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ECONOMY AND ENVIRONMENT PROGRAM FOR SOUTHEAST ASIA

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Annual Report July 1, 1999 - June 30, 2000

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September 2000

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ECONOMY AND ENVIRONMENT PROGRAM FOR SOUTHEAST ASIA

Annual Report July 1, 1999 - June 30, 2000

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David Glover, Director September, 2000

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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 regional course, 27 were accepted. Approximately one application in three for research awards is accepted. To date, EEPSEA has provided training to 280 people and supported 98 research projects.

2. HIGHLIGHTS

This year was EEPSEA's most active yet, with 22 research projects approved, 5 courses offered, and 2 books published.

From July 1999 to February 2000, EEPSEA was subject to an in-depth external evaluation by *Daniel Bromley* and *Gelia Castillo*. They found that:

"EEPSEA, in its short existence, has established itself as an exemplar in producing first-rate policy relevant research on environmental economics. Of greater importance, EEPSEA is developing a cohort of well-trained environmental economists in Southeast Asia who will continue to provide substantive policy input into the resolution of serious environmental problems."

Several projects - in Sri Lanka, Philippines, Indonesia and Malaysia - reported significant impact on policy and community action. (See *EEPSEA Impact Report: 1993-2000* for details.) In addition to regional short courses in Singapore and Los Banos, incountry courses were held in Cambodia, Vietnam and Sri Lanka.

In June, EEPSEA launched its first research projects by Cambodians and its first project in Lao PDR. The latter, done in collaboration with EEPSEA colleagues in Malaysia, looks at timber revenue systems and their potential for encouraging sustainable forest management. A comparative study of solid waste management in several countries was also launched.

EEPSEA produced its first books this year - one documenting the cost of Indonesia's fires and haze, the other a set of seven studies from Vietnam.

3. TRAINING

a) Regional Short Courses

i) Environmental & Resource Economics at Los Banos

EEPSEA's annual five-week course in environmental & resource economics took place for the fourth time in Los Banos, Philippines, April 3 - May 1. Principal instructors were *Myrick Freeman III*, *Nancy Olewiler*, *Benoit Laplante* and *John Whalley*. Twelve participants out of 22 were female. While Filipinos were the most numerous participants in Years 1 and 2, and Vietnamese in Year 3, the Thai contingent was the largest this year. See Annex 1 for the list of participants.

The course outline (available on our website) was used as the model for a similar course offered by the Indira Gandhi Institute in India and financed by the World Bank.

ii) Pollution Control

EEPSEA has begun to offer a series of short courses on **environmental science for economists** to its members. The first course in the series, held December 6-10 in Singapore dealt with the physical science of pollution and pollution control, highlighting information essential for the analysis of policy options. Topics covered included: pollution standards and how they are set; air & water pollutants typical of Asian cities; their sources and effects on humans & ecosystems; and common technologies for their control. The course was taught by *David Barnes* and *Matt Davies*, of Sinclair Knight Mertz Ltd., and *David James* of Ecoservices Ltd. Australia.

b) In-Country Courses

In addition to its regional courses, EEPSEA offers in-country training to meet specific needs in its member countries. This year, three such courses were offered:

i) Cambodia

Cambodia's research capacity is extremely weak, in part due the destructive policies of the Khmer Rouge. In order to address the country's special needs, EEPSEA organized a four-week course in April 2000. Twenty-three participants attended, from government agencies and NGOs, principally the Departments of Fisheries, Forestry and Agriculture. Instructors were *Bruce McKenney* (US, resident of Cambodia), *Agnes Rola* & *Herminia Francisco* (Philippines), *Anton Meister* (New Zealand) and *Benoit Laplante* & *Peter Kennedy* (Canada). The course began with an introduction to basic concepts in microeconomics, then focused on cost-benefit analysis of environmental problems, relying heavily on case studies prepared especially for the course. It concluded with an intensive 5-day workshop in which resource persons worked with teams of participants to prepare research proposals for EEPSEA funding. The result was five approved projects (see Research).

ii) Sri Lanka

In response to a request from the Ministry of Planning, EEPSEA organized a tenday course & proposal preparation workshop on economy-wide environmental issues. While Sri Lanka has good capacity in environmental economics, most of this is in the universities or the Environment Ministry. But the Planning Ministry plays an important role in environmental impact assessment & project approval and in shaping economy-wide policies that affect the environment. A UNDP project provided small amounts of funding for research projects by Ministry officials, but no resources to train them in the techniques needed to do the research. Project leader *Nimal Siripala*, a graduate of EEPSEA's Los

Banos course, therefore requested EEPSEA's involvement.

