal of energy on drafting and striking agreement on working rules for the Kyoto Protocol. In fact, the focus of attention at these meetings was bargaining among industrialized countries over their obligations to reduce greenhouse gas emissions. Only after this long process was agreement reached on most working rules for the Protocol in the form of the "Marrakech Accord." After getting through such a major challenge, the focus of attention at COP8 returned to those fundamental issues involved in climate change measures and the FCCC that were subject to discussion and controversy even before Kyoto: the fairness of measures and responsibility sharing between industrialized and developing countries, and the whole concept of industrialized countries providing technical cooperation and financial assistance to developing countries. These can be described as North-South problems assuming yet another form, marking the restart of lengthy negotiations toward forming a new "post-Kyoto" framework for the first-phase target period from 2008 to 2012.

COP8 thus took on a transitional air but achieved several accomplishments. Most important was adoption of the "Delhi Declaration," which included language that urges countries yet to ratify the Kyoto Protocol to do so at an early date and confirms



priorities in emissions reduction measures and adaptation plans in both industrialized and developing countries. Although the phrasing was very indirect and weak, it was no less significant in that the necessity to reduce emissions in developing countries was affirmed with agreement of all nations. It also deserves mention that COP8 agreed on some details left unattended in the Marrakech Accord, providing a near complete basis for the Kyoto Protocol's implementation, and that progress was made

in procedures for implementing the Clean Development Mechanism (CDM). Agreement was also reached on technical criteria for national registries to manage emissions quotas, on revised guidelines for drafting national reports and on the development of international research and observation systems.

When the Kyoto Protocol comes into effect depends largely on Russia's ratification but it is highly likely to happen in 2003. This would mean that the time has come for industrialized countries, including Japan, to translate climate change measures into concrete action in earnest. Many other "post-Kyoto" issues remain, including reduction of greenhouse gas emissions in developing countries, bringing the United States back into the Kyoto Protocol and setting new targets for emissions reductions. Although the situation still appears chaotic, the significance of COP8 can probably be found in the fact that progress, though limited, was made for the framework for climate change measures to head into a new stage.

During COP8, IGES hosted a symposium entitled "Climate Policy Dialogue in Asia", where policymakers and researchers discussed the current state of climate change measures and the future direction of sustainable development.

For further information: see <http://www.iisd.ca/linkages/climate/cop8/enbots/29oct.html>

Revision of the 1996 IPCC Guidelines

The United Nations Framework Convention on Climate Change (UNFCCC, opened for signature in 1992 at UNCED) and its Kyoto Protocol adopted at Kyoto in 1997 provide an international system for the activities aimed at combating the threat of climate change. In this vein, the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories (IPCC Guidelines)* are designed to assist countries to meet their greenhouse gas (GHG) abatement commitments on the basis of transparent, consistent, comparable, complete and accurate GHG inventories for all major sources and sinks.

The *IPCC Guidelines* were adopted by IPCC in 1995. In 1996 all UNFCCC Parties were encouraged to use them when preparing GHG emission estimates for reporting to the UNFCCC. The *IPCC Guidelines* now include revised methodologies and default

data for six sectors: energy, industrial processes, solvent and other product use, agriculture, waste, and land-use change and forestry.

Notwithstanding, the *IPCC Guidelines* need periodical revisions in order to be consistent with evolving scientific knowledge. Accordingly, in October/November 2002, Subsidiary Body for Scientific and Technological Advice (SBSTA) invited the IPCC to revise the *IPCC Guidelines* taking into consideration the relevant work under the Convention and the Kyoto Protocol, and to aim to complete the work by early 2006. This will entail, inter alia, the use of several key documents such as the existing *IPCC Guidelines*, the IPCC report on Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories, IPCC Emission Factor Database, the report on

Good Practice Guidance for the Land Use, Land-Use Change and Forestry (under preparation by the IPCC to be completed by the end of 2003), as background material.

It is envisaged that the NGGIP-TSU hosted by IGES will start the preparatory work for this task in 2003 in the form of a scoping workshop while the actual revision work will start in 2004. Cardinal principles for this task will attempt to ensure the following: broad participation by all countries; industry involvement; as well as improvement of coverage of gases, sectors, regional peculiarities and new sources and sinks. Attention will also be given to the restructuring of the sectors and interlinking within the *IPCC Guidelines* so as to maintain consistency as well as improving readability and user-friendliness.

