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ECONOMY AND ENVIRONMENT PROGRAM
FOR SOUTHEAST ASIA

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Annual Report
July 1, 1998 - June 30, 1999

EEPSEA
September 1999

EEPSEA is supported by a consortium of donors and administered by IDRC.
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ECONOMY AND ENVIRONMENT PROGRAM FOR SOUTHEAST ASIA



Annual Report July 1, 1998 - June 30, 1999

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David Glover, Director
September, 1999

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Annual Report

July 1, 1998 - June 30, 1999

1. WHAT IS EEPSEA?

The Economy and Environment Program for Southeast Asia was established in May 1993 to support training and research in environmental and resource economics. Its goal is to strengthen local capacity for the economic analysis of environmental problems so that researchers can provide sound advice to policymakers. The program uses a networking approach to provide not only financial support but meetings, resource persons, access to literature, publication outlets, and opportunities for comparative research across its ten member countries. These are Thailand, Malaysia, Indonesia, the Philippines, Vietnam, Cambodia, Laos, China, Papua New Guinea and Sri Lanka.

EEPSEA's structure consists of a Sponsors Group, comprising all donors contributing at least USD 100,000 per year; an Advisory Committee of senior scholars and policy makers; and a small Secretariat in Singapore and the Philippines. EEPSEA is a project administered by the International Development Research Centre of Canada (IDRC) on behalf of the Sponsors Group. (IDRC is a public corporation created in 1970 to support research in developing countries.)

Typically, researchers learn about EEPSEA by various means and apply for a research or training award. Most applicants attend one of EEPSEA's courses before or in conjunction with their research project. Budget ceilings for research projects are USD 15,000-22,000, depending on the country, exclusive of a small honorarium. Researchers may be affiliated with a university, government or non-government organization and grants are normally made to that institution. Most projects are carried out by teams of researchers.

Proposals are sent to experts for written review. Those recommended for further consideration must then be revised and presented in a working group meeting at the next EEPSEA biannual meeting. Further revisions are usually called for, until the project is judged satisfactory and a grant approved. After approval, interim findings are presented and critiqued every six months until the project is completed. Researchers receive frequent technical assistance and literature from the Secretariat and resource persons. Final reports from successful projects are widely disseminated by EEPSEA and by the researchers themselves through publications, the media, and consultations with policy makers.

The selection process for both training and research awards is highly competitive. Of 130 applications for our 1997 course, 27 were accepted. Approximately one application in three for research awards is accepted. To date, EEPSEA has provided training to some 180 people and supported about 70 research projects.

2. HIGHLIGHTS

The most noteworthy achievements of EEPSEA's sixth year of operation were in the area of impact and dissemination. Several years of support and training are now yielding a high flow of publications, media interest and policy impact (see p. 8-14). Among these were the widespread attention devoted to the study of Indonesia's fires & haze; the first publication of EEPSEA material in international journals; a voluminous flow of EEPSEA Research Reports (11 this year); and the introduction of the Policy Brief Series. A glossy Five Year Report documenting the Program's accomplishments to date was well-received. The Website was given a new look and attracted 215,000 hits (vs. 60,000 in '97/98 and 18,000 the year before).

The third offering of the regional short course in Los Banos attracted a record number of Vietnamese participants and our first Laotian participants.

EEPSEA researchers continue to apply their knowledge in a variety of important fora, including national policy making and international environmental negotiations. A project dealing with pricing of water and electricity from small-scale dams in Thailand's forest areas has attracted interest from the National Energy Promotion Office. Recommendations from a project on the cost-effectiveness of measures to reduce automotive pollution in Colombo are under consideration by the Sri Lankan government.

In July-October 1998, EEPSEA was evaluated by a team of consultants hired by IDRC as part of an assessment of multi-donor partnerships. The assessment focused on management and program delivery and had strongly positive findings (see p. 15).

3. TRAINING

a) Regional Short Course in Los Banos

EEPSEA's annual five-week course in environmental & resource economics took place for the third time in Los Banos, Philippines, **May 19 - June 19**. Principal instructors were Myrick Freeman III, Nancy Olewiler, Benoit Laplante and John Whalley. Noteworthy was the large number of Vietnamese in attendance (eight out of thirty) and, for the first time, the participation of two Laotians. See Annex 1 for the list of participants.

b) Other Training Activities

The Philippines Department of Environment and Natural Resources (DENR) and Environment and Natural Resources Accounting Project (ENRAP) joined EEPSEA in sponsoring a course for DENR personnel on **the use of economic principles in environmental management** in July 1998. Government policy now mandates the use of economic instruments, including resource pricing, but officials lack information and

experience in their application. In this two-week course, EEPSEA provided two international resource persons (both long-term EEPSEA associates); USAID provided the services of the local ENRAP experts (also associates of EEPSEA). DENR covered all local expenses, including training facilities, accommodation, travel, and living expenses for participants.

