



**Economy and Environment Program
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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 in the economic analysis of environmental problems so that researchers can provide sound advice to policy-makers. The program uses a networking approach to provide financial support, meetings, resource persons, access to literature, publication avenues, and opportunities for comparative research across its nine member countries. These are Thailand, Malaysia, Indonesia, the Philippines, Vietnam, Cambodia, Lao PDR, China, and Papua New Guinea.

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. EEPSEA is a project administered by the International Development Research Centre (IDRC) on behalf of the Sponsors Group.

Typically, researchers learn about EEPSEA through 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 CAD 20,000-28,000, depending on the country. Researchers may be affiliated with a university, government or non-government organization and the grants are normally made to that institution. Teams of researchers carry out most projects.

Research project proposals are sent to experts for written review. Those recommended for further consideration must then be revised and presented at a working group session 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 of successful projects are widely disseminated by EEPSEA and the researchers themselves through publications, the media, and consultations with policy-makers.

The selection process for both training and research awards is highly competitive. Approximately one in four applications for research awards is accepted.

2. Message from the Director

EEPSEA turned 15 years old this May. Over these last 15 years, we have supported 221 research projects and trained more than 900 researchers on various aspects of environmental economics. The researchers we have trained are actively engaged in their own countries in various capacities from teaching to advising policy-makers. By reaching out to policy-makers and natural resource managers, we have managed to establish a stronger link between research and policy formulation in the region. In addition, our researchers are increasingly getting their work published in refereed international and local journals.



The credit for all these accomplishments belongs to the hardworking EEPSEA researchers, our distinguished resource persons who have patiently nurtured the technical and analytical capacity of our researchers over the years, and last but not least, to the leadership of Dr. David Glover who founded EEPSEA in 1993. Under his diligent directorship, EEPSEA grew steadily over the next 13 years. I was privileged to work with David as his Deputy Director for 10 years before taking over the helm from him in January 2007. On behalf of all EEPSEA researchers, I wish to thank David for his legacy of EEPSEA to the region.

The change in leadership has brought with it some new developments, building on the foundation established in the first two phases of EEPSEA. One main development has been the expansion of our in-country programs in the region by providing (a) a local teachers' training course coupled with a small research grants award, and (b) institutional support to key local research centres to encourage them to become active partners in our capacity-building efforts. We initiated this new two-prong approach in Vietnam a year ago and later expanded it to the Philippines. Next to follow will be Indonesia, Thailand, and China.

It is worthy to mention that this year also marks the increasing participation of Indonesian researchers in our network, something that was made possible with the appointment of the new EEPSEA Senior Economist in Indonesia. Another major accomplishment has been stronger partnerships with other international organizations working in Southeast Asia. This year, we collaborated with the World Bank Institute, the International Union for the Conservation of Nature and Natural Resources (IUCN), and the Partnership for Business Development Division of the International Development Research Centre (IDRC) on two training courses.

A further significant initiative has been the recent launch of our Climate Change Research Program with the organization of a three-day regional conference on Climate Change Adaptation in Bali, Indonesia, in February this year, with about 40 papers presented and 65 participants. In addition, we are funding eight (8) research projects and case studies on adaptation to climate change. We intend to encourage more research including organizing a cross-country research project on this urgent and important area that can indeed be considered as the largest environmental, economic, and social crisis of the century.

This year's Annual Report also highlights the accomplishments of EEPSEA's members, documenting a number of noteworthy achievements in terms of policy influence, new courses developed, and career developments.

Twenty two new individual research awards from the regional competition and five case studies on adaptation to climate change were funded in the past year. Ten training courses were offered; three at the regional level, two in partnership with other regional organizations, and five under the in-country programs in Lao PDR, Cambodia, Vietnam, Thailand, and the Philippines.

I would like to take this opportunity to thank the EEPSEA people who have helped implement our programs this year: the three part-time EEPSEA Senior Economists – Dr. Orapan Nabangchang from Thailand, Dr. Bui Dung The from Vietnam, and Dr. Arief Anshory Yusuf from Indonesia; our editor, Ms. C. Westwood; and Ms. Catherine Ndiaye and Ms. Ang Cheng Hiang for the administrative support.

This message would not be complete without a special note of thanks to our donors who continue to share and support our belief that persistent capacity building efforts in the field of environmental economics are essential to the region.

The challenges and opportunities for researchers in environmental economics have grown intensely, especially in the face of the current global crises. It is my hope that EEPSEA will play an even more integral role in the years to come in helping local communities and governments in Southeast Asia meet the challenges of the times



Herminia A. Francisco

3. Regional Research Awards

3.1 Regional Competition

This last year was a productive one for EEPSEA with 22 approved research projects on various topics (Table 1). One program area where we made a special call for proposals was on the economics of adaptation to climate change impacts. From about 15 submissions, three have been approved (indicated with an * in Table 1). Two of the proposals are on the economic analysis of adaptation options in selected sites in the Philippines and Indonesia while the third one in China is focused on the analysis of the role of information provision in adaptation decisions made by local government units. Since climate change is one critical area where EEPSEA is keen on making a significant contribution through its core competency, this area of research will be systematically encouraged in the coming years. One particularly important area of interest that was identified during the February 2008 regional conference which we held in Bali was local adaptive capacity in dealing with climate change impacts. This will be the theme for a succeeding call for a cross-country research project in the coming year.

Table 1. List of research projects approved from July 2007-June 2008

Researcher/ Country	Research Title
1. Tran Huu Tuan, Vietnam	WTP for Biodiversity in Asia: Benefit Transfer and Meta-Analysis
2. Jamie Kim Bayani, Philippines	Economic Vulnerability and Possible Adaptations to Coastal Erosion in San Fernando City, La Union, Philippines
3. Alice Joan Ferrer, Philippines	The Economic Evaluation of Banning Commercial Fishing from the Visayas Sea, Philippines: The Case of Northern Iloilo
4. Nguyen Mau Dung, Vietnam	Compliance of Paper-making Plants with Environmental Regulations in Bac Ninh Province
5. Liu Li, China	Environmental Cost Analysis of the Reallocation of a Pollution-Intensive Industry: A Case Study of Ceramic Industry Transfer from Foshan to Qingyuan in Guangdong Province
6. Jin Jianjun, China*	Assessing the Effects of Information Provision on Decision-makers' Behavior in Adaptation to Sea Level Rise in the Coastal Area of Zhejiang Province, China
7. Rosa Perez, Philippines*	Assessments of Impacts, Vulnerabilities, and Adaptation Strategies of Coastal Communities to Address Climate Change-Induced Sea Level Rise in Manila Bay, Philippines
8. Akhmad Saidy, Indonesia*	Economic Adaptation of Agriculture to the Impacts of Sea Level Rise in the Province of South Kalimantan, Indonesia
9. Wu Jian, China	Cost Effectiveness of Policy Options to Reduce Off-site Water Use for Sustainable Wetland Conservation: A Case

