

Long-Term Perspective and Policy Integration Project

Hideyuki Mori Project Leader

1. Overview

1.1. Background, objectives, and approach

The objective of the Long-Term Perspective and Policy Integration Project (LTP) is to conduct research on how to cope with the environmental issues of the twenty-first century by taking a long-term and cross-sectoral approach and to propose innovative policies to policy-makers and others. It focused on the following policy analysis objectives in cooperation with other IGES projects and relevant organisations:

- 1. Cross-sectoral policy analysis with a long-term perspective
- 2. Policy analysis that will contribute to international dialogue on sustainable development in the Asia-Pacific region
- 3. Policy analysis on pressing problems commonly observed in the region

In carrying out its first objective in the second phase, the LTP conducted the following research activities:

- publication of the "Environmental White Paper for Sustainable Development in the Asia-Pacific Region" (tentative title), which describes an analysis of the current state of the environment in the Asia-Pacific region, along with an evaluation and prognostication of future directions;
- finalisation of the ECO ASIA Long-Term Perspective Project (LTPP);
- launch and implementation of the Asia-Pacific Environmental Innovation Strategy Project (APEIS), which is proposed as a successor project of the LTPP; and
- preparation of a sub-regional priority paper on Northeast Asia as a background paper for the Tripartite Environment Ministers Meeting (TEMM) ministerial consultations in 2003.

Under objective 2, the LTP carried out the following research activities:

- conducted research to support the Asia-Pacific Forum for Environment and Development (APFED);
- facilitated the Manila Policy Dialogue on transport and the environment in Asia; and
- the Japan–U.S. Task Force for Achieving Harmony in Trade and the Environment.

Under objective 3, the LTP carried out the following research activities:

- research on the information technology revolution and the environment;
- review of research components needed to launch the Freshwater Resources Management Project;
- comprehensive assessment of the implementation of Agenda 21 in Northeast Asia; and
- preparation of a priority paper on sustainable development in Northeast Asia.

In addition, the LTP carried out the following activity to support promotion of environmental communication led by private sectors:

• facilitation of the Toyota Stakeholder Dialogue.

In the process of conducting these research activities, the LTP actively collaborated with research institutes in the region and relevant international organisations, such as the Asian Development Bank (ADB), United Nations Environment Programme (UNEP), and the United Nations Economic and Social Commission for Asia and the

Pacific (ESCAP). Through the APFED process, the LTP organised points for timely discussions and developed policy proposals towards the 2002 World Summit on Sustainable Development (WSSD) in Johannesburg.

1.2. Review of achievements

1.2.1. Asia-Pacific Environmental Innovative Strategic Project (APEIS) and Research on Innovative and Strategic Policy Options (RISPO)

a. Background, objectives, and approach

1. Background

APEIS is composed of three sub-projects—Integrated Environmental Monitoring (IEM), Integrated Environmental Assessment (IEA), and Research on Innovative and Strategic Policy Options (RISPO)—with the aim of providing a scientific basis for decision-making and to establish on-going communication in the Asia-Pacific region. The Long-Term Perspective and Policy Integration Project (LTP) is responsible for the implementation of RISPO, and in order to do that required coordinating cooperation throughout IGES and organising research teams with research institutes and researchers in the Asia-Pacific region. Meetings were held on possible collaboration among various research institutes in the Asia-Pacific Region for APEIS/RISPO in September 2001 at the United Nations University's Institute of Advanced Studies in Tokyo. Subsequently, the plan for collaborative research was created by the participants from the signatory organisations of IGES within the Asia-Pacific region, and the project was at last approved by the Tenth Environment Congress for Asia and the Pacific (ECO ASIA) in October 2001 and prepared for official launch from fiscal year (FY) 2002.

At the first Research Coordination Committee meeting, held in March 2002 at the National Institute for Environmental Studies in Tsukuba, the master plan on the linkages with the other two APEIS sub-projects (IEM and IEA) was developed with the participation of all APEIS sub-projects. At the first meeting of the ECO ASIA Panel, held in July 2002 at IGES in Hayama, the overall implementation plan for APEIS, as well as the research plans for each sub-project, were endorsed by the governments of the countries in the Asia-Pacific region. The projects commenced in FY2002.

2. Objectives

The RISPO project aims to develop knowledge-based reference tools, such as the Good Practices Inventory, and to propose strategic policy options in order to help policy-makers who are seeking better solutions to the sustainable development challenges that they face. The project also places significant emphasis on applying these research findings to actual attempts to promote sustainable development, instead of leaving them simply as a database or policy recommendations. Thus, providing policy-makers with capacity-building opportunities is an important aspect of RISPO's activities. At the same time, the intent of the project is to examine the workability of its recommendations by implementing pilot projects.

3. Approach

With environmental innovation as the overarching theme of the three sub-projects, they each address urgent sustainable development issues in the Asia-Pacific region, taking different approaches that complement each other. Although the Integrated Environmental Monitoring sub-project (IEM) and the Integrated Environmental Assessment sub-project (IEA) take bird's-eye-view approaches by adopting research methodologies such as satellite monitoring and computer simulation, RISPO places significant emphasis on ground-based field studies. Through these practices, the intention is that a sound understanding will be developed of the factors promoting or hindering sustainable development in various settings, and that the lessons learned will be shared among policy-makers and wider audiences.

The final objective of APEIS/RISPO is by March 2005 to propose innovative policy options for environmental innovation in the Asia-Pacific region and to provide a good practices inventory of various examples and cases

aimed at sustainable development. In order to realise this objective, strategic research on eight sub-themes (see Table 1) is being collaboratively implemented with research institutes and key international organisations in the environment field in the Asia-Pacific region. It is also expected that dialogues with policy-makers, such as the ECO ASIA Panel, will be maintained throughout and beyond the project's duration.

Category	Sub-theme					
Economic aspect	 Innovative financing for renewable energy development Creation of an inter-boundary market for recyclable materials Improving environmental performance of small and medium-sized enterprises 					
Physical aspect	 Development of environmentally sustainable transport systems in urban areas Promotion of biomass energy 					
Social aspect	 Promoting environmental education by non-governmental organisations (NGOs) Promoting local/indigenous knowledge-based sustainable resource management Facilitating community-based tourism in protected areas 					

b. Review of achievements

The Good Practices Inventory and Strategic Policy Options are two major expected outcomes of the RISPO project. The achievements to date are compiled in the following reports:

- Technical Report
- Technical Summary
- Progress Report
- Commissioned Report (Research on Innovative and Strategic Policy Options) by the Ministry of Environment

1. Good Practices Inventory

In order to involve a wide range of potential users and to reflect their needs in the process of developing the Good Practices Inventory, a questionnaire survey was conducted from 24 January to 5 February 2003. In the inquiry sent to 89 relevant stakeholders was a listing of the Web site where two sample cases on innovative financing and urban transportation were presented in the Good Practices Inventory, and they were asked for their opinions and feedback.

Based on the feedback from the questionnaire survey, some modifications to the interface were made, and as a result the Good Practices Inventory became an easily searchable database on the RISPO Web site, consisting of a number of examples of good practices that are rich in lessons and potential for replication or application. The latest format and guidelines are available at http://www.iges.or.jp/APEIS/RISPO>.

Good (or unsuccessful) practices that were identified and analysed, based upon literature reviews and field studies conducted by each research team, have now been compiled in the Good Practices Inventory. Information on each good practice includes the critical and innovative instruments that make it successful, the lessons learned, and its potential for application according to the format and guidelines. As a prototype version, 47 cases of good practices collected through the research activities in FY2003 were made available on the RISPO Web site in June 2003.