For further information: see <http://www.ipcc-nggip.iges.or.jp>

The Second Toyota Stakeholder Dialogue

Masaharu Yagishita

Professor, Department of Environmental Policy, Graduate School of Environmental Studies,
Nagoya University

Recently, an endeavor called "Stakeholder Dialogue" is receiving much attention. This gathering of interested parties and sectors with diversified opinions and values holds discussions on specific themes, confirms and absorbs common ground and differences, as well as their background, and wherever possible, finds shared solutions.

The "Second Toyota Stakeholder Dialogue" was held at IGES on Oct. 18-19, 2002. This event was set up by Toyota Motor Corporation to hear opinions from various sectors for use in working out its own business strategy.

According to Toyota Motor Corporation, President Fujio Cho stresses the importance of dialogue with a wide range of sectors in an effort to introduce corporate management that can meet the challenges of the 21st century. This has led to the company seeking dialogue with various sectors as a means of improving communications between businesses and stakeholders. The dialogue meeting was conducted following methods adopted by the World Business Council for Sustainable Development (WBCSD). General planning and operation of the event was entrusted to IGES, and I took on the role of facilitator.

The theme of the discussions was "Is a green market possible?" with a total of 30 people participating (9 from businesses, 8 from NPOs and other organizations, 7 mainly from research institutions, 3 from government, and 3 from Toyota). The first day was devoted to plenary sessions, including keynote presentations. On the second day, participants split into three groups for thematic discussions in the morning before returning to a plenary session in the afternoon. The two days of debate were heated, free and vigorous.

Discussions focused on three issues: 1) What is a green market?; 2) What are the roles of business, consumers, government and NGO/NPOs in seeking market greening? (structural transformation); and 3) what is the driving force behind realizing a green market? To sum up, participants gained a common awareness of the importance of businesses, consumers and government entering into equal partnerships to build a green market. In this regard, they shared the following views: it is important that NGO/NPOs provide fair evaluation of environmental conservation-oriented products and transmit relevant information; and that businesses, consumers and government

play intermediary roles and perform policy recommendation functions. The presence of influential NPOs that can perform such functions is necessary in Japan; and it is extremely important to have a mature civil society supporting those NPOs. For its part, IGES was asked to become more aggressively involved with policy recommendation.

There appeared to be much to gain from the Toyota Stakeholder Dialogues held in 2001 and 2002. I am sure that participants from businesses, NPOs and government alike have realized the need for more opportunities for candid exchanges of view like this and the importance of increasing the number of citizens, government branches and businesses with abilities and experience for this kind of debate. Many participants expressed hope for this dialogue to continue. Some NPOs signaled their intention to organize future events like this on their own. I do hope the network of green minds built upon this dialogue initiative will be expanded in the future to integrate variety of expertise from wider range of folks under the same banner of sustainability.



Plenary session held on Oct. 18, 2002



Mr. Hiroyuki Tada, General Manager of Operational Quality Department, Sony/EMCS Corporation



Ms. Kikuko Tatsumi, Director of Nippon Association of Consumer Specialists and Ms. Michie Kishigami, Managing Director for Japan, International Council for Local Environmental Initiatives (ICLEI)



Mr. Hiroyuki Sato, Deputy Director General of Green Purchasing Network (GPN)

A Stay at the Wuppertal Institute

Yasuhiro Kanda
Business and Environment Project Research Fellow

I was fortunate to have the opportunity to stay at the Wuppertal Institute for Climate, Environment and Energy in Germany as a visiting researcher and to explore possible collaborative work for three months, from October to December 2002.

The Wuppertal Institute is one of the signatory institutes of the Charter for the Establishment of IGES, and a researcher from that institute stayed with IGES last year. It was established by the German state of Nordrhein-Westfalen in 1992, and its activities are not restricted to that state but rather take on a global perspective. It is this institute that proposed the "Factor 4" concept (doubling wealth and halving resource consumption) to the world, and is developing innovative approaches to realize the concept.