	Study of the Qixinghe Wetland in Sanjiang Plain, China
10. Margaret Calderon, Philippines	Towards the Development of a Sustainable Financing Mechanism for the Conservation of the Ifugao Rice Terraces
11. LHP Gunaratne, Sri Lanka	Identification and Evaluation of Policy Options Related to River Sand Mining in Sri Lanka
12. Xie Xuxuan, China	Cost-Effectiveness Analysis of Near-Ground Zero Ozone Control in Beijing, China
13. Syukur Umar, Indonesia	Attitudes towards and Social Decisions on Mangrove Conservation in Banawa Selatan Sub-District of Central Sulawesi, Indonesia
14. Nguyen The Chinh, Vietnam	Evaluation of the Socialization Policy for Domestic Waste Collection in Hanoi, Vietnam
15. Le Huyen Trang, Vietnam	Study of Forest Law Enforcement Economics in Ba Be National Park and Na Hang Nature Reserve in Vietnam
16. Athula Senaratne, Sri Lanka	Commons vs. Commons: Conjunctive Use of Shallow Ground Water Resources in Dry Zone Village Tank Systems in Sri Lanka for Overcoming Rising Water Scarcity
17. Dang Viet Quang, Vietnam	Innovations and Sustainability Strategies in Upland Agriculture in Northern Vietnam: An Agent-Based Modeling Approach
18. Prabodh Illukpitiya, Sri Lanka	Evaluating the Economic Potential and Feasibility of Producing Bio-Energy from Underutilized Crops in Sri Lanka
19. Luthfi Fatah, Indonesia	An Assessment of Forest Management Options to Prevent Forest Fires in Indonesia
20. Cao Jing, China	Decomposition of Changes in China's Energy Intensity – The Origins and Implications for Long Run Carbon Emission Projections and Climate Policies
21. Isabelita Pabuayon, Philippines	Farming and Agroforestry Systems for Addressing Economic and Environmental Concerns in Philippine Upland Coconut Farms
22. Wimolpat Bumbudsanpharoke, Thailand	Perceptions of Best Management Practices in Thai Citrus Farms and the Adoption of an Agri-Environmental Policy: A Case Study in the Ping River Basin, Thailand

Note: * refers to the research projects on climate change

3.2 Climate Change Adaptation Case Studies

To further our initiative in climate change adaptation research, we invited a number of researchers to undertake case studies in selected areas where the local people have experienced living under extreme weather events. There were five case studies that were completed as indicated in Table 2 below.

Table 2. List of case studies on climate change adaptation

Researcher/ Country	Title of Case Study
1. Vo Thanh Danh, Vietnam	Evaluation of the “Living with Floods” Policy: The Case of the Resettlement Policy in the Mekong Delta
2. Nguyen Quoc Chinh, Vietnam	Household and Commune Adaptation Experiences and Strategies for Sea Level Rise in the Giao Thien Commune, Giao Thuy District, Nam Dinh Province, Red River Delta
3. Hoang Trieu Huy, Vietnam	Early Warning Systems for Typhoon/Storm Management in a Coastal Community: Role of Information and Local Institutions
4. Rawadee Jarunrattanapong, Thailand	Adaptation Strategies for Sea Level Rise: A Case Study of Communities in Bang Khun Thian, Bangkok
5. Canesio Predo, Philippines	Adaptation of Community and Households to Climate-related Disasters: The Case of Storm Surges and Flooding in Ormoc and Cabalian Bay

4. Regional Training

4.1 Regional Course on Environmental Economics

This three-week course was organized at the Richmond Hotel in Nonthaburi, Thailand, between April 14 and May 3, 2008. It was attended by 30 participants from eight countries. Dr. Orapan Nabangchang, the EEPSEA Senior Economist from Thailand, oversaw the organization of the course.



Week 1, taught by Dr. Nancy Olewiler from Simon Frazer University in Canada, dealt with natural resource economics. Dr. Olewiler discussed a simple model for the extraction of renewable and non-renewable natural resources, the concept of natural resource rent, weak vs. strong sustainability, and indicators of economic and ecological sustainability. She also devoted ample time to the issue of property rights, this being a critical topic in the region. Participants were given opportunities for group work and interaction through case studies, games, and research report reviews. After the course, some of them discussed with Nancy potential research projects to be developed for EEPSEA funding.

The second week focused on valuation tools, with Dr. Jeff Bennett from the Australian National University as the resource person. Dr. Bennett discussed the various revealed and stated preference valuation techniques, their theoretical foundation, the conditions under which each of the techniques would be suitable to use, and their limitations. He also provided illustrative examples and cases of where some of the tools had been applied. The value and mechanics of benefit transfers were also discussed. As in the previous week, the participants were provided with opportunities for interaction as well as discussion with Dr. Bennett about their research interests.

Dr. Benoit Laplante was the resource person for the last week which covered cost benefit analysis and pollution control economics. Dr. Laplante discussed the cost-benefit analysis framework following the step-by-step procedure for implementing such analysis giving concrete examples along the way. He then discussed market-based instruments used in environmental protection and compared these to command and control measures, in the context of the political economy of developing countries.

4.2 Course on Planning and Policy Analysis in Water and Sanitation Sectors in Developing Countries



From November 16-19, 2007, Dr. Dale Whittington from the University of Carolina, Chapel Hill, USA, gave a course on water and sanitation conditions in developing countries based on his previous work with the World Bank. He discussed the problems of poor strategic planning in water and sanitation sectors, the potential

benefits of introducing water and sanitation programs, and problem areas where environmental economics research could be useful.

4.3 Course on Survey Method Errors



EEPSEA researchers had a short but interactive discussion with Drs. Wiktor Adamowicz and Dale Whittington on common survey method errors associated with survey questionnaire design, selection of samples, and data analysis. The course emphasized that the best approach was to avoid committing these errors through a well

thought out survey design, and proper survey implementation and data analysis. However, it was still important to be able to detect such errors and know how to econometrically minimize their impacts so as to protect the integrity of the analysis. The course, held from May 9-11, 2008, was well received and appreciated by the participants as it dealt with real-life situations/cases that could confront any researcher conducting a survey.

5. Regional Partnerships

This section presents training courses/workshops sponsored by EEPSEA in collaboration with other organizations working in Southeast Asia. There were two such activities in the past year, one in collaboration with another program implemented by IDRC, and the other, with the World Bank Institute. Networking activities with other programs sponsored by EEPSEA donors in the region are also discussed.