2. Strategic Policy Options

In order to share the progress of research activities among the researchers and policy-makers participating in RISPO, and to clarify the direction of the research in developing the Strategic Policy Options, plenary workshops and research team meetings were held. At the research team meeting, held at Bangkok in November 2003, the main framework of the Strategic Policy Options was discussed substantially, and, as a result, the provisional frameworks for each sub-theme of the RISPO research areas were developed with the participation of experts.

The Strategic Policy Options is a set of proposals—clues for maturing sustainable development policy—primarily targeting policy-makers at local, national, and/or regional or international levels. Through a close look at the critical and innovative instruments extracted from the good practices, the political implications of further promoting actions toward sustainable development will be examined. Furthermore, taking into account the diverse social, cultural, and economic backgrounds in the Asia-Pacific region, the policy measures that are necessary to put each strategy into practice will be described.

c. Achievement of objectives

In regard to APEIS/RISPO, much time was spent in FY2001 preparing for the launch of this project and creating frameworks. FY2002 was spent identifying research themes, seeking cooperation within IGES, and formulating a collaborative research team with other research institutes and researchers in the Asia-Pacific region. In FY2003 the project proceeded with research, making the best use of these collaborations and ensuring the outcomes of the research—i.e., the proposals of the Strategic Policy Options and the Good Practices Inventory, which were developed through frequent contact with researchers and policy-makers in the region. The achievements of the last phase contributed to formulation of a basis to develop and enrich the research outcomes.

Along with the preliminary research plan proposal for FY2003, some of the RISPO research sub-themes include a pilot project and a capacity-building programme for policy-makers; however, the pilot projects met with some difficulties in terms of time and budget for evaluating the policy impacts of the proposed policy options. As a result, only capacity-building opportunities for policy-makers in the Asia-Pacific region will be implemented in workshops or in other forms during FY2004.

1.2.2. Asia-Pacific Forum for Environment and Development (APFED)

a. Background, objectives, and approach

The Asia-Pacific Forum for Environment and Development (APFED) is a forum of twenty-six eminent persons, mostly from the region. It was officially launched at ECO ASIA 2001 in October 2001 with a mandate to define a new model for an equitable and environmentally sustainable society and then present it to policy-makers and other persons of influence throughout the world. The main output of APFED is its final report, which is to be finalised by December 2004. IGES was appointed as the secretariat of APFED to support smooth deliberation and formulation of the forum's outputs, and the LTP was put in charge of the task.

As the APFED Secretariat, the LTP provided logistical as well as substantive support to the forum meetings. Such support included overall planning of the forum's deliberation schedule, preparation of meeting documents, and implementation of the commitments that APFED pledged in its Message to the World Summit on Sustainable Development (WSSD) in 2002. With reference to the actual APFED meetings, these are meetings of experts based on the fields identified as issues for APFED deliberations, and there are multi-stakeholder meetings to hear opinions and feedback on APFED activities from various groups such as nations, local governments, private sectors, NGOs, women, and youth.

The APFED members are as follows (as of January 2004):

- Vinya S. Ariyaratne, Executive Director, Sarvodaya Shramadana Movement, Sri Lanka
- Neth Barom, Vice-Rector, Royal University of Phnom Penh, Cambodia
- James Cecil Cocker, Minister of the Environment, Department of Environment, Tonga
- Nambaryn Enkhbayar, Prime Minister of Mongolia
- Cielito F. Habito, Professor, Department of Economics, Ateneo de Manila University, the Philippines
- Barbara R. Hardy, Former Commissioner of The Australian Heritage Commission
- Ryutaro Hashimoto, Former Prime Minister of Japan
- Parvez Hassan, Former Chairman of The World Conservation Union (IUCN) Law Commission, Pakistan
- Yolanda Kakabadse, President, The World Conservation Union (IUCN)
- Martin Khor, Director, Third World Network, Malaysia
- Kim Jin-Hyun, Senior Research Advisor, Korea International Trade Association
- Reza Maknoon, Deputy Chairman, National Committee SD, Iran
- Nakamura Kuniwo, Former President, Republic of Palau
- Wadan Lal Narsey, Associate Professor, Economics Department, The University of the South Pacific, Fiji
- Olga Ponizova, Executive Director, Eco-Accord Centre on Environment & Development, Russia
- Qu Geping, Chairman, Commission for Environment Protection & Resource Conservation, National People's Congress, People's Republic of China
- Emil Salim, Chairman of the Board of Trustees, Indonesian Biodiversity Foundation
- Maurice F. Strong, Chairman of Earth Council, Rector of United Nations University of Peace
- Simon S. C. Tay, Chairman of the Singapore Institute of International Affairs, Singapore
- Tongroj Onchan, President, The Mekong Environment and Resource Institute, Thailand
- Bulat Yessekin, Executive Director, The Regional Environmental Centre for Central Asia, Kazakhstan
- Tadao Chino, President, Asian Development Bank (ADB)
- Hans van Ginkel, Rector, United Nations University (UNU)
- Klaus Töpfer, Executive Director, United Nations Environment Programme (UNEP)
- Kim Hak-Su, Executive Secretary, Economic and Social Commission for Asia and the Pacific (ESCAP)
- Akio Morishima, Chair of the Board of Directors, Institute for Global Environmental Strategies (IGES), Japan

b. Major activities and achievements

The activities of APFED can be categorised into three stages, namely, the preparation stage (April–October 2001), the interim deliberation stage to formulate (November 2001–September 2002), and the final deliberation stage to create the APFED Final Report (October 2002–December 2004).

1. Preparatory stage of APFED deliberations (April-October 2001)

In this stage, the overall framework of APFED deliberations was decided by the APFED members during a preparatory meeting (27 September 2001, Tokyo, Japan) and an organisational meeting (14 October 2001, Tokyo, Japan). The LTP prepared documents to facilitate the deliberations at the meetings, including terms of reference (TOR), time schedule, and an issue paper on future perspectives of sustainable development in the Asia-Pacific region. At the organisational meeting, APFED members decided to present the recommendations to the WSSD as an interim output. They also agreed that these should be concentrated on some priority issues that APFED had identified, including freshwater resources, renewable energy, trade, and finance.

2. Interim deliberation stage: Formulation of the APFED Message to the WSSD (November 2001–September 2002)

As agreed at the organisational meeting, APFED concentrated its first work on the development of recommendations to the WSSD. Two substantive meetings and their associated meetings were held to develop recommendations (see Table 2). The outcome of the deliberations was compiled into the APFED Message to the WSSD, which was adopted at APFED's Second Substantive Meeting in May 2002. The APFED Message was composed of recommendations on five sectoral issues (freshwater resources, renewable energy, trade, finance, and urbanisation), two cross-cutting issues (governance and capacity building), as well as three APFED commitments, namely, collection of best policy practices (BPP), creation of an inventory of capacity-building programmes (CBP), and establishment of the Network of Researchers and Research Institutes (NetRes). The APFED Message was sent to leaders of countries all over the world under the name of the APFED chairperson, Mr. Ryutaro Hashimoto. It was also presented on the occasion of the APEIS/APFED Side-Event at the Fourth Preparatory Committee for the WSSD (PrepCom IV) on 3 June 2002 in Bali, Indonesia, as well as at the APFED Parallel-Event at the WSSD, at the Japan Pavilion in Ubuntu Village, Johannesburg, South Africa, on 28 August 2002. Over 100 participants of the respective events welcomed the APFED Message and expressed interest in the APFED's future work. As well, the APFED Commitments (BPP, CBP, and NetRes) in the APFED Message were registered as one of the commitments of Type II outcomes of the WSSD.