A team of three foreign and several local instructors was organized and a curriculum & teaching materials prepared. Unfortunately, just prior to the course, security conditions in the country declined precipitously, with daily bombings and many fatalities. The foreign instructors were unable to attend, and the course had to be scaled back, using only Sri Lankan instructors. These included several EEPSEA members. This was sufficient to allow the graduates to prepare 20 research proposals. These were funded by UNDP and are now underway.

iii) Vietnam

Over the years, EEPSEA has carried out many training and supervised research activities in Vietnam. Several of these have dealt with the health and environmental impacts of pesticide misuse. In 1999, results of these studies were presented to senior officials of the Vietnamese government's Plant Protection Department (PPD). The officials noted that they had a wealth of data on these problems, but lacked expertise to analyse them. In response to their request, EEPSEA mounted a short course on valuation of health and environmental impacts of pesticides. The course lasted 11 days (June 5-16) and was taught by *Agnes Rola* (Philippines) and *Anton Meister* (New Zealand), with Vietnamese EEPSEA members acting as interpreters and discussion leaders. The PPD contributed a substantial amount toward the cost of the course. The PPD recently submitted a proposal to EEPSEA for an assisted project to carry out the data analysis.

c) Other Training Activities

In response to a request from the **University of Peradeniya in Sri Lanka**, EEPSEA sponsored an **evaluation of two MSc progams** in the Postgraduate Institute of Agriculture: Environmental Economics and Natural Resource Management. The evaluation was conducted by EEPSEA resource person *Dale Whittington* of the University of North Carolina at Chapel Hill, USA. The findings were very positive in terms of quality of teaching. The main problem revealed by the evaluation is the difficulty of teaching students who already have full time jobs, which is the case for almost all of them. Students have only weekends to attend classes and most commute from Colombo to Kandy. This slows their progress considerably and prevents them from participating in faculty members' research. EEPSEA is now exploring with the university ways in which to alleviate this problem.

Three fellowships were granted to **University of the Philippines at Los Banos** to allow 3 Filipino students to enroll in a new MSc in Economics program, with specialization in environmental economics. UPLB offers an inexpensive, high quality program and EEPSEA plans to provide fellowships for foreign students in 2000-01, when there is more

lead time to identify them.

Individual study awards were granted to the following people:

Nguyen Van Song, Vietnam - Three-year PhD program in Agricultural Economics at University of the Philippines at Los Banos. This is EEPSEA's first PhD award. (Mr. Song did his MSc at UPLB and successfully completed an EEPSEA research project on environmental costs of coal mining in Vietnam.)

Phan Thi Giac Tam, Vietnam - Eight-month award to complete a PhD program in Economics at Oklahoma State University, USA. (Following completion in December 2000, Ms. Tam is scheduled to return to Vietnam as EEPSEA's first Country Associate.)

Yeo Bee Hong, Malaysia - Ten-day course on Water & Sanitation Infrastructure Planning, Massachusetts Institute of Technology, USA. (The course was intended to assist her in preparing a proposal on water pricing.)

Elvira Orbeta, Philippines - One-week course in methods for encoding benefit transfer data, Environment Canada, Ottawa. (The course enabled Ms. Orbeta to begin inputting studies from EEPSEA and elsewhere into the Environmental Valuation Reference Inventory.)

The Director and Deputy Director also gave various lectures to university classes and visiting delegations throughout the year.

4. RESEARCH

Twenty-two projects were approved, four of which were PhD thesis awards. Noteworthy were the cross-country comparative projects on solid waste (Thailand, Philippines & Malaysia) and timber pricing (Lao PDR & Malaysia); our first projects in Lao PDR; and the first EEPSEA projects by Cambodians.

- 1. Sustainability and Structural Change: An Efficiency Analysis of Timber Plantation Policy in Indonesia. Bambang Hartono, North Carolina State University, USA (PhD Thesis Award).
- 2. An Economic Analysis of Ream National Park, Cambodia. Thanakvaro Thyl De Lopez, University of Cambridge, UK (PhD Thesis Award).
- 3. Capital Market Reaction to the Public Disclosure of Companies' Environmental Performance: Analysis of the Proper Prokasih Program in Indonesia, 1995-1997. Taufiq Alimi, Yayasan Pembangunan Berkelanjutan (LEAD), Indonesia.