5.1 Resources Mobilization Training Workshop for EEPSEA Network Members

A training workshop on how to go about resource mobilization was held at the Richmond Hotel, Nonthaburi, Thailand, from October 2-5, 2007. Jointly organized by EEPSEA and the Partnership and Business Development Division (PBDD) of IDRC, 20 participants from EEPSEA-supported



institutions attended the course. The PBDD brought in a team of experts that included Dr. Melanie Billings-Yun, Ms. Sherine Lilani Jayasuriya, Ms. Marianne G.

Quebral, Mr. Luisito Baclagon, and Major Gen. Surat Sandhu. The topics covered included fund raising strategies, formulating the key message to potential donors, and how to sell your 'product' to potential donors. The participants also discussed the idea of forming an Environmental Economics Association for Southeast Asia.

5.2 Course on Environmental Economics for Development Policy

This was organized by the World Bank Institute with IUCN, EEPSEA, and ADB. EEPSEA provided funding for six participants from Thailand to attend the training course. Two participants were from the Office of Environmental Policy and Planning (OEPP) of MONRE and four were judges from the Supreme Court, the Central Intellectual Property and International Trade Court, and the Alternative Dispute Resolution Office under the Office of the Judiciary. Drs. Herminia Francisco and Orapan Nabangchang served as resource persons on the topics of "The Economics of Soil Erosion" and "Marine Turtle Conservation Valuation", respectively. This course was held from January 14-25, 2008 in Bangkok, Thailand.

5.3 Networking with Other Programs of EEPSEA Donors in the Region

As part of its commitment to its donors, EEPSEA decided to link with the former's projects in the region. To start off this process, efforts to link with CIDA-funded projects were initiated in Thailand and Indonesia.

For Thailand, the EEPSEA Senior Economist, Dr. Orapan Nabangchang visited the Asian Institute of Technology (AIT) in Bangkok to explore possible collaboration. She had a meeting with members of the South-East Asia Urban Environment Management Applications (SEA-UEMA) Program.

The SEA-UEMA Project receives funding from CIDA and in-kind contribution in terms of professional time, lectures, and venue and various other facilities from AIT. The main focus of the SEA-UEMA Project is urban-based environmental issues such as water pollution, solid waste management, and air pollution. There are also some cross-cutting themes such as poverty and gender issues.

CIDA is now providing a limited number of scholarships for doctoral, post-doctoral, and Masters degree programs. One of the issues explored with the SEA-UEMA team was the possibility of EEPSEA co-sponsoring scholarships or providing financial support for research carried out by doctoral and Masters degree students of AIT. The opportunity for graduate students under the SEA-UEMA project to attend the 2008 EEPSEA Regional Training was also explored and the potential for organizing joint training courses between SEA-UEMA and EEPSEA in the field of environmental economics was discussed.

In the case of Indonesia, Dr. Arief Anshory Yusuf made initial contact with Mr. Marco Damaschio of the Canadian Embassy who was the person in charge of overseeing CIDA-funded projects in Indonesia. He informed Mr. Damaschio that EEPSEA was

exploring how it could link up with other projects funded by CIDA in the country. Mr. Damaschio identified two possibilities for collaboration:

- The Tomini Bay Sustainable Livelihoods and Management (SUSCLAM) Project. This project is targeted towards coastal communities in Tomini Bay, Sulawesi, to engage them in managing the coastal and marine resources of the area effectively and to bring about an improvement in their livelihoods. The project runs from April 2007 to March 2012.
- The Environmental Governance and Sustainable Livelihoods (EGSL) Project. This project is similar to the SUSCLAM project but is targeted at improving the well-being of communities in selected watersheds. This project has just started and the plans are still in the process of being developed.

Dr. Yusuf will explore how to bring about these linkages when the respective program managers are ready to meet with him.

6. In-Country Activities

6.1 Cambodia

6.1.1 Interim Project Meeting and Write-Shop for Cambodia-Lao PDR Researchers

To further assist the researchers from Lao PDR and Cambodia in their final report preparation, EEPSEA organized a workshop for their research teams to present their draft final reports and to get inputs on these. The workshop was held at the Environment Research Institute (ERI) in Vientiane, Lao PDR, from July 16-20, 2007. The resource persons were Dr. Herminia Francisco, Dr. Orapan Nabangchang and Ms. Anabeth Indab.

There were 25 participants comprising researchers who were involved in the three research projects in Cambodia and the five projects in Lao PDR. The various research teams made presentations of their draft final reports and received suggestions and comments on these from the resource persons as well as the other researchers present. This reporting session was followed by one-on-one sessions between the resource persons and the individual research teams.

The researchers received specific suggestions on their report structure and additional analyses that they could explore. All the research teams were present, except for the one working on the Bokor National Park in Cambodia, headed by Ms. Somaly Chan, who was unable to attend because of prior travel commitments.

It was heartening to observe that the various research teams demonstrated quite a high level of accomplishment in their respective projects thus far, and that the write-shop was the right intervention at this concluding stage of the process to help them focus on the critical aspects of their analysis in their final reports.

6.1.2 Cambodia Small Research Grants and Training

a) Small Research Grant Projects

The first batch of research projects from Cambodia have all been completed except for one that was terminated a few months after it started due to the temporary closure of the study area, one of the country's protected areas, and another, focused on understanding the issues regarding "Land Encroachment and Community Dependence on the Forest of Bokor National Park", which is in the process of being completed. The completed projects are listed below.

- Top, Neth; Dararath Yem; Sideth Muong; Vuthy Lic; and Daravy. 2008. Rubber Plantation Development in Cambodia: At What Cost? Cambodia Development Resource Institute (CDRI).
- Thun, Vathana; Soun Vanny, Kiev Daravy, and Ros Bandeth. 2007. Water Use Conflicts and Rice Yield Impact in Takeo Province, Cambodia. CDRI.
- Hou, Kalyan and Sothunvathanak Meas. 2008. A Cost and Benefit Analysis of the Community Forestry Project in Chumkiri District, Kampot Province, Cambodia. Community-based Natural Resource Management–Learning Institute (CBNRM–Li).

b) Training

With the completion of the first set of outputs from the first Small Research Grants Program in Cambodia, EEPSEA was ready to start the second round of this activity. This took place from March 24-28, with the offering of a five-day introductory course on Environmental Economics jointly with the Cambodia Development Resource Institute (CDRI) at CDRI facilities in Phnom Penh. Although about 28 participants had registered for the course, only about 20 showed up on the first day while others came in later during the week. A lesson we learned from this event was that it is better to host such a course outside of Phnom Penh where people would be compelled to stay in one venue for the whole duration of the course (which we did for the first round of this program).