Throughout the interim stage, the LTP provided logistical and substantial support to APFED in the formulation and distribution of the APFED Message, e.g., through preparation of all meeting documents and identification of experts and stakeholders to provide input to APFED. As well, overview papers on the four priority issues identified by APFED (freshwater resources, renewable energy, trade, and finance) were prepared by the LTP, and these helped the members at the First Substantive Meeting of APFED to identify the possible elements to be included in the APFED Message. A draft of the APFED Message to the WSSD was also prepared by the LTP researchers. Through its development process, the LTP was able to tap into networks of experts and relevant stakeholders.

3. Final deliberation stage: Development of the APFED Final Report (October 2002–December 2004)

In its final deliberation stage, APFED is active in preparation of its final report and implementation of the three commitments made in the APFED Message. The work of APFED will continue until the end of 2004, beyond the Second Strategic Research Phase of IGES. By February 2004, two substantive meetings and a series of meetings to support APFED activities had been held, as shown in Table 1.

The LTP extended its expertise in formulation of the APFED Final Draft. The Zero Draft of the report was prepared and presented by the LTP for discussion at the Fourth Substantive Meeting (APFED4) in August 2003 in Mongolia. Having received comments from APFED members, the LTP is now preparing the first draft, in collaboration with the United Nations University (UNU) and the United Nations Environment Programme (UNEP), and it will be submitted to the Fifth Substantive Meeting (APFED5) in May 2004. In preparation, two expert meetings were held in the Philippines and Palau, respectively, to incorporate the views of the experts. A multi-stakeholder meeting is scheduled in March 2004 in Sri Lanka for further elaboration.

The LTP is also actively engaged in implementation of the APFED Commitments, in particular the collection of best policy practices (BPP) and development of an inventory of capacity building programmes (CBP). Regarding the BPP, more than eighty practices have been collected to date with the cooperation of APFED members, and the BPP database has also been under development for interim evaluation at APFED5. For intensive discussion on BPP criteria and future utilisation, a workshop was held at the IGES headquarters in December 2003 with the participation of seven experts nominated by APFED members. Information on CBPs is also currently being collected based on information provided by APFED members. The BPP and CBP databases will be developed for finalisation at the Sixth Substantive Meeting (APFED6).

c. Degree of attainment of the objective

As APFED Secretariat, the LTP was expected to play an active role in facilitating APFED discussions. Four substantive meetings of APFED as well as related meetings (expert meetings and multi-stakeholder meetings) have been successfully completed so far. In the course of AFFED deliberations, the LTP succeeded in drafting key outputs, such as the APFED Message and the draft of the Final Report. APFED is a forum of eminent persons from the region, and its outputs are drawing the attention of policy-makers in the region. Its final output, the APFED Final Report, will be presented at the Ministerial Conference on Environment and Development (MCED) and Eco Asia in 2005. In that sense, the expertise accumulated by the LTP through its research works have contributed or will contribute to regional policy-making process through APFED's outputs.

Stage	Meeting title	Date	Venue	Chairperson	Main objective(s)		
Preparatory stage	Preparatory Meeting	27 Sept. 2001	Tokyo, Japan	Mr. Ryutaro Hashimoto	Discussion on the framework of APFED activities		
	Organisational Meeting	14 Oct. 2001	Tokyo, Japan	Mr. Ryutaro Hashimoto			
Interim deliberation stage	First Substantive Meeting (APFED1)	12–13 Jan. 2002	Bangkok, Thailand		Elements to be included in the APFED Message		
	Multi-Stakeholder Meeting for APFED1	10 Jan. 2002	Bangkok, Thailand	Dr. Tongroj Onchan, APFED member from Thailand	Expectations of the APFED Message		
	Expert Meeting for APFED 1	11 Jan. 2002	Bangkok, Thailand	Dr. Phaichitr Uathavikul, Chair of the Board of Directors of the Thailand Environment Institute	Elements to be included in the APFED Message, in particular regarding freshwater resources, renewable energy, and trade and the environment.		
	Second Substantive Meeting (APFED 2)	4–5 May 2002	Jakarta, Indonesia	Prof. Morishima chaired the meeting on behalf of Mr. Hashimoto	Finalisation and adoption of the APFED Message		
	Expert meetings for APFED2						
	On freshwater resources	29 Mar. 2003	Tokyo, Japan	Dr. Apichart Anukularmphai, Chairperson of GWP South East Asia-TAC			
	On trade and finance	1 Apr. 2003	Tokyo, Japan	Dr. Ryokichi Hirono, Professor Emeritus, Seikei University (session on finance); Mr. Nirmal Andrews, Regional Director and Representative, UNEP/ROAP (session on trade and development)	Elaborate the preliminary draft of the APFED Message		
	On renewable energy	2 Apr. 2002	New Delhi, India	Chaired by Dr. R. K. Pachauri, Director-General, TERI			
	Multi-Stakeholder Meeting for APFED	3 May 2002	Jakarta, Indonesia	Chaired by Professor Akio Morishima on behalf of Dr. Emil Salim, APFED member of Indonesia	Provision of multi- stakeholders' views on the draft of the APFED Message		

Table 2. List of APFED and its related meetings in the Second Strategic Research Phase (FY2001–FY2003).

Table 2 continued

Stage	Meeting title	Date	Venue	Chairperson	Main objective(s)
Final Deliberation Stage	Third Substantive Meeting of the APFED (APFED3)	25–26 Jan. 2003	Guilin, People's Republic of China (P.R.C.)	Mr. Ryutato Hashimoto, Chair of APFED	Outline of APFED Final Report and work plan for APFED Commitments
	Expert Meeting on an Integrated Approach to Managing Urbanization with Particular Emphasis on Sustainable Land Use	23 Jan. 2003	Guilin, P.R.C.	Dr. Qu Geping, APFED Member of PRC	Inputs to APFED on the subject
	Multi-Stakeholder Meeting	24 Jan. 2003	Guilin, P.R.C.	Dr. Qu Geping, APFED Member of P.R.C.	Provision of multi- stakeholders' views on elements to be included in the Final Report
	The Fourth Substantive Meeting (APFED4)	23–24 Aug. 2003	Ulaanbaatar, Mongolia	Mr. Ryutato Hashimoto, Chair of APFED	Consideration of the Zero Draft of the Final Report and progress of implementation of APFED Commitments
	Best Policy Practice Workshop	11–12 Dec. 2003	Kanagawa, Japan	Mr. Hideyuki Mori, LTP Project Leader	Consideration of criteria and utilisation of BPPs
	Manila Expert Meeting	16–17 Dec. 2003	Manila, the Philippines	Dr. Cecilito Habito, APFED member of the Philippines	Elaboration of the preliminary version of the First Draft
	Palau Expert Meeting	16–17 Jan. 2004	Koror, Palau	Mr. Kwnio Nakamura, APFED member of Palau	
	Sri Lanka Multi- Stakeholder Meeting	20–21 Mar. 2004	Colombo, Sri Lanka	Dr. Vinya Ariyaratne, APFED member of Sri Lanka	

1.2.3. Environmental White Paper for Sustainable Development in the Asia-Pacific Region (tentative title)

a. Background, objectives, and approach

It is considered that the Asia-Pacific region will have a great impact on the global environment in the twenty-first century due to its expected economic development and population growth. To provide and disseminate innovative policy recommendations to cope with the situation, at the Board of Directors Meeting in February 2001, it was decided to launch a new IGES-wide initiative—publication of the IGES Environmental White Paper for Sustainable Development in the Asia-Pacific Region (IGES White Paper).

The White Paper is intended to bring forward innovative policy options and strategies for further actions towards sustainable development in the region by cross-cutting and integrating research activities at IGES.