- 4. Assessment and Forecast of Carbon Dioxide Emissions in Vietnam During the Economic Reform Process. Vu Xuan Quang, Vienna University of Economics & Business Administration, Austria (PhD Thesis Award).
- 5. Erosion, Productivity and Adoption Analysis of Typical Land Use Systems in Highly Erodible Hilly Areas in Thua Thien Hue Province, Central Vietnam. Bui Dung The, Hue University, Vietnam.
- 6. An Efficiency Analysis of Sawmilling Industry in Sri Lanka: Implications for Rainforest Conservation. Herath Gunatilake, University of Peradeniya, Sri Lanka.
- 7. Cost-Benefit Analysis of Metering Groundwater Use of Private Well Owners in Cagayan de Oro, Philippines. Rosalina Tan, Ateneo de Manila University.
- 8. Trade Libralization and Pollution: Evidence from the Philippines. Rafaelita Mercado-Aldaba, Resources, Environment & Economics Centre for Studies, Inc. (REECs), Philippines.
- 9. Policy Instruments for the Reduction of Agro-chemical use in Vietnam. Nguyen Huu Dung, Institute of Social Studies, the Hague (part of PhD Thesis).
- 10. Cost-Benefit Analysis of Domestic Sewerage Treatment in Provincial Towns of Cambodia. Som Mithonarath, Uong Bunal & Yim Chamnam, Cambodia.
- 11. Valuation of Flooded Forests in Kandal Province, Cambodia. Hap Navy, Thay Somony & Keo Sovannary, Department of Fisheries, Cambodia.
- 12. Health and Environmental Effects of Agrochemical Use in Rice in Cambodia. Mary Chamroeun, Van Kiet Le & Sun Votthy, Cambodia.
- 13. Contingent Valuation Measurement of Household Demand for Water in Colombo, Sri Lanka. Pradeep Kurukulasuriya, Yale University, USA (MA thesis).
- 14. Ecological Effects of the 'Mimosa Pigra' Weed Infestation on Fishery Habitat in Kandal Province, Cambodia Area. Keo Chamroeun, Ministry of Agriculture, Cambodia.
- 15. Forest Use and Product Flow in Chumkiri District, Kampot Province. Sy Ramony, Hou Kalyan, Chay Chetha & Meas Sothunvathanak, Cambodia.
- 16. Air Qualtiy Impacts of Electricity Restructuring in the Philippines. Elvira Orbeta, Resources, Environment & Economics Centre for Studies, Inc. (REECs), Philippines.

- 17. Economic Analysis of Coral Reefs in the Andaman Sea of Thailand. Udomsak Seenprachawong, Sukhothai Thammathirat Open University, Thailand.
- 18. Economic Analysis of Alternative Approaches for Sludge Management in Bangkok. Churai Tapvong, Sukhothai Thammathirat Open University, Thailand.
- 19. Economic Analysis of Materials Recovery and Recycling, Philippines. Eugenia Bennagen, Resources, Environment & Economics Centre for Studies, Inc. (REECs), Philippines.
- 20. Behaviour of Timber Concessionaires in Response to Selected Policy Instruments: the Case of Peninsular Malaysia. Mohd Shahwahid Haji Othman, Universiti Putra Malaysia.
- 21. Comparative Study of Forest Pricing Policy in Malaysia and Lao PDR: Malaysia Component. Awang Noor and Mohd Shahwahid Haji Othman, Universiti Putra Malaysia.
- 22. Comparative Study of Forest Pricing Policy in Malaysia and Lao PDR: Lao Component. Thoughanh Southitham, Burapha Agro-Forestry

5. BIANNUAL WORKSHOPS

a) November 1999

The November workshop included five plenary sessions, in addition to presentations of proposed and ongoing EEPSEA research.

Anton Meister described New Zealand's famous system of **tradeable quotas** for fishing rights, and its potential for application in SE Asia. Among the factors contributing to the system's success in New Zealand were extensive consultation before quotas were introduced; the fact that off-loading of catch is practical only in a limited number of ports, where catches can be monitored; and the willingness of many fishermen to be bought out and leave the industry.