The resource persons for this course were Drs. Orapan Nabangchang, Adis Israngkul Na Ayudhaya and Piyaluk Buddhawongsa, all EEPSEA affiliates from Thailand who are helping in the capacity-building efforts in Cambodia and Lao PDR. Special lectures were also given by two Cambodians who had attended previous EEPSEA-sponsored training courses; Mr. Serey Rotha from the Community-based Natural Resource Management–Learning Institute (CBNRM–Li) and Mr. Li Vuthy from the Fisheries Administration.

6.2 Lao PDR

6.2.1 Writing Workshop

From December 17-18, 2007, the Lao-PDR research teams consisting of six researchers spent a few days in Thailand to receive guidance from Dr. Orapan Nabangchang in writing up their reports.



The draft final reports from the Lao-PDR Small Research Grants Program have been completed. These are:

- Souphonphacdy, Daovinh; Malabou Baylatry; and Kaisorn Thanthathep. 2008. CVM Study on In Situ Biodiversity Conservation and Sustainable Use: Houay Nhang Protected Area. Environment Research Institute.
- Luangmany, Duangmany and Souphandone Voravong. 2008. Sustainable Development and Maintenance of Saysthat Park in Vientiane Capital City. Environment Research Institute.
- Douangphila, Phousavanh; Somephone Khamphan; and Kaisorn Thanthathep. 2008. Paper Mill Plants: Wastewater Treatment Options to Protect the Water Quality of Houay Say Khao Stream. Environment Research Institute.
- Manivong, Khamphay and Phouthone Sophathilath. The Economic Valuation of Land Use Options in the Uplands of Northern Laos. National Agriculture and Forestry Research Institute (NAFRI).
- Thanthathep, Kaisorn; Souphasay Khomany; Sinthnouthong Souliga; Thanvakhom Simueangsong; Duangmany Luangmany; Sivannakone Malivarn; and Alomlangsy Rajvong. 2008. Incremental Values of Hydropower Dams – Potential Hydrogen Energy Production in a Lao PDR Case Study, “Xeset 1 Hydropower”.

These research reports are now undergoing some editorial and minor revisions.

6.3 Vietnam

6.3.1 Second Vietnam Teachers' Training Course on Environmental Economics



The second Training Course in Environmental Economics for university lecturers in Vietnam was held last August 6-24, 2007, in Ho Chi Minh City. The course had two goals: (a) to train economics teachers to teach environmental economics using a curriculum consistent with that used in neighboring countries, and (b) to provide opportunities for participants to discuss potential research topics for possible submission to EEPSEA under the Small Research Grants Program.

The three-week course consisted of lectures, demo-teaching by the participants, and group discussions on selected case studies/research reports. There were 24 participants from 15 state and private colleges in the country. The resource persons were EEPSEA researchers (Dr. Nguyen Mau Dung, Ms. Le Thanh Ha, and Mr. Truong Dang Thuy) who are currently teaching environmental economics, Dr. Bui Dung The, the EEPSEA Senior Economist in Vietnam, and Dr. Rabindra Nath Bhattacharya, a resource person for the South Asian Network of Development and Environmental Economists (SANDEE).

6.4 Thailand

6.4.1 Regional Conference on Marine Turtle Conservation

EEPSEA organized a conference on "Willingness to Pay for Marine Turtle Conservation: A Cross-country Comparison in Asia" on July 23, 2007, at the Siam City Hotel in Bangkok. The conference was co-hosted by the Ministry of Natural Resources and Environment and the School of Economics of Sukhothai Thammathirat Open University.

The conference started with Dr. Herminia Francisco giving an overview of the objectives and activities of EEPSEA in Southeast Asia. She then outlined the key issues which were addressed by the cross-country study and stressed that the research team would appreciate feedback on the findings of the study. Her opening remarks were followed by the Keynote Address delivered by Mr. Petipong Pungbun

Na Ayudhaya, the Permanent Secretary of the Ministry of Natural Resources and Environment (MONRE), Thailand.

The presentation of the cross-country study was done by two members of the EEPSEA CV research team (of six), Ms. Anabeth Indab and Dr. Orapan Nabangchang. Their presentation was followed by a panel discussion. The four panelists were Mrs. Nisakorn Kositratna, Director General of the Department of Marine and Coastal Resources, MONRE; Mr. Douglas Hykle, IOSEA Marine Turtle MoU Secretariat; Mr. Colin McQuistan, Conservation Programme Manager of the WWF; and Dr. Tejpal Singh, Programme Coordinator, Ecosystem and Livelihood Group, the IUCN, Asia Region.

Altogether, the conference had 35 participants which included representatives from directly concerned public agencies such as the Department of Coastal and Marine Resources, the Department of Fisheries, agencies currently involved in marine turtle conservation such as the Royal Thai Navy and Southeast Asia Fishery Development Center (SEAFDEC), and non-government agencies working on wildlife conservation such as WildAid and WWF. The conference was also attended by academics from universities and research institutes as well as members of the press.

6.4.2 Course on Environmental and Natural Resources and Economics for Public Agencies



Dr. Adis Israngkul Na Ayudhaya

This training course took place from October 29 to November 2, 2007, in Nonthaburi, Thailand. The course had three main objectives: (a) to provide an overview of the concepts, tools and methodologies of natural resources and environmental economics, (b) to build a basic understanding of the importance of natural resources and environmental economics in supporting policy formulation and decision-making, and (c) to explore and identify the training and research needs of public agencies responsible for the management of natural resources and the environment. The training course was coordinated by Dr. Orapan Nabangchang. Resource persons were EEPSEA affiliates (either researchers or participants of previous EEPSEA courses). They were Drs. Adis Israngkul Na Ayudhaya, and Udomsak Seenprachawong from the National Institute of Development Administration, Dr. Penporn Janekarnkij from Kasetsart University, and Dr. Piyaluk Buddhawongsa from Chiang Mai University. In addition to the resource persons, a special lecture was delivered by a guest speaker from the Office of National Environmental Policy and Planning of the Ministry of Natural Resources and Environment on the topic of “The Status of Natural Resources and Environment in Thailand”.

Thirty participants attended the course. Among these, 24 were senior and middle ranking government officials from seven departments of three ministries; namely, the Ministry of Natural Resources and Environment (MONRE), the Ministry of

Agriculture and Cooperatives (MOAC), and the Ministry of Public Health (MOPH). There were also participants from the Court of Justice, the Office of the Prime Minister, the Office of the National Research Council of Thailand, and the Thailand Environmental Institute including four students from Sukhothai Thammarat Open University.