As an IGES-wide project, the White Paper Project has involved all IGES research projects, as well as the IGES Secretariat, in its activities, with the LTP playing a coordinating role. A series of study sessions was conducted in the beginning of the second phase in a plenary manner. Then, a task force composed of representatives of each project, the IGES Secretariat, and external collaborators was set up to take the initiative in terms of the planning process and identification of key elements to be included in the White Paper. The discussion of the task force

was followed by the setting up of a core team consisting of one visiting researcher (Dr Yohei Harashima, Takushoku University) and two full-time LTP staff. The team drafted a few chapters on the overarching theme of the White Paper, while the rest of the chapters were written by the representatives of each IGES research project. Together with the LTP project leader, the team was also in charge of the management of the White Paper project, including communication with authors, other full-time researchers, consultants, and the IGES Secretariat. It also hosted meetings with authors to improve and coordinate chapters as well as to formulate the concluding chapter. Through such a process, the White Paper is a product of IGES-wide efforts.

b. Review of achievements

Papers to be included in the White Paper have already been prepared through several processes, including peerreview, although final editorial work on the publication is still to be completed. The contents of the White Paper are as follows (as of 21 January 2004):

- Chapter 1 From a Consolidated to a Fragmented World: Changes in the Developmental State in Asia
- Chapter 2 Emerging Landscape of Environmental Problems
- Chapter 3 Emerging Landscape of Environmental Actors and Processes: Towards Polycentric Governance
- Chapter 4 Communities and Forests: What Makes Participation Work?
- Chapter 5 Water Resources: Promoting an Integrated Approach
- Chapter 6 Waste: Transboundary Market for Recyclables
- Chapter 7 Business and the Environment: Corporate Sustainability Management
- Chapter 8 Urban Environment: Integrating International and Local Responses
- Chapter 9 Education for Sustainable Development: From Dream to Reality
- Chapter 10 Climate Change: (title to be decided)
- Chapter 11 Alternative Direction of Environmental Strategies

c. Degree of attainment of the objectives

Although not yet published, this sub-project has achieved its original purpose of preparing all the chapters with innovative policy options through cross-cutting and integrating research activities at IGES.

1.2.4. The IT revolution and the environment

a. Background, objectives, and approach

There has been a growing concern about the impacts of the information technology (IT) revolution on the environment in recent years. Some have pointed out that further proliferation of IT would bring an increase in electricity consumption and e-waste with an accompanying negative impact on the environment. At the same time, others claim that IT could be an effective tool to reduce the use of natural resources and energy so that it has a positive impact on the environment. To date, however, there has not been sufficient discussion about the pros and cons of the IT revolution. Based on this gap, research has been conducted with three objectives in mind: collection of good practices of the utilisation of IT for the environment, an examination of the pros and cons of the IT revolution in terms of its impacts on the environment. To meet these objectives, study meetings were regularly held to discuss the potential of IT for reducing stress on the environment and on researching the utilisation of IT for sustainable development through participation in the regional UNEP/ROAP initiative, Information and Communication Technologies for the Environment in Asia and the Pacific (ICTEAP).

b. Review of achievements

Study meetings on the IT revolution and the environment were held monthly, on average, from December 2000 through to August 2002 in collaboration with Nikkei Business Publications, Inc. At the study meetings,

discussions were held with members, of which eleven were experts from universities, and people from IT-related companies, research institutes, NGOs, and staff of IGES and Nikkei Business Publications, Inc., about how the IT revolution is affecting economic activities, individual lifestyles, and social systems as a whole, and about how to make the best use of IT to reduce resource and energy consumption. A book was published commercially as one of the fruits of the study meetings.

Under the framework of the above-mentioned ICTEAP, which started in August 2001, good practices in the utilisation of information and communication technologies (ICT) for environmental management in the region were collected. In addition, research on two topics (the utilisation of ICT to reduce greenhouse gas emissions and the creation of an industrial-waste exchange using ICT) was conducted, and the resulting proposal of two pilot projects was presented to UNEP/ROAP.

As part of the efforts to diffuse the research outcomes to the public, e-learning material on IT and the environment (ICT and the Environment) was developed in collaboration with IGES's Capacity Building Programme. This course helps users gain a basic understanding of the issues surrounding IT and the environment.

c. Degree of attainment of the objective

The outcomes of this research were disclosed as a report, a commercially published book, e-learning material, and through presentations made at the ICTEAP International Workshop (May 2002, New Delhi, India) and the International Symposium on IT and the Environment (September 2002, United Nations University). It is not yet known, however, to what extent the outcomes of the research have impacted on the formulation of policy in promoting the utilisation of IT for the environment, which is one of the three objectives. Communicating and recommending the research outcomes effectively should be set as a challenge in the future.

References

IGES. 2003. E-learning material on ICT and the environment, http://cmp.iges.net/learn/faculties/courses/?courseid=279>.

- IGES and Nikkei Business Publications, Inc. 2003a. Report of the study meetings on IT revolution and the environment (March).
- . 2003b. Report of the study meetings on IT revolution and the environment. Separate volume: Record of discussions (March).

Mitsuhashi, Tadahiro and Institute for Global Environmental Studies (IGES), eds. 2003. Kankyo Saisei to Joho Gijutsu:Chikyu Shinjidai no Giho (September).

1.2.5. Freshwater Resources Management Project

a. Background, objectives, and approaches

The issues related to freshwater resources are critical for sustainable development of the world and are causing considerable concern among the international community. In Asia and the Pacific, issues such as severe water shortage and water pollution are forecast to become more serious because of continuous population growth and economic expansion. Considering the importance of freshwater for sustainable development in the region, IGES decided to establish a new project. The basic studies on the issue were initiated under the LTP to identify possible research topics and methodologies.

The activities included conducting a basic survey of the issues and existing trends of freshwater resources management, both in the region and the world, and the identification of IGES's research topics on freshwater issues. These were done together with international and regional networking during the preparation process for the Third World Water Forum (WWF3), which was held in Kyoto in March 2003. Furthermore, the issues in the Asia-Pacific region were closely examined in response to the decision, and a formal request was made at the Asia-Pacific Forum for Environment and Development (APFED) to consider making the solving of water resources problems a priority regional challenge.

b. Major activities and achievements

For FY2001, as a part of the basic study on freshwater resources management issues, IGES organised a preparatory session for the WWF3, participated in the International Conference on the Conservation and Management of the Lakes, and conducted research on international dialogue on freshwater resources management. The outcomes of these activities were compiled in the *Study Report on Issues on International Freshwater Resources*, which was commissioned by the Ministry of the Environment of Japan, and into an overview paper submitted to the APFED First Substantive Meeting (APFED1). Furthermore, the project wrote the part related to freshwater resources in the APFED Message to the WSSD, which, after going through a series of discussions at the APFED meetings, was disseminated to the international community.

During FY2002, studies of international trends and issues were continued, and at the same time, the Study Group on Freshwater Resource Management in Asia, chaired by Dr. Shinichiro Ohgaki, Director of the Research Center for Water Environment Technology at the University of Tokyo, was set up. The study group re-identified the issues related to freshwater resources in the Asia-Pacific region, and examined possible research topics for IGES to tackle. An interim report of the study was distributed widely at the WWF3, and IGES's activities, based on this report, were presented at the Integrated Water Resources Management session at the WWF3.

In relation to the WWF3, a session called "Water Monitoring and Modeling: The Present Situation and Partnership for the Future" was co-organised with the Ministry of the Environment of Japan, the Japan Society on Water Environment, and United Nations University (UNU), and its pre-session was also co-organised in October 2002 at the UNU. The outcome of the session was included in the session report, and it is registered as one of the outcomes of the WWF3.