Stale Navrud assessed some applications of the **benefit transfer** (BT) approach in cross-country comparisons within Europe and between Costa Rica and Portugal. These comparisons showed large discrepancies in the values estimated, suggesting that BT is unsuitable for purposes that require very accurate estimates. He also noted that transfers from a single similar study appear to be more accurate than transfers from "meta-analyses" that average the findings from many studies.

Roger Sedjo looked at biodiversity and other forest values, arguing that these values are often overestimated. The low profitability of bio-prospecting ventures points to low marketable values from biodiversity, while vegetative cover other than forests can provide many of the same benefits as forests in terms of erosion control and hydrological functions. If carbon trading becomes important, however, carbon sequestration service may acquire considerable marketable value.

Bill Hyde presented a model relating the enforceability of **property rights for forests** to the latter's distance from settlements.

Rufus Bellamy drew on his experience as an environmental journalist and activist to provide us with some pointers about **how to communicate effectively with the media**, policymakers and the general public. Among his suggestions were to structure any presentation or press release like a pyramid, with the main finding or recommendation on top, and the supporting arguments coming later.

b) May 2000

The May workshop involved a change of format, with a case study substituting for two of the plenary talks. The case study, designed by *David James*, looked at the **environmental impacts of dam construction** in the fictitious country of Jakoma and was carried out in small concurrent groups. The exercise was well received, with the great majority of participants voting in favour of continuing the format in future workshops.

Plenary speakers were Tom Tomich and Ben Malayang.

Tom Tomich, Principal Economist at the International Centre for Research in Agroforestry (ICRAF), argues that current lines of research have left a significant gap in the analysis of **forest ecology**, thereby impeding the development of solution so forest degradation. "There has been a fairly complete analysis of environmental issues at the macro and micro level - [e.g. climate stability on the one hand, and nutrient cycling on the other] - but not enough work has been done in the middle ground between the two," explained Dr. Tomich. "There must be more focus on issues at a 'meso-scale' such as the landscape-level functions of biodiversity, smoke, and watershed hydrology," he said. Such issues, he added, involve spatial and time scales that are too big for individuals to resolve but not too big for a single government entity to handle.

Because of this, the analysis of problems at this 'missing' middle scale can result in solutions that link local and international needs - yielding win-win solutions. For example, "we need to understand how land cover affects the amount of water in river beds during the dry season," said Dr. Tomich. "If local governments and people perceive land cover to be a key water supply issue and conserve it, then we'll get not only local benefits, but international benefits such as carbon sequestration and biodiversity conservation."

Ben Malayang, a professor at the School of Environmental Science and Management in Los Banos, told EEPSEA researchers that they must get their hands dirty if they are to have an **impact on policy**. "Policy is a moment in a continuing process of consensus making" said Malayang, who was speaking on how science can feed into public policy. "The policy researcher is part of this process, so researchers should always be conscious of who their allies are." Dr. Malayang, who drew on his experiences as Undersecretary of the Environment in the Ramos administration, illustrated the need for researchers to establish judicious partnerships with policy makers by highlighting the work of Filipino environmental research group ENRAP - the Environment and Natural Resource Accounting Project.

Since its formation in 1991, Dr. Malayang explained, ENRAP's studies have been key inputs into pollution control policies in the Philippines. The group's work has helped phase out leaded gasoline and shape legislation such as the Clean Air Act of 1999. "ENRAP had the studies when they were needed," said Dr. Malayang, who argued that because ENRAP was a long-term project and represented a sustained research effort, politicians could rely on it for resources. ENRAP also provided policy options and explained them clearly. "Research that helps resolve the policy dilemmas that most harry, harass or disturb policy makers", he said, "will have a higher likelihood of influencing policy making."

6. DISSEMINATION & IMPACT

Late this fiscal year, research was carried out to trace the impact of EEPSEA support since 1993, in a variety of categories:

- * impact on policies and community action
- * career development
- * reaching the media and international journals
- * increasing teaching capacity
- * introducing new concepts and tools into public discourse
- multiplying impact through networking.

The findings have been documented in *EEPSEA Impact Report: 1993-2000*, a 24-page colour report available in September 2000. Dissemination and impact for the 99/00 fiscal year are reported below.

a) Project Impact

Several projects achieved notable impact in 99/00. Details can be found in *EEPSEA Impact Report: 1993-2000*.

Selliah Thiruchevam's work led local farmers associations to combat salinity from over-irrigation in Sri Lanka.

Churai Tapvong helped Bangkok's municipal authority establish fees for waste water treatment.