The participants were given the chance to present on the in-house research capacities of their respective organizations and state their research and training needs. During the closing ceremony, they thanked the Director of EEPSEA and expressed their appreciation for the course which they said gave them a clearer understanding of the concepts, framework, and analytical tools in environmental economics. In terms of needs, there was a consensus that the local government did not lack funding for research. However, the government officials needed to be able to understand and assess the research reports that they received so that they could make the right recommendations/decisions on them. They thus requested EEPSEA to continue to provide them with training support to improve their understanding of environmental economics research.

6.4.3 EEPSEA and the Court of Justices

With the increase in cases of environmental conflicts and current efforts to set up an environmental court in Asia, judges are becoming more and more interested in improving their understanding of the concepts and approaches in estimating the economic values of natural resources and the environment. This was reflected in the level of importance attached by the Thai Court of Justices to the training course on “Environmental and Natural Resources and Economics for Public Agencies”. It sent seven judges to attend.

Given the clear indication of interest and enthusiasm by the members of Thailand’s Court of Justices, EEPSEA further supported the participation of four Thai magistrates/judges to the WBI-IUCN-EEPSEA-ADB training course on “Environmental Economics for Development Policy” organized in Bangkok from January 14-25, 2008.

6.5 The Philippines

6.5.1 EEPSEA-UPLB-SEARCA: First National Teachers’ Training Course in Environmental Economics

This was held from May 19 to June 8, 2008 at the Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA) Guest House, UPLB, Laguna. A total of 21 university and college faculty members participated in this training aimed at improving and standardizing the environmental economics curriculum of local state colleges and universities and encouraging and improving research in environmental economics.



The content of the three-week training course was broken down into three modules: Module 1 – Principles and Theories in Natural Resource Economics; Module 2 – Environmental Valuation; and Module 3 – Pollution Control Economics. Most of the resource persons for the

course were EEPSEA research grantees and alumni of the regional trainings held by EEPSEA. The highlight of the training was the presentation of research proposals by the participants. The panel reviewing the presentations was composed of EEPSEA Director, Dr. Herminia Francisco; Dr. Zeny Sumalde; Dr. Isabelita Pabuayon; Dr. Agnes Rola; Dr. Marge Calderon; Ms. Les Catelo; Ms. Dieldre Harder; Ms. Eugene Bennagen; and Ms. Anabeth Indab.

Overall the objectives of the training were met. Some of the concrete results of the course are as follows:

- The establishment of an informal network of environmental economics educators wherein the training participants would act as focal persons for future activities related to environmental economics education and research. There are 12 regions currently represented in this network. A blog site has been established – this will serve as a hub for communication among the participants. Likewise, an e-group has been set up through which exchanges of lecture and other materials can take place.
- Several of the participants have since taken concrete steps towards institutionalizing the environmental economics courses in their respective institutions. This is in no small part due to the confidence they gained and the new concepts and tools they learned from the training course. They have also started advocating the inclusion of environmental economics research in their respective institutions' research agendas and focus.
- The participants came up with a number of research proposals that had good potential for submission either to EEPSEA regional research competitions or the Small Research Grants Program which will be offered in the Philippines in the future. These research proposals are listed out in Table 3 below.

Table 3. Selected research proposals from course participants

Researcher / Institution	Title of Project Proposal
1. Donnie C. Bacud, Isabela State University	Crop Residue Burning in Isabela: An Economic and Environmental Analysis
2. Vilma D. Conrado, Cagayan State University	Economic Assessment of the Impacts of Corn Production on the Hilly Lands of Cagayan
3. Wilma Tejero, Siliman University	Economic Valuation of Tanon Strait: Choice Modeling and Contingent Valuation Method
4. Raul C. Bredicina, Partido State University	Economic Valuation of Coastal Ecosystems and the Seascape Beauty of the Caramoan Beaches and Establishing an Equitable Payment for an Environmental Services System for Sustainable Ecotourism.
5. Arlene L. Gonzales, Mariano Marcos State University	Economic Valuation of the Mangrove Forest in Ilocos Norte: An Approach towards Better Management, Protection, and Conservation
6. Edita Pangan, University of Southeastern Philippines	Household Preferences for SWM in Davao City

To further strengthen environmental economic research and education in the country, the following activities have been lined up:

- A small fund for local environmental economics research will be set up. The application process for funding grants will be competitive with two categories being offered: (a) Small Research Grants (SRGs) for qualified researchers, and (b) thesis support for students. Support for six SRGs and eight theses will be offered for competition in October, 2008.
- To improve the analysis of environmental economics studies and increase competence in the development of methodologies for analyzing environmental data, a one-week course that focuses on the econometrics of survey-based research will be offered in October, 2008. First priority will be given to those who have qualified for a small research grant.

6.6 Indonesia

6.6.1 EEPSEA at IRSA's 9th Annual Conference

From November 1-3, 2007, EEPSEA had an EEPSEA stand at the ninth annual international conference of the Indonesian Regional Science Association (IRSA) in Bandung, Indonesia and distributed questionnaires to conference participants to gather information on their interest in environmental economics and other relevant areas.

EEPSEA had not been successful in the past in getting more economists to work on environmental issues in Indonesia. This led to the hiring of Dr. Arief Yusuf as EEPSEA's Senior Economist in the country. His presence at the IRSA conference was meant to: (a) introduce EEPSEA to key academic institutions in the country, (b) identify the causes for the lack of response by Indonesian researchers to EEPSEA calls, and (c) explore possible future activities to revitalize environmental economics research in Indonesia.



As a result of the survey and several interviews held with the participants, Dr. Yusuf managed to identify the most obvious problem areas. First, environmental economics was still not a popular subject of research in the Indonesian economics community, despite increasing environmental problems in the country. Secondly, the few economists who have done some research in the subject-area do not network with one other.

Thirdly, many researchers were not aware of EEPSEA so there was a need to disseminate information about what EEPSEA offered more widely in Indonesia, and finally, the capacity to conduct good environmental economics research in Indonesia was still very low.

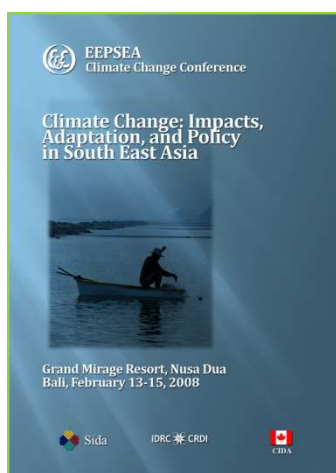
As a result of this activity and previous meetings held by Dr. Yusuf with several prominent economists in Indonesia, the number of Indonesian participants in the regional environmental economics training course in April 2008 was the highest ever. Furthermore, the number of research proposals received from Indonesia for the May 2008 competition was substantially more than in previous years. We expect a steady growth in Indonesian participation in EEPSEA activities in forthcoming years.