In June 1999, EEPSEA again provided a resource person for a DENR/ENRAP course, this time to talk about international experience with solid waste management.

Jeevika Weerahewa received an EEPSEA post-doctoral fellowship to study general equilibrium modelling at the University of Western Ontario.

4. RESEARCH

Six new projects were approved, one of which was a PhD thesis award:

1. *Land Degradation and Its Impact on Grain Self-Sufficiency Policy in China.* Hu Dayuan, China Center for Economic Research (CCER).
2. *An Analysis of Backyard and Small-Scale Commercial Piggeries: Environmental Consequences and Pollution Control Options.* Angeles O. Catelo, University of the Philippines at Los Banos.
3. *Reconciling Trade Policy with the Environment - The Case of Southeast Asian Timber.* Jutamas (May) Arunanondchai, University of Warwick, UK (PhD thesis).
4. *Alternative Regimes for Forest Management in the North Upland of Vietnam from Social, Economic and Environmental Perspectives.* Nguyen Nghia Bien, Forestry University of Vietnam.
5. *Economic Assessment of On-Site Costs and Benefits of Soil Erosion in the Mountainous Region of Northern Vietnam.* Tran Dinh Thao, Hanoi Agricultural University.
6. *Improving Air Quality in Large Chinese Cities by Substituting Natural Gas for Coal.* Mao Xinqiang, Beijing Normal University.

5. SPECIAL REPORT: VIETNAM-PHILIPPINES CONNECTIONS

EEPSEA's member countries are very diverse in terms of income levels, economic systems and research capacity in environmental economics. This is a challenge when

designing a program of interest to each. But it can also provide opportunities. While the countries differ, they generally have more in common with each other than they do with developed countries and those with higher incomes have gone through many of the same "growing pains" as those at a prior stage of development. In many cases, the research capacity in the higher income countries can be used to train and transfer experience to people in lower income countries.

EEPSEA has exploited this advantage most extensively in a series of collaborative activities involving researchers and trainers in Vietnam and the Philippines. This special report pulls together the many threads that have been woven over the past six years in developing this partnership.

When EEPSEA began in May 1993, its first initiative was to identify a group of sixteen people to attend the first offering of the Harvard Institute for International Development's course in Environmental Economics and Policy Analysis. Identifying participants from Vietnam was not easy - in 1993, few Vietnamese spoke English, and those who had studied economics had generally done so in universities in Russia or Eastern Europe; the Marxist economics they learned there provided little or no preparation for the kind of analysis employed by environmental economists in the West.

Relying on advice from colleagues in IDRC, EEPSEA identified two Vietnamese university professors who had recently completed Masters degrees in Agricultural Economics at the University of the Philippines at Los Banos (UPLB): Mr. Do Van Xe from Cantho and Ms. Phan Thi Giac Tam from Ho Chi Minh City. These were among the very first Vietnamese to study economics in the West. Their training at UPLB & HIID prepared them to carry out a successful research project with EEPSEA on options for rural sanitation.

UPLB has a long history of training agricultural and other scientists from around the region. Its Masters program in Agricultural Economics began in 1954 and its PhD program in the early 1960s; both offer the opportunity to specialize in Resource Economics. The university expects to offer a Masters Degree in Environmental and Natural Resource Economics beginning in 2000.

When EEPSEA formed its Advisory Committee, it looked for representation for Vietnam. Again, the Philippines provided a connection. Dr. Vo-Tong Xuan, Vice-Rector of Cantho University was widely recommended. Xuan had studied agricultural chemistry at University of the Philippines and served for several years as member of the Board of Governors of the International Rice Research Centre at Los Banos. He had devoted his career to improving the livelihoods of Vietnam's small rice farmers, for which he was awarded the Ramon Magsaysay Award, named after the late Philippine president. Xuan joined EEPSEA's Advisory Committee in 1993 and served as its Chairman from 1996-99.

Xuan, Xe and Tam became EEPSEA's principal links with Vietnam, facilitating a number of training and research activities. In August, 1995, Xe and Tam took responsibility

for organizing the first five-week course in environmental economics at the University of Agriculture and Forestry in Ho Chi Minh City. The course was repeated in 1996. Two of the instructors were from the Philippines: Dr. Marian de los Angeles (Resources, Economics and Environment Centre for Studies) and Dr. Herminia Francisco (UPLB). (Dr. Francisco later became EEPSEA's Deputy Director.)