Budy Resosurdomo's evidence about the economy-wide benefits of **integrated pest** managment influenced the decision to continue the program in Indonesia.

Herminia Francisco's collaborative project with UNEP has led local organizations to implement user fees for watershed conservation in the Philippines.

Angeles Catelo's research findings led the government and pig raisers to look into options for **controlling pig waste** in the Philippines.

b) **EEPSEA Publications**

There continues to be heavy demand for publications, both online and on paper. Many of the requests come from outside SE Asia. For example, EEPSEA provided a full set of publications to the National Environment Office in Madagascar.

i) Books

Economy and Environment: Case Studies in Vietnam was published by EEPSEA in February. It contains chapters on emissions charges for water pollution; health effects of agrochemical overuse; recreational benefits of a national park; valuation of non-timber forest products; agro-forestry; mangrove management; and rice-shrimp farming. This is the product of a two-year research effort involving 26 Vietnamese researchers and is the first book on environmental economics produced in the country. A Vietnamese translation is in preparation. The book was favourably reviewed in *Indochina Chronology*.

Indonesia's Fires and Haze: The Cost of Catastrophe was published by ISEAS and IDRC, in hardcover and paperback.

ii) Research Reports

Controlling Automotive Air Pollution: The Case of Colombo City - Sunil Chandrasiri

Marginal Opportunity Cost Pricing for Wastewater Disposal: A Case Study of Wuxi China - Fan Zhang

An Economic Analysis of Salinity Problems in the Mahaweli River System H Irrigation Scheme in Sri Lanka - Selliah Thiruchelvam and S. Pathmarajah

Pollution Tax for Controlling Emissions from the Manufacturing and Power Generation Sectors: Metro Manila - Catherine Frances Corpuz

Forestry Policy, Non-timber Forest Products and the Rural Economy in the Wet Zone Forests in Sri Lanka - Cyril Bogahawatte

Water Quality Improvements: A Contingent Valuation Study of the Chao Phraya River-Churai Tapvong and Jittapatr Kruavan

China's Paper Industry: Growth and Environmental Policy During Economic Reform - Jintao Xu

Benefits and Costs of Controlling Emissions from Fossil-fired Power Plants: Region IV, Philippines - Elvira M. Orbeta, Carlito M. Rufo Jr., and Anabeth L Indab

iii) Policy Briefs

Colombo Chokes on the Car: The Case for Controlling Automotive Air Pollution - Sunil Chandrasiri

Cleaning Up The King's River: A 'Willingness To Pay' Study From Thailand - Churai Tapvong

Can Market Forces Clean The Air In Metro Manila? - Catherine Corpuz

Getting The Incentives Right: Sri Lanka Forest Conservation - Cyril Bogahawatte

Seeing Through The Smoke: Choosing The Best Options For Pollution Clean-Up In The Philippines - Elvira M. Orbeta

Ignoring The Labels: An Analysis of Pesticide Use in China - Jikun Huang

iv) Special Papers

The New Zealand Experience with Fishery Management: Lessons Learned - Anton Meister

Valuasia: Benefit Transfer for SE Asia - Romel Saplaco

c) Journal Articles

Yaoqi Zhang, J. Uusivouri, J. Kuuluvainen, "Impacts of Economic Reforms on Rural Forestry in China". Forest Policy & Economics 1 (May, 2000)

Yaoqi Zhang, "Costs of Plans vs. Costs of Markets: Economic Reforms in State-Owned Forest Management". Development Policy Review 18, 2000.

Yaoqi Zhang, "Deforestation & Forest Transition: Theory & Evidence from China". M. Vanhanen (ed.), *Global Prospects on Deforestation & Forest Transition*. Kluwer Academic Publishers, Dordrecht, 2000.

d) Re-publication

In several cases, EEPSEA papers were picked up by other publishers for wider circulation:

Dale Whittington's Special Paper on applying contingent valuation methods was published in World Development.

Ed Barbier's Special Paper on soil erosion was published in an edited volume published by Edward Elgar.

Adis Israngkura's Research Report on entrance fees for national parks was republished by the Thailand Development Research Institute.

e) Conferences

Several researchers were supported by EEPSEA to present their work at conferences:

Nguyen Van Song, Vietnam- Vietnamese Economics Network Conference, Waterloo University, Canada, July.

Churai Tapvong, Thailand - Northwest Regional Consortium for Southeast Asian Studies, University of British Columbia, Canada, October 22-24.