7. Regional Conference on Climate Change Research

Sixty five researchers, policy-makers, NGOs, and donors put their heads together to identify key areas and approaches for research on adaptation to climate change in Southeast Asia at the EEPSEA conference on climate change adaptation in Bali, Indonesia, from February 13-15, 2008.

Policy-makers who participated in the conference included the Assistant Deputy Minister for Climate Change Impact Control in Indonesia, and deputy directors from the ministries of environment in Cambodia and Lao PDR. They shared on the specific vulnerabilities and local NAPAs (National Adaptation Programs of Action under the

UNFCCC) of their countries – common areas of focus were agriculture, health, water, and forestry.



Thirty nine papers by various researchers were presented in three parallel workshop sessions on (a) Climate Change and Agriculture, (b) Enhancing Adaptive Capacity and Risk Management, and (c) Adaptation to Sea Level Rise and Climate Change Mitigation. The presentations highlighted the dire impacts of climate change in the different countries. Philippines, Indonesia, and Vietnam were subject to frequent cyclones, floods, storm surges, droughts, and forest fires while Lao PDR, Cambodia, and Thailand faced mainly droughts and floods. On the other hand, research solutions and success stories of adaptation were also shared, such as Vietnam's "safer village plan" which has been replicated in many

local villages. Key findings from the various papers helped the participants identify how various sectors, particularly the poor, were affected by climate change and what gaps still existed in terms of research.

The conference identified several areas that future research on climate change should focus on. They are as follows:

- The identification and characterization of vulnerable communities and sectors
- Multi-dimensional analysis of adaptation practices in Southeast Asia
- The economics of adaptation interventions
- Methodological issues in the economic analysis of climate change impacts and adaptation interventions
- Downscaling and scope-scaling methods/models used in climate change analysis
- Better understanding and communicating of research findings
- Private-sector involvement in adaptation

The complete proceedings of the conference and power point presentations are available at <http://climatechange.eepsea.org>.

8. Biannual Workshops

EEPSEA holds biannual workshops every May and November of each year. The format of EEPSEA workshops has remained essentially unchanged for many years now. A typical biannual workshop lasts for two days, with plenary, bilateral, and workshop sessions.

The main events are the plenary presentations and working group discussions. The plenary sessions contain a mixture of presentations, with one or two exploring a

broad theme and the rest describing in detail how a particular research method was applied in an actual project. The working group sessions, on the other hand, are intended to provide advice to researchers on how to design and implement the research projects approved by EEPSEA. The reports presented in these sessions can be proposals, interim reports, or final reports. Lastly, the bilateral sessions consist of rehearsals of the working group presentations (to make sure the presentations are clear and complete) as well as wrap-up sessions between the researchers and their advisors.

8.1 November 2007 Biannual Workshop



Jean Lebel, Director of ENRM Program, IDRC

EEPSEA had its 28th biannual workshop in Kuala Lumpur, Malaysia, from November 13-16, 2007. There were 53 participants, mostly researchers from the region. We were also joined by Mr. Jean Lebel, the Director of the Environment and Natural Resources Management (ENRM) Program of IDRC and Mr. Richard Fuchs, the Regional Director of the IDRC Singapore office. This was Jean's first time at an EEPSEA meeting as it was only recently that EEPSEA had been moved to the ENRM Program (it used to be under the Social and Economic Policy Program). In addition to

concurrent sessions where researchers presented their proposals or interim/final reports, there were three plenary talks given by EEPSEA resource persons and an interactive game on carbon trading.

The opening plenary lecture on "Qualitative Analysis for Environmental Management" by Dr. David James explained the why's and how's of multi-criteria analysis in environmental management decision-making, using examples from his past work with the Australian government in various capacities. There were numerous queries from the floor on comparable non-monetary values of criteria/impacts and on how weights were derived to compare the various criteria/impacts.

Dr. Ted Horbulyk presented the second plenary talk on "Numerical Models for Policy Analysis", highlighting how numerical models could be used to analyse a given environmental problem. These models were in direct contrast to those discussed in the first lecture. Collectively, both talks thus presented a good range of methods for researchers to choose from. Dr. Horbulyk applied the numerical models to water allocation decisions and demonstrated how complex problems could be structured and simplified using the computer modelling approach.

The plenary session on the last day of the workshop was led by Dr. Roberto Yap, a professor from Ateneo de Manila, Philippines. Dr. Yap presented the current status of projects under the Clean Development Mechanism (CDM) in selected Asian countries. His presentation highlighted the dominance of China and India in taking

advantage of CDM opportunities through methane recovery and utilization efforts as well as in exploring renewable sources of energy from biomass, wind, and water. He then led the group into a carbon trading game by dividing the participants into teams from various developed and developing countries. Using information on the marginal cost of greenhouse gas reduction from each country and on greenhouse gas reduction commitments under the Kyoto Protocol, participants learned how the carbon market operated and how trading countries could mutually gain from carbon trading.

8.2 May 2008 Biannual Workshop

The 29th biannual workshop of EEPSEA was held in Nonthaburi, Thailand, from May 5-8, 2008. Attended by 65 participants, this meeting featured four plenary talks on various issues relevant to the Southeast Asian setting.

The former Secretary of the Department of Environment and Natural Resources, Philippines, Ms. Bebet Gozun, spoke on the status of “Environmental Compliance and Enforcement in Asia”. Ms. Gozun based her presentation on the ongoing efforts of the Asian Environmental Compliance and Enforcement Network (AECEN) which she helped obtain USAID funding, shortly after her stint with the government. Through this network, member countries from the region shared their experiences and exchanged lessons learned or practices to improve environmental compliance monitoring. Ms. Gozun mentioned that the main challenges faced by environmental agencies in the region were the lack of authority to impose penalties on violators and insufficient human and financial resources to undertake rigorous monitoring activities.

Dr. William Jaeger from Oregon University, USA, presented a paper on the “Economics of Biofuels”, based on the research that he and his team did for the government of Oregon. Besides sharing the interesting findings of the study, he highlighted the kind of questions one must ask when comparing biofuels with other alternatives to reduce greenhouse gas emissions. Using relevant criteria such as commercial competitiveness, energy independence, and environmental impacts, and by asking the right questions, his research team had shown that the use of biofuels, which could reduce the state's fossil fuel use by less than one per cent, would result in higher costs to society than other alternatives like the use of a gasoline tax or increasing fuel efficiency standards.

The last day plenary talks dealt with forestry issues. The first talk was based on a joint paper on the analysis of a log export ban by Drs. Budy Resosudarmo and Arief Yusuf. The paper analyzed the economic and environmental consequences of a log export ban using a computable general equilibrium model. The authors concluded that in the short term, the economic impact would not be beneficial for the country, but economic benefits would be realized in the long term. However, there was the risk that the subsequent higher investment in the wood processing sectors might result in higher deforestation calling for action to strengthen policies to prevent this from happening.