The August 1996 course was immediately followed by a five-day project development workshop for graduates of the two 1996 courses. Resource persons worked with graduates to develop projects on the environmental economics of forests, mangroves, agro-chemicals and urban pollution. Again two Filipinos were among the resource persons: Hermi Francisco and Dr. Agnes Rola of UPLB.

These projects were seen as "apprenticeships" through which relatively inexperienced researchers could receive more assistance than they would in EEPSEA's regional research awards program. The researchers met with their peers and the resource persons every three months, instead of every six months, as would normally occur in a regional award. The workshops and grants scheme were administered by the Environmental Economics Unit, Faculty of Economics, National University of Ho Chi Minh City.

Three workshops were held over the life of the project and additional visits were made by each resource person in April 1997. The final workshop took place in August 1997. (The Advisory Committee member for the Philippines, Ponciano Intal Jr., attended the third workshop and met with government officials in HCMC and Hanoi to get a better picture of EEPSEA's activities in Vietnam and how they respond to policy priorities.)

The final reports from these projects will be published by EEPSEA as a book in late 1999. A Vietnamese language version is also in preparation.

Some of the graduates of the Vietnam course, have gone on to pursue advanced degrees at UPLB. They include Tran Chi Thien (Ph.D in Agricultural Economics), Nguyen Van Hong (Ph.D in Agronomy) and Trinh Dinh Thau (Ph.D. in Rural Development).

In recent years, more Vietnamese have been trained in Western economics and more have become involved in EEPSEA's regional activities. When EEPSEA launched its regional short course in 1997, UPLB was the logical place to hold it and four Vietnamese researchers were in attendance. The 1998 course included two Vietnamese participants and the 1999 course had eight - the largest contingent from any one country. Many of these participants were graduates of UPLB's MA or PhD programs in Economics or Agricultural Economics. Several have gone on to carry out EEPSEA research projects.

More linkages are also taking place to promote the application of research results. Agnes Rola, resource person to the research project on health impacts of agro-chemicals in Vietnam, has herself worked on this topic for many years in the Philippines and been involved in shaping policy there. In the summer of 1999, she visited Vietnam to discuss

with local policymakers the findings of the Vietnam study and the Philippines' experience in limiting the excessive use of agro-chemicals.

These are not the only connections between the Philippines and other EEPSEA countries - several EEPSEA researchers in China, Indonesia and Sri Lanka are UPLB graduates. Nor is the Philippines the only country to provide this kind of support to its neighbours - EEPSEA members in Thailand provided a course for colleagues in Lao PDR in 1995. But the Philippines-Vietnam connection is particularly strong and seems sure to thrive for some time to come.

6. WORKSHOPS

a) November '98 Biannual Workshop

EEPSEA's 11th biannual workshop took place November 10-13, 1998. In addition to presentations by EEPSEA researchers, plenary sessions covered a variety of topics.

Benoit Laplante re-examined the efficiency advantages of **market-based instruments** for pollution control over command & control (C&C) approaches and found that in practice, these are less than theory leads us to expect. Because regulators often implicitly take damage functions into account when inspecting plants and enforcing regulations, the assumption that C&C ignores the marginal costs and marginal benefits of pollution control does not hold. The outcome may not be perfectly efficient, but is closer than commonly presumed.

Dale Whittington questioned the "increasing block tariff" system widely used for **municipal water supply** in developing countries. Providing households with an initial quota of water at a low rate is supposed to meet the basic water needs of the poor. But Prof. Whittington argued that it is ineffective in promoting either water conservation or income distribution and proposed an alternative pricing system involving a "life line credit".

Justin Lin assessed the effects of **China's rural policies** on the sustainability of agriculture, concluding that significant remnants of central planning - such as a food self-sufficiency policy - are promoting agriculture in inappropriate areas and leading to soil degradation and other problems.

Du Yaping's paper responded to the growing interest in **benefit transfer**, whereby environmental values are taken from existing studies and transferred to new study sites in order to reduce the need for costly and time-consuming original studies. The approach is often recommended for quick cost-benefit analyses and data bases have been established by the governments of Canada and Australia to facilitate it. But can these values be transferred so easily? Du Yaping compared the willingness to pay for water quality improvements in China from her original EEPSEA study with results obtained in studies in

the US and Philippines. While Philippines values were in the same "ballpark", those in the US were quite different.

Finally, **Eric Cowan** reviewed experience with environmental funds and other forms of **environmental finance**, including some very new ones like the Clean Development Mechanism arising out of the Kyoto climate change negotiations. His paper includes an extensive bibliography and suggests topics for research.

b) May 1999 Biannual Workshop

EEPSEA's 12th biannual workshop took place May 11-14, 1999. Some sessions were held in cooperation with the Environment and Natural Resources Accounting Project of the Philippines (ENRAP) and Resources for the Future. In addition to presentations by EEPSEA and ENRAP researchers, plenary sessions covered a variety of topics.