For FY2003, the Study Group on Freshwater Resource Management in Asia continued its discussions, and the implementation plan of a new initiative, Water Environment Partnership in Asia (WEPA), proposed by the Ministry of the Environment of Japan, was examined. In relation to WEPA, an expert group (chaired by Dr. Mitsumasa Okada, Hiroshima University) was founded to prepare for the official commencement of the project, and the group examined issues such as the contents of the databases planned to be developed under WEPA. In March 2004, an inception workshop will be held in Indonesia with invited policy-makers of the relevant Asian countries, where the implementation plan will be further examined.

In addition, based on the results of studies to date, a strategic research proposal for the Third Phase was drawn up, and to put the proposal into effect, the Freshwater Resources Project was launched, with Dr. Shinichiro Ohgaki, the Director of Research Center for Water Environment Technology at the University of Tokyo, as project leader.

c. Degree of attainment of the objectives

The initial target was met by drawing up the Third Phase Strategic Research proposal, which is based on the previous basic studies, and by setting up the Freshwater Resources Management Project as an independent project. A network was established among the specialists from within and outside Japan through the basic research activities and through participation in the WWF3. Furthermore, knowledge attained through the basic research also contributed to the APFED Message and reports. In this regard, it could be said that the preparation process not only contributed to the launching of the project but also to the policy recommendations for the Asia-Pacific region.

1.2.6. ECO ASIA Long-Term Perspective Project

a. Background, objectives, and approach

The Environment Congress for Asia and the Pacific (ECO ASIA) was established in 1991 upon the initiative of the Ministry of the Environment of Japan (MOEJ), formerly the Environmental Agency, as a forum for high-

level government officials, including ministers and representatives from international organisations, to discuss environmental policy in Asia and the Pacific. The ECO ASIA Long-Term Perspective Project (LTPP) was conducted from 1993 to 2001 under the framework of ECO ASIA. It was expected that the LTPP would provide scientific information on the state of the environment in the region, as well as recommendations and policy options for solving problems faced, which contributed to a series of ministerial-level discussions at ECO ASIA. Being commissioned by the MOEJ, IGES played a key role in conducting the LTPP research on a wide variety of environmental issues in collaboration with a number of research institutes in the region from 1999 and 2001. IGES's New Development Patterns Project played the key role in conducting research activities and delivering their outcomes to ECO ASIA in 1999 and 2000, as did the LTP in 2001.

b. Review of achievements

The LTP completed the final report of the LTPP, *Towards a Sustainable Asia and the Pacific: Report of ECO ASIA Long-Term Perspective Project Phase II*, in 2001, which is available in the following formats:

- Full report <http://www.iges.or.jp/jp/ltp/pdf/ECOASI~1.PDF>
- Summary for policy-makers (included in the Full Report)
- Digest <http://www.iges.or.jp/jp/ltp/pdf/ECOASI~2.PDF>

The report addressed issues such as climate change, urban environment, biodiversity, forest conservation, freshwater resources, and environmental education in the Asia-Pacific region, and their respective status was analysed from four viewpoints, namely, eco-consciousness, eco-partnership, eco-technology and investment, and eco-policy linkage, which are the basic concepts of the LTPP. An analysis of the causes of environmental changes, the current status of the environment, and their future perspectives were included, as well as recommendations for policy-making to promote sustainable development in the region.

The report was presented at the tenth ECO ASIA, held in Tokyo in October 2001, and it was endorsed by the participants. With their approval, it was distributed at the WSSD Regional PrepCom for Asia and the Pacific held in Phnom Penh, Cambodia, in November 2001. The report was also distributed at the Fourth WSSD PrepCom (ministerial level), held in Bali, Indonesia, in May and June 2002, as well as at the WSSD, held in Johannesburg, South Africa in August and September 2002.

c. Degree of attainment of the objectives

The targets of the project were well accomplished by preparing the final report for the tenth ECO ASIA. The report summarised the research outcomes of ECO ASIA, and the LTPP operated from 1993 to 2001, providing ECO ASIA with scientific information on the state of the environment in Asia and the Pacific as well as policy recommendations for further addressing regional environmental issues. It also delivered information on the current development of strategic research on the environment in the Asia-Pacific region to policy-makers in the field of environment and development from all over the world at the WSSD and its preparatory process.

1.2.7. Japan-U.S. Task Force for Achieving Harmony in Trade and Environment

a. Background, objectives, and approach

It was a great step towards harmonising trade expansion and environmental protection when the Doha Declaration was adopted at the Fourth World Trade Organization (WTO) Ministerial Meeting (in Doha, Qatar) and it was agreed by member states that the issue of the environment was to be included in the negotiation agenda at the WTO. Therefore, there was an expectation that a substantial discussion to harmonise trade and the environment would start at the Fifth WTO Ministerial Meeting at Cancun, Mexico, in September 2003 (Cancun Meeting). With this expectation, a group of U.S. researchers from the Global Environment & Trade Study (GETS) launched the Japan–U.S. Task Force for Harmonizing Trade and Environment in order to contribute to the discussions at the WTO. Then, GETS requested IGES to join the Task Force. Its members include four

organisations—the Global Industrial and Social Progress Research Institute (GISPRI), the Fair Trade Center of Japan, GETS, and IGES—and professors of Japanese universities (the total number of members is fifteen). The Task Force selected major issues in trade and the environment and is conducting research on these selected issues. (The Japan Foundation provides the funding for the activities of the Task Force.)

b. Review of achievements

Individual organisations or members of the Task Force are conducting research on the individually selected topics, which are categorised into three groups: the WTO and the Doha Agenda, multilateral environmental agreements (MEAS) and the global trade regime, and global environmental governance. IGES is in charge of the topic titled "The Relationship between the WTO and Regional Trade Agreements and Institutions on Trade and Environment in Asia," which falls under the classification of global environmental governance. Its interim research outcomes were presented at the Workshop on Achieving Harmony in Trade and Environment, which was organised by the Task Force as a side event of the Cancun Meeting. This project lasts until the end of 2004. Policy recommendations for achieving harmony in trade and environment as final outputs will be presented at a symposium to be held in November 2004.

c. Degree of attainment of the objectives

Members of the Task Force made presentations on their interim research outcomes at the workshop held by the Task Force at the Cancun Meeting, but since the main discussion at the Cancun Meeting was focused on agricultural issues and there was no substantial discussion about the issues in trade and environment, the impact of a range of side events on trade and environment appeared to be diminished. The Task Force expects, however, that its policy recommendations could influence the discussion on trade and the environment hereafter through the publication of a book as a final output and a symposium to be held in Tokyo in November 2004.

Reference

Global Environment and Trade Study (GETS). 2003. Achieving harmony in trade and environment (on CD). Minneapolis: GETS. The text is available at ">http://www.gets.org/pages/harmony/>.