The second talk was on “Reducing Emissions from Deforestation and Degradation (REDD)” by Ms. Erin Myers, a consultant with Resources for the Future (RFF). Ms. Myers highlighted the scientific, technical, methodological, and socio-economic issues



confronting the REDD initiative. She stressed that while REDD was recognized as an attractive option for developing countries in post-Kyoto negotiations, there was still a number of challenges that had to be addressed in putting this scheme into operational terms. While the more salient issues centred around measurement, monitoring, leakage, permanence, and market effects, others like co-benefits, governance, equity, and financing mechanisms needed to be addressed also.

9. Publications Program

This section lists the reports released during the period from July 2007 to June 2008.

9.1 Research Reports

All research reports (RRs) are now uploaded onto the “Eldis Gateway to Development Information”, an online information archive and news service financed by Sida and other donors.

- 2007-RR1: The Impacts of Dykes on Wetland Values in Vietnam’s Mekong Delta: A Case Study in the Plain of Reeds by Thang Nam Do
- 2007-RR2: The Impacts of Coal Mining on the Economy and Environment of South Kalimantan Province by Luthfi Fatah

9.2 Technical Reports

- The Value of Cultural Heritage Sites in Southeast Asia – A Comparison of Values and Discussion on the Difficulties of Benefit Transfers by Tran Huu Tuan and Udomsak Seenprachawong
- Willingness to Pay for the Conservation of the Vietnamese Rhino by Truong Dang Thuy
- The Economic Valuation of Black-faced Spoonbill Conservation in Macao by Jin Jianjun
- Saving the Philippine Eagle: How Much Would It Cost and Are Filipinos Willing to Pay for It? by Dieldre S. Harder et al
- Willingness to Pay for Whale Shark Conservation in Sorsogon, Philippines by Anabeth L. Indab

9.3 Policy Briefs

- Paying Too Much for Pollution? – An Assessment of Environmental User Fees from the Philippines by Maria Angeles Catelo et al
- The Dyke Dilemma – A Cost-benefit Analysis from Vietnam by Thang Nam Do
- Is Coal King? An Environmental and Economic Assessment from Kalimantan by Luthfi Fatah
- Willingness to Pay for Marine Turtle Conservation in Asia: A Cross-country Perspective by Orapan Nabangchang, Truong Dang Thuy, Dieldre S. Harder, Jin Jianjun, Anabeth L. Indab, Rodelio F. Subade

9.4 Policy Brief Translations

Into Khmer (Cambodian) Language

- Pollution Prevention Pays: Pollution Charges in Cambodia by Sideth Muong
- Making Biotechnology Safer: An Assessment from the Philippines by Linda Penalba
- How Much for World Heritage? The Value of Temple Preservation in Vietnam by Tran Huu Tuan
- Funding Solid Waste Disposal: A Study from the Philippines by Antonia Corinthia Naz
- Tracking the Trade: Vietnam's Illegal Wildlife Business by Nguyen Van Song
- Pricing Policies for Malaysia's Forests by Awang Noor Ghani and Mohammed Shahwahid Othman

Into Lao PDR Language

- Rags Among Archaeological Riches: Sustainable Development in the Angkor World Heritage Site by Thanakvaro de Lopez
- Pollution Prevention Pays: Pollution Charges in Cambodia by Sideth Muong
- Can a Carbon Tax Help the Poor? A Study from the Philippines by Erwin Corong
- What Price Crop Insurance? An Environmental Analysis from China by Funing Zhong et al
- How Much for World Heritage? The Value of Temple Preservation in Vietnam by Tran Huu Tuan
- Pollution Clean Up at What Price? A Cost-Benefit Study from Thailand by Varaporn Punyawadee et al
- Paying for Environmental Services: A Trial in Vietnam by Bui Dung The

- Making Biotechnology Safer: An Assessment from the Philippines by Linda Penalba
- Saving Thailand's Temples: How Much Are People Willing to Pay? by Udomsak Seenprachawong
- Funding Solid Waste Disposal: A Study from the Philippines by Antonia Corinthia Naz et al

Into Vietnamese Language

- Payment for Environmental Services: A Trial in Vietnam. Environmental Economics Review. ISSN 1559-1906, No. 4. November 2007.
- A Future for Fish Farming: Valuation of Fish Farming Protection Policies in the Philippines. Environmental Economics Review. ISSN 1559-1906, No. 5. June 2007.
- Industrial Zone and Environment: Research on Water Pollution in Vietnam. Environmental Economics Review. ISSN 1559-1906, No. 5. June 2007.

Into Thai Language

- A Cost Benefit Analysis of Resettlement Policy: A Case Study of the Ob Luang National Park, Northern Thailand by Orapan Nabangchang
- An Economic Valuation of Coastal Ecosystems in Phang Nga Bay, Thailand by Udomsak Seenprachawong

10. Impact and Outreach

10.1 Policy Impact and Influence

10.1.1 Helping to Raise Funds for Marine Turtle Conservation



evening which will be spent on marine turtle conservation through the Department of

Following the front page headlines on the Marine Turtle Study in the Bangkok's newspaper, *The Nation*, Dr. Orapan Nabangchang was invited as a guest speaker at the Gala Dinner Talk at the Aleenta Resort and Spa in Phangnga on November 24, 2007. Aleenta Resort works with the Haad Thauyuang National Park in managing the Aleenta Marine Turtle Sanctuary. The dinner talk was part of Aleenta's efforts to mobilize extra funds for turtle conservation activities. It raised 500,000 baht that

Marine and Coastal Resources under the Ministry of Natural Resources and Environment. Aleenta is interested in financing the tagging of turtles, a positive spin off from the academic study into the real world of conservation. Dr. Nabangchang's group was praised by the audience and Ms. Anchalika, Aleenta's owner, said, "... at last, I have met an economist who has a heart!"

10.1.2 EEPSEA Study Used to Support Nomination of Wetland Park as a RAMSAR Site

The study done by Thang Nam Do on "The Impact of Dykes on Wetland Values: A Case Study in the Plain of Reeds" generated value estimates of wetland conservation in Vietnam which were used in the preparation of the document nominating the Tram Chim Wetland National Park as a RAMSAR site. This study was also used to justify several follow-up valuation studies to assist environmental policy-making. The importance attached to environmental economics is clearly manifested in the government's plan to create an Environmental Economics Unit under the Environment Institute soon to be established by the Vietnam Environmental Protection Administration.