Henry Peskin discussed the differences between the ENRAP and United Nations approach to **natural resource accounting**. Some of these, according to the author, are the inclusion of environmental services in ENRAP and the use of cost-based measures to estimate some benefits in the UN approach. Dr. Peskin questioned the need for a single standardized approach for all countries since priorities and research resources vary; but if a single approach is to be used, he favours ENRAP since an ENRAP framework can generate a UN-style system while the reverse is not true.

Jack Ruitenbeek provided a comprehensive survey of **coral reef economics**. These ecosystems are a source of bio-diversity potentially as great as rainforests, but they have received far less attention from researchers and policy makers. They are also extremely fragile and have suffered devastation in recent years. Their ecology is poorly understood and the little research that has been done is difficult to generalize from or to use for benefit transfer. Dr. Ruitenbeek urged SE Asian economists to "put the SEA in EEPSEA" by carrying out site-specific research. His paper provides a number of concrete suggestions about how to do so.

David Simpson and Isra Sarntisarat discussed preliminary results from their study of the value of **genetic diversity in Thailand's teak forests**. The study is one component of a larger RFF-Chulalongkorn University project on teak forest values, undertaken in response to plans to flood a forest area through dam construction. It found the value of genetic diversity to be fairly modest in comparison with some other forest values. Like the Ruitenbeek paper, the presentation and discussion period also highlighted the wide range of estimates for bio-diversity values found in the literature.

Dale Whittington presented a paper done with Christine Poulos on individuals' rates of **time preference for life saving programs** in developing countries. Cost-benefit analyses of projects typically discount benefits that will be received in the future, in part because people prefer benefits received sooner rather than later. But the discount rates

used are often ad hoc and do not reflect actual time preferences, as revealed through surveys or experiments. Research by Poulos and Whittington suggests that people in poor developing countries have stronger preferences for benefits received now than do people in developed countries. If so, projects providing services and environmental benefits to poor people may need to be rethought.

7. DISSEMINATION & IMPACT

a) Project Impact

i) **Sitanon Jesdapipat's** recent EEPSEA Research Report dealt with pricing of water and electricity from **small-scale dams** in Thailand's forest areas - an option that could provide incentives for local communities to manage the forest sustainably. The idea has attracted interest from the **National Energy Promotion Office**, which is now carrying out a feasibility study of it. If the proposal proves workable, the Office would provide financing for upgrading a series of mini-hydro projects to make them commercially viable. Discussions are also underway with UNDP and the World Bank for use of the Global Environment Fund to support such an endeavor.

ii) **Sunil Chandrasiri's** project on the cost-effectiveness of measures to reduce automotive pollution in Colombo has attracted the attention of policymakers. Following two workshops with government officials, organized by the Ministry of Environment, several measures recommended in Dr. Sunil Chandrasiri's study are under consideration for implementation.

iii) **Study on Haze & Fire Damage:** Last year's EEPSEA/WWF study of the damages from Indonesia's fires and haze included a number of recommendations for the prevention of fires in the future. Recommendation # 7 ("investigate no-burn methods for land clearing") has been adopted as policy by the ASEAN Environment Ministers.

"ASEAN environment ministers, meeting here yesterday, endorsed the immediate implementation of a "zero-burning policy"... The policy would be promoted among plantation owners and timber men in Brunei, Indonesia, Malaysia and Singapore."

- *Zero-burning Policy to be Implemented:* Straits Times, April 17, 1999

A book-length version of the report (*Indonesia's Fires and Haze: The Cost of Catastrophe*) was published by the Institute of SE Asian Studies (ISEAS) and IDRC in August. Copies can be obtained from ISEAS's On-line at <http://www.iseas.edu.sg/pub>.

Although the summary report was issued in May 1998, it continues to attract attention. In addition to the 100 media citations recorded last year, below are citations collected since July 1998. It includes one proposal for a fire prevention project; its approval may have been advanced by the strong justification provided by our damage estimates.