1.2.8. Comprehensive Assessment of the Implementation of Agenda 21 in the North-East Asian Sub-region

a. Background, objectives, and approach

In the run-up to the World Summit on Sustainable Development (WSSD) held in Johannesburg, South Africa, in August and September 2002, IGES was commissioned by the Task Force for the Preparation of WSSD in Asia and the Pacific, consisting of the Asian Development Bank (ADB), the United National Economic and Social Commission for Asia and the Pacific (ESCAP), the United Nations Development Programme (UNDP), and the United Nations Environment Programme (UNEP), to prepare a sub-regional report assessing the implementation of Agenda 21 for the Northeast Asian sub-region, which is comprised of the Democratic People's Republic of Korea, Japan, Mongolia, the People's Republic of China, the Republic of Korea, and the Russian Federation.

b. Review of achievements

The report, prepared by the LTP project, assessed the progress made in the implementation of Agenda 21 in Northeast Asia since the 1992 United Nations Conference on Environment and Development (UNCED), identified key issues and challenges for reporting to the WSSD, presented mechanisms to ensure cooperation on the sub-regional level, and formulated project proposals to deal with the major sustainable development issues in the sub-region.

c. Degree of attainment of the objectives

The first draft of the report was presented and reviewed at the Stakeholders' Meeting and the Intergovernmental Meeting for Northeast Asia in Preparation for the WSSD, held in Beijing, China, on 26 and 28 July 2001, respectively. Furthermore, the preparation process involved consultations with sub-regional and national lead agencies preparing for the WSSD, as well as planning, financial, and environment agencies at the national and sub-regional levels in the countries concerned. Completed in September 2001, the report on Northeast Asia was compiled in a synthesis version and distributed at the high-level regional meeting for the WSSD in Phnom Penh, Cambodia, on 27–29 November 2001. Along with other sub-regional reports, the Northeast Asia report served as a basis for formulating the Phnom Penh Regional Platform on Sustainable Development in Asia and the Pacific, which was the official document from Asia and the Pacific to the WSSD.

1.2.9. Priority Paper on Sustainable Development for Northeast Asia

a. Background, objectives, and approach

The UNEP Asia-Pacific Resource Centre for Asia and the Pacific (UNEP RRC.AP) drew up priority papers on sustainable development in 2003 and 2004 for five sub-regions in the Asia-Pacific region, namely, Northeast Asia, Southeast Asia, South Asia, Central Asia, and the Pacific. It aimed to review responses gathered during and after the WSSD preparatory process to promote sustainable development in the region and issues relevant to their implementation. Upon being commissioned by the UNEP RRC.AP, IGES prepared a draft of the Priority Paper on Sustainable Development for Northeast Asia. The LTP conducted a literature review and interviewed experts, focusing on priority issues in the sub-region, including atmospheric pollution, water quality, degradation of the marine environment, land degradation and desertification, deforestation and biodiversity loss, energy, poverty, population and urbanisation, food security, and sustainable production and consumption. The LTP completed the draft in a collaborative manner with the support and provision of the latest information on the above-mentioned issues by each of the IGES research projects, governments, research institutes, and NGOs in the sub-region, as well as international organisations.

b. Review of achievements

UNEP plans to publish the priority paper, along with a collection of priority papers for Southeast Asia, South Asia, Central Asia, and the Pacific, under the title "Priority Paper on Sustainable Development in Asia and the Pacific" (tentative title, as of February 2004). IGES' collaboration with governments, research institutes, and NGOs in the sub-region, as well as with international organisations, was also further strengthened through the preparation of the draft.

c. Degree of attainment of the objectives

The LTP successfully responded to the request of the UNEP RRC.AP by providing the latest information on a wide variety of responses gathered and an analysis on future challenges to promote sustainable development in Northeast Asia.

1.2.10. State of the Environment in Northeast Asia 2005

a. Background, objectives, and approach

The United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) hosts the Ministerial Conference on Environment and Development (MCED) every five years. The next MCED, the fifth, will be held in Korea in March 2005, and ESCAP is preparing publication of its "State of the Environment in Asia and the Pacific 2005" (SOE 2005) for the conference. Being commissioned by ESCAP, IGES is currently drafting one of its chapters on Northeast Asia. The chapter addresses particularly important environmental issues in Northeast Asia, namely, land degradation, biodiversity loss, freshwater resource degradation, industrialisation and pollution,

cleaner production and energy, and marine degradation, and it provides information on their causes, current status, and responses taken or to be taken. Preparation for the SOE 2005 is in progress, and the LTP is currently drafting the chapter by fully utilising its expertise and experience in incorporating information provided by researchers both within and outside of IGES, by government officials in relevant countries, as well as international organisations, etc.

b. Review of achievements

A draft outline of the SOE 2005 and major contents of each chapter were agreed upon among participants at the Expert Group Workshop for SOE 2005 organised by ESCAP (Bangkok, September 2003). Based on this agreement, the LTP conducted a review and analysis of the important selected environmental issues in Northeast Asia and wrote the first draft. Beyond March 2004, the draft will be submitted to a series of experts for review and further elaboration, and then finalised by the end of 2004.

c. Degree of attainment of the objectives

Review and analysis on selected issues, establishment of a relevant network, and preparation of the first draft are completed so far, although the preparation of the chapters is still in progress. The draft will be updated in due course, for example, by reflecting comments from the expert's review and incorporating the latest information, and will be finalised by the end of 2004, as mentioned above.

1.2.11. Support for the Manila Policy Dialogue on Environment and Transport in the Asian Region

a. Background, objectives, and approach

The Manila Policy Dialogue (MPD) was initiated and organised by the Ministry of the Environment, Japan, and the Department of Transport and Communications, the Philippines, in following up on the outcomes of the International Conference on Environmentally Sustainable Transport in the Asian Region, held in March 2003 in Nagoya, and by taking into account various on-going initiatives in the field of the environment and transport.

The objectives of the meeting were as follows:

- Overview the regional situation on transport and environment and discuss the need for strategic planning for environmentally sustainable transport with both a long-term vision and short-term/long-term actions.
- Discuss specific priority topics in Asia, including roadside air quality monitoring and assessment, emission control for in-use vehicles with special attention to inspection and maintenance, cleaner fuel for vehicles, and environmentally friendly public transport planning.
- Develop recommendations towards the establishment of environmentally sustainable transport in Asia in the form of a policy statement.

The MPD was held on 16 and 17 January 2004 in Manila, the Philippines, and 47 delegates from 13 countries and 11 international organisations participated. Sessions were held to discuss the following specific priority topics: (1) strategic planning for promoting environmentally sustainable transport (EST) in Asia with both a long-term vision and short-term actions, (2) roadside air quality monitoring and assessment, (3) emission control for in-use vehicles with special attention to inspection and maintenance, (4) cleaner fuel for vehicles, and (5) environmentally friendly public transport planning. Following the discussions, the Manila Statement was adopted as an agreement of the participants of the Policy Dialogue.

The LTP supported the MPD by participating in the preparatory committees, providing an issue paper on environmentally friendly public transport planning, and making a presentation at the relevant session.

b. Review of achievements

The major achievements of the MPD were the active information sharing and discussion on the primary topics and adoption of the Manila Statement. The main points of the Manila Statement include agreement on the need for establishing a regional forum and subsidiary expert groups, a welcome for the initiatives of the United Nations Center for Regional Development (UNCRD) in extending assistance in preparing national strategies and action plans to promote EST, and a request for the UNCRD to follow-up on overall progress on transport and environment related issues in Asia.¹

c. Degree of attainment of the objectives

The MOEJ described its view on the MPD with the following statement: "This Policy Dialogue was meaningful in that it assembled the policy-makers in the field of environment and transport from the Asian countries, advanced sharing of information and views to realise the EST considering the backgrounds and characteristics of the participating countries, and identified the issues for the specific actions."²

It can be concluded that the MPD has generally achieved the objectives, listed above in Section 1, and achieved and initiated the basis for further activities for EST in the Asia-Pacific region.