Selliah Thiruchelvam, Sri Lanka - International Conference on Agricultural Engineering, Beijing, December 14-17.

Susan Zhang, China - Conference to Assess Ancillary Benefits of Climate Change Policies, Inter-governmental Panel on Climate Change, Washington DC, March 27-29.

f) Media Events

On November 16-17, EEPSEA, with the Asian Media and Communications Centre (AMIC), held a **workshop with environmental journalists** from EEPSEA member countries. The first day consisted of presentations by EEPSEA members on the principles of environmental economics and their applications in EEPSEA research projects. On Day 2, the journalists received coaching from AMIC staff to prepare articles based on the previous day's presentations. The journalists also met EEPSEA researchers at the November biannual workshop the next day, making contacts that should increase EEPSEA's exposure in local media in the future. (See Annex for Day 1's program.)

Agus Sari, whose research project deals with the income distribution effects of climate change mitigation measures, was quoted extensively on that subject in **New Scientist**, May 13, 2000.

On February 21, the Director was interviewed on **Radio Singapore International** about the environmental implications of globalization.

EEPSEA put on a display at the **Global Knowledge Fair II** in Kuala Lumpur, Malaysia, in March.

g) Website

The Website's popularity continues to grow. The number of hits recorded has increased in recent years as follows:

1996/97	18,000
1997/98	60,000
1998/99	215,000
1999/00	427,053

New techniques also allow us to monitor the number of "user visits" i.e. the number of times visitors actually entered the site and extracted information. This is normally a much smaller figure than hits. In 1999/00 the site registered 23,787 user visits. Beginning this year, we shall report both hits and user visits.

h) Members' Accomplishments

Several members applied skills they developed with EEPSEA in other fora, without EEPSEA funding:

Mohd. Shawahid H.O. of Malaysia taught principles of valuation to Asia-Pacific staff of World Wide Fund for Nature (WWF) in Beijing in July, an activity financed by WWF.

Shawahid and Churai Tapvong both spent several weeks at the University of Gothenberg, Sweden in November as EEU Visiting Research Fellows. Other EEPSEA members who had study visits at Gothenberg included Udomsak Seenprachawong (Thailand), Herath Gunatilatke (Sri Lanka) and Tran Vo Hung Son & Vu Xuan Quang (Vietnam).

Adis Israngkura and other Thai EEPSEA members conducted a nine-day training workshop on environmental valuation in Bangkok in June. It was organised by the Thailand Development Research Institute and financed by the Government of Thailand. The 25 participants were from the Office of Environmental Policy and Planning (OEEP), Ministry of Science, Technology and Environment, and related agencies. The purpose of the course was to prepare guidelines for environmental valuation and conduct on-the-job training in their use. EEPSEA materials were used extensively in the course.

7. NETWORKING & COLLABORATION

Efforts continued to deepen environmental economics in member countries and to work with other institutions and networks:

The Vietnamese Association of Environmental Economists held its inaugural meeting with EEPSEA support on December 16-17 in Hanoi. The program included papers by Vietnamese economists; a presentation by EEPSEA resource person *Benoit Laplante* on the potential for economic instruments in Vietnam; and an organizational meeting to discuss the association's governance and future activities.

The Malaysian Association of Resource and Environmental Economists (MAREE) held its first meeting, also with EEPSEA support, in Air Keroh, Malacca, July 29/30.

EEPSEA's Director attended the inaugural meeting of **SANDEE** - the South Asian Network for Development and Environmental Economics - in Nepal in November. He spoke to the Steering Committee and participants about EEPSEA's experience in organizing research & training networks.

8. MANAGEMENT

a) Evaluation

From July 1999 to February 2000, EEPSEA was subject to an **in-depth external evaluation** carried out on behalf of the Sponsors Group by *Dr. Daniel Bromley* and *Dr. Gelia Castillo*. The findings were published in February 1999; supplemented by information from an exhaustive tracer study of EEPSEA recipients, they also appear in the *EEPSEA Impact Report:1993-2000*. The evaluators found that:

"EEPSEA, in its short existence, has established itself as an exemplar in producing first-rate policy relevant research on environmental economics. Of greater importance, EEPSEA is developing a cohort of well-trained environmental economists in Southeast Asia who will continue to provide substantive policy input into the resolution of serious environmental problems."