Opening speech of The First Regional Workshop to Strengthen the Capacity of ASEAN to Prevent & Mitigate Transboundary Pollution, Asian Development Bank, Manila, September 1-2, 1998

Asian Development Bank Review, Vol. 30 No. 3, 1998

Radio Canada International, July 24, 1998

Regional Meeting of Asian Institutes of Strategic Studies, Bali, August 1998

World Bank Annual Review "Environment Matters", Fall 1998

East Asian Economics Association Meeting, August 1998

TCS (Singapore) television interview, September 7, 1998

Kuala Lumpur Star, October 22, 1998

World Bank (EDI) Workshop on Fire Hazards, Transboundary Haze and Sustainable Forestry, Surabaya, Indonesia, December 9-12, 1998

"Burning Earth", television documentary, The Discovery Channel, November 5, 1998

D. Murdiyarso & L. Lebel, "Land Use Management and the Impacts of Transboundary Pollution from Fires in SE Asia". Conference paper, December, 1998

A. Heil, "Fire-related Transboundary Haze and Air Pollution in SE Asia". Conference paper, December, 1998

Project proposal: Project Firefight (financed by World Bank: USD 3 million)

"East-West Center Update", December 1, 1998

b) EEPSEA Publications

i) Five Year Report

A report on EEPSEA's achievements from 1993 to 1998 was published in October 1998. It is in "reader-friendly" format, with colour photos and graphics, and includes year-by-year highlights; summaries of high-impact projects; centres of excellence; EEPSEA alumni; complete project list; and more.

ii) Research Reports

The Pollution Charge System in China: An Economic Incentive? - Yun Ping

Tradable Discharge Permits System for Water Pollution of the Upper Nanpan River, China
- Wendong Tao, Weimin Yang & Bo Zhou

Environmental Valuation: An Entrance Fee System for National Parks in Thailand - Adis Israngkura

Damage Schedules for Thai Coastal Areas: An Alternative Approach to Assessing Environmental Values - Ratana Chuenpagdee

Estimation of Environmental Damages from Mining Pollution: The Marinduque Island Mining Accident - Eugenia Bennagen

Economic Valuation of Mangroves and the Roles of Local Communities in the Conservation of Natural Resources: Case Study of Surat Thani, Southern Thailand - Suthawan Sathirathai

The Impact of Agro-Chemical Use on Productivity and Health in Vietnam - Nguyen Huu Dung, et al

Surrogate Pricing for Water: The Case of Micro Hydro-Electricity Cooperatives in Northern Thailand - Sitanon Jesdapipat and Siriporn Kiratikarnkul

Economic and Health Consequences of Pesticide Use in Paddy Production in the Mekong Delta, Vietnam - Nguyen Huu Dung & Tran Thi Thanh Dung

The Use of Benefit Transfer in the Evaluation of Water Quality Improvement: An Application in China - Du Yaping

Marginal Cost Pricing for Coal Fired Electricity in Coastal Cities of China: The Case of Mawan Electricity Plant in Shenzhen, Guangdong Province - Zhang Shiqiu & Duan Yanxin

iii) Policy Briefs

Policy Briefs are 3-page summaries, in non-technical language, of EEPSEA's Research Reports. They are intended for a wide audience of policymakers, educators and NGOs and are issued in both on paper and on our Website. Until 1998, these were issued on an occasional basis. This year the series was formalized and a professional writer engaged on a per-item basis to write the Briefs. Policy Briefs are now issued for all EEPSEA Research Reports. The following were published in FY 1998/99:

Coal, Costs And Consequences: Improving China's Energy Pricing System - Zhang Shiqiu and Duan Yanxin

A Pesticide Tax For Vietnam? - Nguyen Huu Dung and Tran Thi Thanh Dung

The Benefit Transfer Approach to Environmental Valuation: An Application in China - Du Yaping

Agro-Chemicals, Productivity and Health in Vietnam - Nguyen Huu Dung, et al

Surrogate Pricing For Water: The Case For Micro Hydro-electricity Cooperatives in Northern Thailand - Sitanon Jesdapipat and Siriporn Kiratikarnkul

Costing Coastal Conservation: The Case for Community-led Mangrove Protection - Suthawan Sathirathai

Assessing Environmental Values: The Damage Schedule Approach - Ratana Chuenpagdee

Cutting the Costs of Cleanup: The Case for Tradable Discharge Permits in the Upper Nanpan River, China - Wendong Tao, Weimin Yang & Bo Zhou

Sewage or Swimming? The Recreational Value of East Lake, Wuhan, China - Du Yaping

China's Pollution Challenge: Balancing the Carrots and Sticks - Yun Ping

Manila's Water Supply: Getting Water to Work

Philippines Mining Disaster: Counting the Cost of a Ruined River - Eugenia Bennagen

Thailand's National Parks: Making Conservation Pay - Adis Israngkura

iv) Special Papers

The Political Economy of Increasing Block Tariffs for Water - Dale Whittington

Rural Policies and the Sustainability of Agriculture in China - Justin Lin & Fan Zhang

Topical Issues in Environmental Finance - Eric Cowan

Environmental Economics and Coral Reef Management: Needs and Opportunities for Research in SE Asia - H. Jack Ruitenbeek

Individuals' Rates of Time Preference for Life-Saving Programs in Developing Countries:

Results from a Multi-Country Study - Christine Poulos and Dale Whittington

Accounting For Environmental Services: Contrasting the SEEA and the ENRAP Approaches - Henry M. Peskin and Marian S. de los Angeles

c) Journal Articles

An article based on the EEPSEA Research Report by **Wendong Tao and Zhou Bo** ("Tradeable Discharge Permits System For Water Pollution: Case of the Upper Nanpan River of China") was accepted for publication in the Journal of Environmental and Resource Economics. (This is the first article from an EEPSEA research project to appear in an international journal. JERE is perhaps the most prestigious journal in the field of environmental economics.)