1.2.12. Support for the Third Toyota Stakeholder Dialogue

a. Background, objectives, and approach

The Toyota Stakeholder Dialogue (TSD) has been hosted annually by the Toyota Motor Corporation since 2001, with the aim of having dialogues with multiple sectors, including NGOs, as part of the efforts to encourage environmentally sound business practices. Toyota contracted out the operation of the stakeholder dialogue to secure free discussions among all the stakeholders, and IGES' Research Supporting Section was commissioned as the secretariat since the first TSD. The theme of the third TSD in 2003 was "Environmentally Sustainable Transport (EST)." Since the LTP has conducted research in the area of EST, it supported the TSD by assisting with the selection of relevant participants, examining the approaches for participatory workshops, providing information on the international and national practices on environmentally sustainable transport at the presymposium, and participating in the TSD as one of the stakeholders.

A stakeholder dialogue is one form of participatory workshop, and it aims to identify the points at issue, to identify and understand the common and different viewpoints among the participants, as well as the background of commonality and differences, and to reach agreement as much as possible by convening the stakeholders and facilitating the discussion based on some set rules. The third TSD was held on 28 and 29 November 2003 at IGES' headquarters with the participation of 32 stakeholders from various sectors including government, business, civil groups, academics, and the media. On the first day, group discussions among each sector and a plenary meeting were held to identify the basic components and barriers of EST. Based on the discussions of the first day, three themes were identified, and those themes were discussed at the group sessions attended by people from multiple sectors. The results of the multiple-sector group discussions were reported to the plenary meeting. For the group discussions by each sector and by the multiple sectors, the KJ method³ and the applied mapping method were used to effectively facilitate the discussion and organise the results. In order to share the information and raise issues prior to the TSD, an open symposium, Environmentally Sustainable Transport, was held on 17 November at the Plaza Hall in the Kasumigaseki Building.

¹ The Statement can be found at http://www.env.go.jp/press/file_view.php3?serial=5249&hou_id=4645>.

² MOEJ press release (in Japanese) is available at http://www.env.go.jp/press.php3?serial=4645>.

³ The KJ method, named after its inventor, Prof. Jiro Kawakita, is a technique of creative development or creative problem solving. This technique uses small pieces of cards to fill in the information and groups the cards with similar concepts together to identify the linkages of the factors related to the issue.

b. Review of achievements

The discussion at the TSD clarified the views of each sector on "the factors for EST society" and "the barriers of EST." The views of three multiple-sector subgroups were also put together on the following three themes: (1) the commonalities and differences of the visions of EST among the sectors, (2) the approaches to share the vision of EST that Japan should seek for under the diversity of the views, and (3) the policies and measures to be promoted to realise EST. Those results and analyses are to be put together in *The Report on the Third Toyota Stakeholder Dialogue*.

c. Degree of attainment of the objectives

The TSD achieved participation from various sectors related to transport and the environment, and it facilitated very active discussions. Some participants evaluated the discussions among the sectors as fruitful and more indepth than the previous TSDs. The improvement was brought about by the introduction of smaller group discussions using the KJ method and the applied mapping method in reference to the preceding examples of participatory workshops. On the other hand, it was pointed out that this theme is very area-specific and that the discussions at the TSD focusing on national levels could not distinguish the conflicting views that would have been clearer with a focus on some specific locations.

2. Self-evaluation

2.1. Evaluation of achievements

2.1.1. An aspect of influence on the policy-making process

a. APEIS/RISPO

- 1. APEIS aims to develop scientific, knowledge-based tools to promote informed decision-making on the environment and development.
- 2. The outcomes of RISPO (Strategic Policy Options and the Good Practices Inventory) will be proposed at ECO ASIA and other international policy dialogues for sustainable development.
- 3. The outcomes of RISPO (Strategic Policy Options and the Good Practices Inventory) will be made available to the public on the Internet, which will enable policy-makers, researchers, and other stakeholders to search for data on their field of interest.
- 4. Capacity building of policy-makers and other stakeholders is planned, utilising the outcomes of RISPO.

b. APFED

- 1. Since the APFED Message was registered as a Type II partnership/initiative document for the WSSD, it has the potential to become an influential document for policy-making.
- 2. Since the Message was written with input from various stakeholders, the APFED Commitments made in the Message are unique and have the potential to be effective should they be implemented with additional support and cooperation from the various stakeholders and international organisations.
- 3. As of March 2004, the APFED Final Paper on the APFED recommendations is in the process of preparation. In this process, expert meetings and multi-stakeholder meetings were organised in the Philippines, Palau, and Sri Lanka, and various opinions were collected based on the consideration for environmental policies specific to each region. Through discussions at these meetings, the APFED recommendations have become more substantive and practical enough to meet policy needs. At the same time, the meetings provided national policy-makers with an opportunity to review policy issues from wide and strategic viewpoints. Similar meetings are planned in some regions towards the adoption of the APFED Final Paper in December 2004.
- 4. One of the commitments of APFED is to develop the Good Practices Inventory, which is expected to serve as a common asset for policy-makers in the Asia-Pacific region. As of March 2004, a number of

good practices have been collected with the cooperation of APFED members, and a prototype of the database system has been developed for on-line searching. The database system will be improved further in consultation with APFED members and will be completed in December 2004.

c. ECO ASIA Long-Term Perspective Project (LTPP)

- 1. The final report was submitted to the ECO ASIA 2001 conference held in Tokyo and disseminated at the WSSD Regional PrepCom for Asia and the Pacific, held in Phnom Penh, Cambodia, which made an appeal targeting policy-makers from the Asia-Pacific region, including those at the ministerial level.
- 2. The final report was also disseminated to environment ministries and agencies in the Asia-Pacific countries through the Ministry of the Environment of Japan.
- 3. In addition, the final report was disseminated at the Fourth WSSD PrepCom (ministerial level) held in Bali, Indonesia, as well as at the WSSD, held in Johannesburg, South Africa.
- 4. Various stakeholders, such as government officials, researchers, and business people from China, Indonesia, Japan, Malaysia, South Korea, and Thailand, participated in the review process of the draft final report. The report received varied feedback, and various information exchanges occurred between the reviewers and the editorial team at the same time.

d. Comprehensive Assessment of the Implementation of Agenda 21 in the North-East Asian Subregion

As a document distributed at the high-level Asia and the Pacific meeting for the WSSD, this output had the potential to be of major influence to policy-makers.

e. Priority Paper on Sustainable Development for Northeast Asia

The first draft of the Priority Paper was shared as a background information paper among the participants of the UNEP Asia-Pacific Civil Society Consultation Meeting (Bangkok, November 2003)—a part of the preparatory process for the Eighth Special Session of the UNEP Governing Council/Global Ministerial Environment Forum (Jeju, March 2003)—and utilised well to facilitate their discussion on the priority issues in the region. It is also quite likely that the paper published by UNEP, combined with priority papers for other sub-regions, namely, Southeast Asia, South Asia, Central Asia, and the Pacific, would provide wider potential audiences with impartial information on the responses taken, as well as insights for responses to be taken, to promote sustainable development in the region.

f. State of the Environment in Northeast Asia 2005

Preparation of this paper is in progress as a part of *State of the Environment in Asia and the Pacific 2005*, one of the flagship publications of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) released every five years. The report will be published in 2005 to coincide with the Fifth ESCAP Ministerial Conference on Environment and Development. By providing information on the state of the environment and responses taken or to be taken to address major issues of concern in the region, the report is expected to bring about significant impacts for its potential readers, including policy-makers, researchers, and NGOs.

g. Contribution to the Manila Policy Dialogue on Transport and the Environment

At the Manila Policy Dialogue, national policy-makers in charge of transport and the environment in Asian countries discussed the actions necessary to be taken to realise environmentally sustainable transport and an agenda for implementation. IGES prepared an issue paper for the discussions and made presentations. The outcomes of the discussions were adopted as the Manila Statement, which is expected to bring about significant impacts on transport and environmental policies in Asian countries.

h. The Fresh Water Management Project

The process of establishing the Fresh Water Management Project included the preparation of the APFED recommendations to the WSSD, participation in the WWF3, and building a network with experts within and outside Japan. These activities are regarded as contributions to the development of policy recommendations for Asia and the Pacific region. The project will continue carrying out these activities with the aim of having further impacts on policy-making in the region.