EEPSEA was also subject to a one-week audit by IDRC, as a routiine procedure, and likewise received a very high performance rating. In IDRC's internal risk assessment framework, EEPSEA is classified as "very low risk".

b) Secretariat

Staffing continued unchanged: *David Glover* (Director) and *Catherine Ndiaye* (Program Assistant), Singapore, full-time; and *Herminia Francisco* (Deputy Director), Philippines, 60% time.

c) Advisory Committee

The term of *M. S. Kismadi* of Indonesia expired in June 2000. A candidate for replacement has been identified. That is the only vacancy.

d) Sponsors Group

There were no changes to the Sponsors Group this year.

ENVIRONMENTAL & RESOURCE ECONOMICS COURSE April 3-May 1, 2000: Los Banos, Philippines

PARTICIPANTS

Ms. Cao Jing, Peking University **

Dr. Mao Xiangiang, Beijing Normal University

Ms. Gong Yazhen, University of the Philippines at Los Banos

Dr. Cristina P. Lim, Ateneo de Naga University (Philippines)

Ms. Joy C. Lizada, University of the Philippines in the Visayas *

Mr. Canesio D. Predo, National Abaca Research Centre (Philippines)*

Dr. Lokugam H.P. Gunaratne, University of Peradeniya (Sri Lanka)

Mr. Sunil Thrikawala, University of Peradeniya (Sri Lanka)*

Ms. H.M.B.S. Herath, Ministry of Industrial Development (Sri Lanka)

Ms. J.A.A.M. Jayakody, Tea Research Institute (Sri Lanka)

Dr. Orapan S. Nabangchang, Sukhothai Thammathirat Open University (Thailand)

Ms. Jiraphan Chutchawanchaiphan, Ministry of Agriculture & Cooperatives, (Thailand)

Prof. Piyaluk Chutubtim, Chiang Mai University, (Thailand)

Ms. Kunlayanee Pornpinatepong, Prince of Songkla University, (Thailand)

Dr. Acharee Sattarasart, Thailand Development Research Institute, (Thailand)

Dr. Wirat Krasachat, King Mongkut's Institute of Technology, (Thailand)

Ms. Yuwadee Kardkarnklai, Ministry of Public Health, (Thailand)

Mr. Pham Le Thong, Can Tho University, (Vietnam)

Mr. Pham Khanh Nam, National University at Ho Chi Minh City (Vietnam)

Mr. Le Quang Thong, University of Agriculture & Forestry, (Vietnam)*

Mr. Nguyen Trong Dac, Hanoi Agriculture University, (Vietnam)

Mr. Tran Vo Hung Son, National University at Ho Chi Minh City, (Vietnam)

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WORKSHOP FOR JOURNALISTS

Singapore: November 16-17, 1999 Program, Day 1

09:00	Welcome: AMIC and EEPSEA
09:20	Making Economics Work for the Environment: David Glover, Director, EEPSEA
10:00	Carbon Trading: What it Means for the Kyoto Agreement and Developing Countries <i>Mohan Munasinghe</i> , Vice-Chair, Bureau of the Intergovernmental Panel on Climate Change (IPCC) and Distinguished Visiting Professor of Environmental Management, University of Colombo, Sri Lanka
10:50	Break
11.20	The Kyoto Agreement: What it Means for Tropical Forest Conservation Roger Sedjo, Senior Fellow, Resources for the Future
12:00	Lunch
13:15	Environmental Economics in SE Asia: Case Study #1 The Marcopper Disaster in Philippines - Eugenia Bennagen
14:00	Environmental Economics in SE Asia: Case Study #2 Reducing Auto Emissions in Sri Lanka - <i>Sunil Chandrasiri</i>
14:50	Break
16:10	Environmental Economics in SE Asia: Case Study #3 Indonesia's Fires and Haze: The Cost of Catastrophe - <i>David Glover</i>
17:00	Close

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 once a year, in conjunction with the November biannual workshop. The current membership is listed below.

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 (up to June 30, 2000)

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

SPONSORS GROUP

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

International Development Research Centre (IDRC), Canada	\$300,000/year
Danish Ministry of Foreign Affairs (DANIDA)	\$100,000/year
Swedish International Development Agency (Sida)	\$170,000/year
Canadian International Development Agency (CIDA)	\$300,000/year
The MacArthur Foundation, United States	\$170,000/year
Norwegian Agency for Development Cooperation (NORAD)	\$150,000/year