An article derived from **Mohd. Shahwahid et al's** EEPSEA Research Report on the value of forests for watershed protection in Malaysia was published in Environment and Development Economics (4 [1999]: 281-314). It was also cited in a journal article by Chomitz and Kumari in World Bank Research Observer, Vol. 13, No. 1, February 1998.

A paper derived from **Yaoqi Zhang's** EEPSEA-supported PhD thesis was published as "The Forest Sector in China: Towards a Market Economy" (in M. Palo & J. Uusivuori, ed. *World Forests, Society and Environment*. Kluwer, 1999).

A Special Section of Environment and Development Economics (Vol. 4, Part 1, February 1999) was devoted to EEPSEA Special Papers by **John Whalley** and **David O'Connor**, with an introduction by David Glover.

Suthawan Sathirathai's EEPSEA Research Report on the value of mangroves in southern Thailand was cited in a journal article by Barbier & Strand in the Journal of Environmental and Resource Economics, September 1998

Eric Cowan's Special Paper on environmental finance was cited in Asia Environmental Review, February 1999.

d) Conferences

Nguyen Van Song and **Nguyen Van Hanh** presented results from their study of environmental impacts of coal-fired electricity production at a conference organized by the Japanese International Cooperation Agency (JICA). They also published two articles from their study in Vietnam Power Review (3/99 and 4/99).

Seliah Thiruchelvam presented projects results on salinization of agricultural land at workshops organized by the International Institute of Irrigation Management (IIIM).

Jeevika Weerahewa presented the interim results of her study on the effects of trade on the environment in Sri Lanka at the MIMAP international conference on Micro Impacts of Macroeconomic and Adjustment Policies in Nepal in November, 1998.

Several EEPSEA researchers presented papers at the IX Pacific Science Inter-Congress on The Economics on Sustainable Development, in Taipei, November 16-18, 1998.

Two EEPSEA researchers presented papers or commentaries at the Methodology Workshop on Environmental Services & Land Use Change: Bridging the Gap between Policy & Research in SE Asia. Chiang Mai, Thailand, May 31 - June 2, 1999.

A documentary video featuring several EEPSEA projects was used for training purposes in an environmental economics short course in Bangkok (March, 1999: DANCED/UNEP/THITREM/Thammasat).

e) Media Appearances

On April 15, EEPSEA's Director talked about the **health effects of pollution** on "*An Apple a Day*", a Singapore public affairs television program. He also gave two interviews on *Radio Singapore International*: one, for **Earth Day**, on the state of the environment in Asia; another discussing the EEPSEA project on **micro-hydro in Thailand**.

Two radio interviews on the effects of the economic crisis on the environment in Indonesia were given by EEPSEA resource person **Bill Hyde** to the *Canadian Broadcasting Corporation*, November 5, 1998.

f) Website

The Website was upgraded in January to provide a more attractive appearance and a more logical search path for the now-extensive collection of documents. The site received 215,000 hits in '98/99, compared to 60,000 in '97/98 and 18,000 the year before.

Several new links were added (bringing the total to 20): International Institute for Sustainable Development; World Bank (Environmental Economics & Indicators); ENVALUE and EVRI; Tom Teitenberg's Homepage; and US Environmental Protection Agency (Economy & Environment).

Until 1999, EEPSEA attempted to post all Research Reports on the Website, as well providing printed copies to those on its mailing list. The technical difficulty of posting documents containing many tables and equations, coupled with the increased volume of reports, has made this impractical. Since January 1999, Research Reports have been available only in printed form. A 3-page Policy Brief, summarizing the principal findings of each, is posted on the Website. Printed copies of any EEPSEA publication including

Research Reports, Policy Briefs, and Special Papers can always be obtained free of charge from the EEPSEA Secretariat.

g) Members' Accomplishments

Shiqui (Susan) Zhang represented China at two meetings related to the **Montreal Protocol** on ozone-depleting substances recently. In October she attended a meeting of the Technology and Economic Assessment Panel in Washington DC and in November she attended the 10th Parties Meeting, where she co-chaired the Economic Options Committee. In January 1999, Susan attended the Task Force on the Replenishment Report for the 2000-2002 Multilateral Fund of UNEP. In June, she attended a meeting of the Montreal Protocol in Geneva as member of the Task Force for Replenishment of the Multilateral Fund (Montreal Protocol) for 2000-2002; the task force comprises 3 members from developed and 3 from developing countries.