During my time there, I enjoyed discussions with many researchers and appreciated generous supports from Dr.

Bleischwitz (far right in photo). Through the discussions, I came to understand key concepts in ways not possible just by reading, and I realized that the Factor 4 concept is at the core of this institute. I also sensed the vitality of the institute, as it goes through positive restructuring today, 10 years after being established.

Even though my stay was short, it was a valuable experience for me to live in Germany and to learn the perspectives of German people by living with them. I now understand better the value of exchanging information and learning from each other about leading innovative policies and approaches. I also learned the importance of respecting local customs and cultures, and that the importance of links between institutions, and hope to continue contributing to exchange with relat-

ed organizations, including the Wuppertal Institute.

I extend my sincere appreciation to Ms. Brosch (middle right) and Mr. Nowak (far left) and others for their assistance during my stay.



Wuppertal researchers and Mr. Kanda (middle left)

IGES Supporting Member Seminars

At IGES we regularly hold seminars for our supporting members. These seminars provide information about IGES research results quickly in a manner that members can easily understand, and also give us a chance to receive direct input about our activities from members. During this fiscal year, IGES held a total of four such seminars and an additional two are planned for March.

The first seminar, held in October 2002, was entitled "Considering the Johannesburg Summit from a Community-based Perspective." Participants reviewed summit debate from the viewpoint of community-level activities and discussed how local societies could contribute. In the second seminar held in November, Yasushi Ninomiya, an IGES Climate Policy Project researcher just back from the 8th session of the Conference of the Parties to the UN Framework Convention on Climate Change (COP8), presented a report and talked with participants about community based efforts to curb global warming. Held in December, the third seminar took up the issue of ecotourism and, while scrutinizing actual examples, held discussions on the possibilities of ecotourism utilizing local nature and culture. The fourth seminar, held in January 2003, took the form of a workshop, something slightly different from those in the past. People responsible for environ-

mental management systems (ISO14001) were invited to participate in the workshop. Lively discussions took place about challenges and problems being faced by people in charge of running ISO14001. Plans are under way for results of this workshop to appear in eLearning Internet training courses that the IGES Capacity Building Program is developing. The idea is to benefit not only discussion participants, but all people involved with the running of ISO14001.

From its inception, IGES has been holding supporting member seminars, at which various themes have been taken up. Each time, supporting members and other participants have lively and enthusiastic discussions.

In addition, IGES conducts questionnaire and other surveys that ask supporting members to give comments and suggestions about our activities. By doing so, we try to better acquaint ourselves with the needs of various fields and sectors and to conduct our research in a manner that will help solve problems they face.

This year IGES revised part of its supporting member system (Affiliate and Associate Membership) and is currently accepting registration of members. Please take this opportunity to participate in IGES activities.

For information about registration, please see <http://www.iges.or.jp/jp/from/index.html>.

Tours of the new IGES research facility

The new IGES research facility has attracted some 900 visitors since it opened in June 2002. It has been featured in newspapers, magazines and on television as a model for environmentally-conscious construction that makes use of natural energy. The visitors included many from abroad - ambassadors in charge of the environment as well as researchers, business people and university staff. They came from Sweden, China and South Korea, among other countries, to see the latest technology at work, such as natural lighting, solar batteries, NAS batteries and more. Of course, we received a number of visitors from the local community as well, including the town of Hayama where the facility is located. We hope that these visits will lead to a further expansion of the IGES research network.

Facility tours are generally held every Tuesday afternoon, each lasting approximately an hour and a half. Inquiries can be made at the IGES secretariat.

Calls for Strategic and Policy-oriented Research Papers to IRES

"International Review for Environmental Strategies (IRES)" is a peer-reviewed biannual journal aimed at contributing to the development of strategically and policy-oriented environmental research to address global environmental issues. The Winter 2002 issue, to be published in February, will cover analysis of the issue of freshwater resources management focusing on Asia with a global view. IGES is currently calling for strategic and policy-oriented research papers to be published in the Winter 2003 issue. The submission deadline is 30 April 2003.

Price: 2,200 Japanese yen (Incl. Postage)

For further information:

<http://www.iges.or.jp/en/pub/ires/ires.html>



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