2.1.2. Timeliness in terms of stakeholders' needs

a. APEIS/RISPO

In the Asia-Pacific region, where the economy is growing rapidly, it is important to provide information on successful cases to cope with various environmental problems by using a win-win approach, which overcomes the trade-offs between the economy and the environment (i.e., the Good Practices Inventory). In choosing a research theme, the needs of the Asia-Pacific region are considered through ESCAP's Regional Action Programme and the Phnom Penh Regional Platform, and requests from policy-makers in the region are also collected in hearings on the process or through research, utilising discussions at the ECO ASIA Panel.

b. IT Revolution and the Environment

Under today's diffusion of information technologies, in order to change the lifestyles as well as the economic and social systems in Asia and the Pacific, research on IT and its impact on the environment and IT applications for sustainable development are urgently needed. Outputs from the LTP's research on the IT revolution and the environment must meet the needs of stakeholders in a timely fashion.

c. ECO ASIA Long-Term Perspective Project (LTPP)

It was quite timely to publish the final report in the world-wide momentum of the WSSD preparatory process, which includes ECO ASIA 2001 and the WSSD Regional PrepCom for Asia and the Pacific.

d. Japan–U.S. Task Force for Harmonisation of Trade and the Environment

As trade is rapidly expanding worldwide, harmonisation of trade and environmental protection is becoming a significant agenda. In parallel to this situation, the Japan–U.S. Task Force organised a side event on trade and the environment at the Fifth WTO Ministerial Conference, held in Cancun in September 2003, and presented a midterm progress report of the research.

e. Fresh Water Management Project

The issue of fresh water is currently a worldwide concern, and it will be a much more important topic, particularly in the Asia-Pacific region where population and economic development continue to grow. In view of this situation, IGES initiated the Fresh Water Management Project in November 2003. In the process of establishing it, the LTP conducted a basic survey on fresh water issues and contributed to policy recommendations for APFED and the WWF3.

2.1.3. An aspect of uniqueness, originality, and effectiveness

a. APEIS/RISPO

1. The key word of APEIS and RISPO is environmental innovation.

2. To achieve policy-making towards sustainable development, RISPO includes the following innovative aspects:

- it promotes dialogues between scientists and policy-makers at international policy forums, such as ECO ASIA;
- develops the basis of scientific research as a common regional asset;
- proposes strategic policy options;
- maximises participation and collaboration with researchers and policy-makers in the Asia-Pacific region; and
- promotes capacity building.

b. APFED

The APFED Message submitted to the WSSD includes not only the recommendations for sustainable development but also three commitments of the APFED members towards actual implementation (listed below). These were registered as a Type II partnership initiative of the WSSD, and IGES, as the APFED secretariat, is facilitating their implementation.

- 1. Collect good policy practices, develop an inventory, and make it a common asset for decision-makers.
- 2. Develop an inventory for a capacity-building programme and provide useful information to those who are interested.
- 3. Build a network among researchers and research organisations through APFED activities, and develop policy proposals toward implementation of APFED recommendations.

c. Freshwater Resources Management Project

This project, in the process of being launched, established a network between IGES and experts within and outside Japan. This network is a unique asset of IGES, and it will serve as a basis for carrying out the project's activities. The network will also be a basis for exploring further cooperation in the future.

d. ECO ASIA Long-Term Perspective Project (LTPP)

- 1. The LTPP and its final report preparation was an IGES-wide project.
- 2. It was quite unique in its approach towards critical environmental issues in the Asia-Pacific region, such as climate change, urban environment, fresh water resources, forest, and biodiversity, by discussing the importance and effectiveness of four concepts/measures, namely, eco-consciousness, eco-partnership, eco-technology/eco-investment, and eco-policy linkage.

2.2. Evaluation of project management

2.2.1. Project management

The Long-Term Perspective and Policy Integration Project (LTP) is an amalgamation of two highly successful projects from the first research phase (April 1998–March 2001): the Environmental Governance Project and the New Development Patterns Project. The aims of this project are to conduct long-term and cross-cutting research for sustainable development in Asia and the Pacific in collaboration with other IGES projects and to deliver policy recommendations in an effective manner.

The LTP, as a new project, increased its research staff as necessary and strengthened its overall structure. It increased its capacity to achieve its expected roles in having an impact on policy-making through implementation of APFED and RISPO. Through these projects, the LTP built a network with researchers and decision-makers within and outside Japan. This network will serve as a strong basis for the LTP, and IGES as a whole, in proceeding with activities in the future.

While achieving these major outcomes, the LTP has developed its overall management through trial and error, taking into consideration its expected roles that are slightly different from other projects within IGES. A large

portion of the LTP's activities consists of commissioned work from the Ministry of the Environment and international organisations. Thus, a major objective of the LTP was to carry out efficient project management in coordination with other projects within IGES and with external organisations.

2.2.2. Efficiency in budget use

Major sub-projects of the LTP were carried out by efficiently using external funds. The main source of funding was Japan's Ministry of the Environment (MOE) and international organisations. Funds from the MOE include those for the Asia-Pacific Environmental Innovation Strategy Project (APEIS) and Research on Innovative and Strategic Policy Options (RISPO), the Asia-Pacific Forum for Environment and Development (APFED), the ECO ASIA Long-Term Perspective Project (LTPP), the Manila Policy Dialogue on Environment and Transport, and others. Projects funded by international organisations included a comprehensive analysis of the implementation status of Agenda 21 in Northeast Asia and the preparation of a sub-regional environmental priority paper on Northeast Asia, both of which are funded by UNEP, and preparation of the *State of Environment (SOE) 2005 Report for Asian and Pacific Region,* funded by ESCAP.

APFED and RISPO have a relatively large budget, and the total allocation of the two projects is almost equal to the total budget of the LTP. In the process of preparing the APFED Final Report, more expert/multi-stakeholder meetings were held than originally expected, but the costs did not exceed the allocated budget, thanks to efficient management. Under RISPO, the LTP conducted joint research and organised international workshops in collaboration with research partners under eight sub-themes. All of these activities were also carried out within the budget. In this respect, it is fair to say that the efficiency of the LTP in its budget use was generally appropriate.

3. Conclusion

As stated above, the LTP is different from other projects within IGES, and it was set up as a test project that is expected to employ an interdisciplinary approach and collaborate with external organisations and other projects within IGES. Thus, it is important for the LTP to continue exploring and identifying the most effective form of its roles and functions as it carries out its activities. Members of the LTP should keep this in mind as they work on their research activities.

In the second phase, the LTP strengthened its overall structure, accumulated international experience, and developed the capacity of researchers and the project as a whole through implementation of various projects. On the other hand, since the concept of sustainable development covers elements such as environmental protection, social justice, and economic development, the LTP came to understand that policy research in its area requires analysis from a cross-sectoral perspective, as well as integration and strategising based on the analysis. In this respect, the LTP has gone through the process of developing an in-depth understanding of policy research during the second phase.

Taking all these things into account, the LTP will strive in the third phase to conduct policy research by employing a cross-sectoral approach, identify strategies and policies for sustainable development based on research results, and present the strategies at international policy dialogues and meetings. The LTP will carry out these activities in collaboration with other projects within IGES and external organisations with the aim of creating synergistic effects on the outcomes.