In January 1998, Susan was awarded the First China Young Environmental Scientist Award by the Chinese Association of Environmental Sciences; in September she received the Sixth China Young Science and Technology Award from the Chinese Science Association. She was recently promoted to full Professor at Peking University.

Agus Sari's work with EEPSEA assesses the distributional impact of policies that Indonesia might undertake to reduce carbon emissions. This study informed his contributions to international climate change negotiations, as Technical Advisor to the Indonesian Negotiations Delegation at the Conference of the Parties to the **Framework Convention on Climate Change** in Buenos Aires in November 1998.

After completing EEPSEA's five-week course in Los Banos, **Dang Kim Son** has moved from the Mekong Delta Rice Research Institute to become **Deputy President of the Policy Division** of the Ministry of Agriculture and Rural Development in Vietnam.

An EEPSEA member since 1994, **Nguyen Huu Dung** has received an award to pursue a PhD program at the **Institute for Social Studies** in the Hague. **Jing Xu** is pursuing a PhD in Economics at the University of Wisconsin and **Yun Ping** (whose project was highlighted in the Five Year Report) is at George Mason in the US. **Du Yaping** is studying in the Netherlands.

Mohd Shahwahid H. O. was principal instructor for a short course on environmental valuation in Penang, Malaysia. Teaching materials were drawn in part from EEPSEA's annual short course, at which Dr. Shahwahid has been a teaching associate.

8. NETWORKING & COLLABORATION

Contacts continued with a wide range of institutions and networks. Noteworthy is an emerging collaboration with the **Environmental Valuation Reference Inventory (EVRI)**, a database provided by Environment Canada. The purpose of the database is to facilitate benefit transfer (the transfer of estimates of environmental values from previous studies to new study sites.) It is Web-based and allows researchers to search for studies by keywords. It currently contains a wealth of studies, but these are almost entirely from developed countries. EEPSEA is currently negotiating an agreement whereby EEPSEA would input studies from Asia in return for free access to the database for EEPSEA researchers. An EEPSEA researcher was trained in input methods at EVRI headquarters in August 1999; input of the first studies will begin shortly.

9. MANAGEMENT

a) Evaluation

In July-October 1998, EEPSEA was evaluated by a team of consultants hired by IDRC. This formed part of an assessment of IDRC's experience with multi-donor partnerships (Jim Armstrong & Anne Whyte "Learning Partnerships: A Review of IDRC Secretariats", Vol. 1, p. 121-138). The assessment focused on management and program delivery and had strongly positive findings. (E.g. "EEPSEA is very focused and results-oriented. They have a clear focus on a single issue and a structure set up to deliver specific activities related to their mission. There is a high performance commitment.") The overall conclusion: "There is little doubt that, by any measure, EEPSEA is one of the more successful Secretariats housed at IDRC."

In addition, a comprehensive external evaluation was launched on behalf of the Sponsors Group in June 1998. This conforms to the established evaluation schedule; the previous assessment was carried out in 1993 by Mohan Munasinghe. The current evaluation, by Daniel Bromley and Gelia Castillo, will be completed in January 2000. It will include an extensive tracer study of EEPSEA awardees since 1993.

b) Secretariat

Jariah Saad, 20% Secretary, resigned in June 1999 to work full-time at IDRC, reducing administrative support slightly. Otherwise staffing continued unchanged (David Glover, Director and Catherine Ndiaye, Program Assistant, both in Singapore, full-time; and Herminia Francisco, Deputy Director, Philippines, 60% time).

c) Advisory Committee

The terms of several members expired recently in 1999: **Vo-Tong Xuan, Ponciano**

Intal Jr., Stein Hansen and John Whalley. **Piyasena Abeygunawardena** resigned after moving to a new position at ADB. They were replaced by **Le Quy An** (Vietnam Society for Nature Conservancy and former Vice-Minister of Science, Technology & Environment, Vietnam); **Cielito Habito** (former Director-General, National Economic & Development Authority, Philippines); **Nancy Olewiler** (Professor & Chair, Dept. of Economics, Simon Fraser University, Canada); and **Mohan Munasinghe** (Distinguished Visiting Professor of Environmental Management, University of Colombo, Sri Lanka).

d) Sponsors Group

The **Swedish Agency for International Development Cooperation** (Sida) recently approved a new grant, increasing both the duration and level of support by 50% over the previous grant. The **MacArthur Foundation** also increased the level of its funding in its most recent grant. The **Dutch Ministry of Foreign Affairs** indicated its intention to rejoin the Sponsors Group after an absence of one year, owing to a freeze and restructuring of the Ministry's procedures for budget allocation.

Annex 1

ENVIRONMENTAL & RESOURCE ECONOMICS COURSE May 19 - June 19, 1999: Los Banos, Philippines

PARTICIPANTS

Mr. Sideth Muong, Université de Nice, France (Cambodia) *
Mr. Tia Savora, Cambodia Development Research Institute
Mr. Jun Wang, The University of Queensland, Australia (China)
Mr. Xiaoping Wang, Yale University (China) *
Ms. Jing Xu, University of Wisconsin-Madison (China) *
Mr. Masyhudi Muqorobin, International Islamic University, Malaysia (Indonesia) *
Mr. Tanza Erlambang, Universiti Putra Malaysia (Indonesia) **
Mr. Taifiq Alimi, Leadership for Environment and Development, Indonesia
Mr. Louangvixa Boonta, National Statistical Center, Lao PDR
Mr. Bounchanh Keosithamma, Vientiane Municipality, Lao PDR
Ms. Grace Wong, University of Florida (Malaysia) **
Ms. Yeo Bee Hong, World Wide Fund for Nature, Malaysia
Ms. Rafaelita Aldaba, Philippine Institute for Development Studies
Ms. Maria Centeno, University of New England, Australia (Philippines) *
Mr. Agham Cuevas, University of the Philippines at Los Banos
Ms. Elvira Orbeta, Resources, Environment & Economics Centre for Studies, Philippines
Mr. Ranil Abayasekara, University of Peradeniya, Sri Lanka
Ms. Kiran Dhanapala, University of Peradeniya, Sri Lanka
Mr. Indra Ranasinghe, Coast Conservation Department, Sri Lanka
Ms. Jutamas (May) Arunanondchai, University of Warwick, UK (Thailand) *
Ms. Suwana Praneetvatakul, Kasertsart University, Thailand
Ms. Chapika Sangkapitux, Kasertsart University, Thailand
Ms. Tran Thi Thanh Dung, Vietnam National University
Mr. Dang Thanh Ha, National University of Ho Chi Minh City
Mr. Pham Thai Hung, National Economics University
Mr. Pham Van Hung, Hanoi Agricultural University
Mr. Nguyen Van Ngai, Australian National University *
Mr. Vu Xuan Quang, Vienna University of Economics & Business Admin (Vietnam) *
Mr. Bui Dung The, University of the Philippines at Los Banos *
Ms. Le Ngoc Uyen, Vietnam National University

* *PhD Student*

** *MA Student*

Annex 2

ADVISORY COMMITTEE

The Advisory Committee advises the Director on priorities for research and training and recommends to the Sponsors Group the annual program of work. The Committee consists of senior scholars and policy makers active in environmental management in Asia. A majority of the Committee's members are from Asia. Each member has a three year term, renewable once for Asian members. The Committee meets twice a year, in conjunction with the biannual research workshop.

As of June 30, 1999, the Committee consisted of the following individuals:

Dr. Le Quy An, Vietnam Society for Nature Conservancy and former Vice-Minister of Science, Technology and Environment, Vietnam

Dr. Cielito Habito, University of the Philippines at Los Banos and former Director-General, National Economic & Development Authority, Philippines

Dr. Mingsarn Kaosa-Ard, Chiang Mai University and Thailand Development Research Institute

Mr. M. S. Kismadi, Executive Director, Yayasan Pembangunan Berkelanjutan, Indonesia

Dr. Mohan Munasinghe, Distinguished Visiting Professor of Environmental Management, University of Colombo, Sri Lanka

Dr. Nancy Olewiler, Professor & Chair, Department of Economics, Simon Fraser University, Canada

Mr. Ma Zhong, Renmin University, China

Annex 3

SPONSORS GROUP

The Sponsors Group of participating donors sets policy, provides financial support and approves the annual program of work and budget. It comprises all donors contributing at least USD 100,000 per year. The current and prospective membership is listed below. All amounts are expressed in **USD**. (Since contributions are made in the donor's currency exact USD equivalents may vary.)

1. International Development Research Centre (IDRC), Canada
(\$300,000/yr.)
2. Danish Ministry of Foreign Affairs (DANIDA)
(\$125,000/yr.)
3. Swedish International Development Agency (SIDA)
(\$170,000/yr.)
4. Canadian International Development Agency (CIDA)
(\$325,000/yr.)
5. Norsk Hydro, Ltd., Norway*
(\$15,000/yr.)
6. The MacArthur Foundation, United States
(\$170,000/yr.)
7. Ministry of Foreign Affairs, Norway
(\$150,000/yr.)

* contributes but does not sit on Sponsors Group