10.1.3 Oil Spill Valuation Results Used to Seek Damage Compensation

In 2007, there were two oil spills that happened in the Visayas Islands of the Philippines, known as the Semirara Oil Spill and the Guimaras Oil Spill events. Dr. Rodelio Subade, an EEPSEA researcher of two past studies, immediately responded by forming a team of researchers to do a valuation study on the damages. EEPSEA was requested to provide funding for the field work in both cases.

The results of the study were used by Governor Sally Zalidvar-Perez in negotiating with the National Power Corporation (NAPOCOR) on the amount of compensation for damages suffered by the affected coastal families and the damage to marine resources. Compensation was made in 2007.



Oil spill at Nueva Valencia Guimaras, Philippines

The study also provided inputs to the local media and was cited in various news releases based on the interview between Dr. Subade and the Agence France press. These in turn were utilized by various news agencies in Singapore, Iceland, and other countries.

More importantly, Dr. Subade, with the other team members, was invited to attend a joint Congressional and Senate Committee hearing which investigated the Semirara Oil Spill, and the Philippine Senate Hearing which investigated the Guimaras Oil

Spill. Dr. Subade introduced to the two chambers the concept of economic valuation, highlighting the importance of non-market ecological values and the rights of future generations (non-use values).

10.1.4 Making a Case for Carbon Tax in Indonesia

The research study funded by EEPSEA entitled “The Distributional Impact of Environmental Policies: The Case of Carbon Tax and Energy Pricing Reform in Indonesia” was cited in the presentation of the Ministry of Finance in Jakarta on January 23, 2007, on what policy instruments could be used to combat climate change in Indonesia. Subsequently, Dr. Yusuf was invited to several meetings by the Ministry of Finance, the Indonesian Planning Agency, and the State Ministry of the Environment to discuss the recommendations that he had put forward in his study, particularly on imposing a carbon tax on the energy producers in the country.

10.1.5 Conserving the Corals of Cordova

EEPSEA researchers, led by Ms. Lourdes Montenegro, discussed the recommendations of their study with respect to the proposed reclamation project in Cordova, Metro Cebu, with the town mayor. Their study had shown that the social cost of the reclaimed land would outweigh its benefits when environmental damages were factored in. The study found that much of the cost would arise from foregone tourism revenues as a result of the irreversible damage to the coral cover, the adverse impacts of small but scattered quarrying in the uplands, and the loss of livelihood of the local fisherfolk. The study thus recommended that the southern and southeastern portions of the reef flat with healthy coral cover not be part of the reclamation project. The researchers pointed out that “The 3,000-hectare reclamation plan could wipe out the already substantial contribution of marine sanctuary income to the town’s coffers”.

The good news is that the town mayor is now supporting the reclamation of a much smaller 46-hectare area surrounding a small islet in the southwestern portion of the coast away from the healthy coral cover in the southeast. In addition, the local government is expanding the size of the existing marine sanctuary and establishing a new marine protected area.

10.2 Media Exposure

10.2.1 Marine Turtle Study Makes the News in Thailand

On July 23, 2007, EEPSEA held a conference at the Siam City Hotel in Bangkok to present the results of the cross-country marine turtle conservation valuation study that it had earlier supported. The conference was attended by 40 participants from relevant government and international agencies, wildlife protection NGOs, academia, and journalists. The EEPSEA Director was joined by the two EEPSEA researchers who were part of the cross-country research team; Ms. Anabeth Indab and Dr. Orapan Nabangchang. The event was reported in the national English newspaper,

The Nation. A short article on EEPSEA's cross-country study also appeared in a Thai magazine called *Madame Figaro*.

Further to this, Dr. Nabangchang gave a presentation on the study at the Faculty of Economics, the Prince of Songkhla University in southern Thailand. News of this special lecture was broadcasted by the Southern Region Radio Broadcasting Network.

In addition, Mr. Douglas Hykle from IOSEA wrote a summary article on "Taxing Electricity to Help Conserve Turtles in Asia?" based on the July 23rd event and posted this story on the IOSEA MOU website on July 27, 2007.

10.2.2 Haze News Continues

Two articles appeared in *The Straits Times* in Singapore on August 21, 2007 about Dr. David Glover's talk on Indonesia's fires and the haze at the Second Annual Regional Forum on Transboundary Haze, hosted by the Singapore Institute for International Affairs.

10.2.3 Cheaper for Companies to Pay Fines than Heed Environmental Laws

The results of the study "Policing Pollution Control in Central Visayas" were presented by Ms. Lourdes Montenegro, Dr. Margaret Calderon, and Dr. Elizabeth Remedio at a conference attended by the academe, non-government organizations, government officials, local government units, and the private sector. The study pointed out that the fines currently imposed by the government to control pollution had no strong impact as they were much lower than the cost of compliance and the cost of the damage created by the pollution. The study was cited in a local newspaper report stating that there was presently no incentive for firms to control pollution as the fines for non-compliance of environmental laws were very low, having been set a long time ago.

10.3 Members' Accomplishments and Career Developments

Dr. Rodelio Subade was appointed as Director of the Institute of Fisheries Policy and Development Studies at the College of Fisheries and Ocean Science at the University of the Philippines, the Visayas, starting June 16, 2008.

Tuan Tran Huu of Hue University completed his PhD program with the Department of Economics and Resource Management in the Norwegian University of Life



Sciences in December 2007. He is now back in Vietnam, teaching, doing research, and providing consultancy services.

Ms. Les Catelo won the “Outstanding Researcher Award” on July 27, 2007. The award was given by the College of Economics and Management, University of the Philippines, based on the work that Ms. Catelo did in the fields of environmental economics and livestock economics. In addition, she served as Coordinator and resource person at the first National Teachers’ Training Course in Environmental Economics, held from May 19 to June 6, 2008, at the SEARCA Guest House, UPLB, Los Banos.

Dr. Awang Noor was made Dean of the Faculty of Forestry, Universiti Putra Malaysia, Serdang, Selangor, Malaysia on February 1, 2008.

Dr. Marge Calderon demonstrated her expertise in a number of training activities: (a) As Coordinator and resource person for the training course on Forest Ecosystem Valuation: Focus on Mangrove Forests (an ASEAN-Korea Environmental Cooperation Project) held in Puerto Princesa City, the Philippines, in February 2008; (b) As resource person in the first National Teachers’ Training Course in Environmental Economics, held from May 19 to June 6, 2008, at the SEARCA Guest House, UPLB, Los Banos; and (c) As resource person for the training course on Environment and Natural Resource Valuation for Palawan held at the Palawan Sustainable Development Training Institute in Barangay Irawan, Puerto Princesa City, Palawan, from October 15-19, 2007. This course was organized by the Palawan Council for Sustainable Development Staff in cooperation with Conservation International and the South Palawan Planning Council.

Dr. Zanzin Wang joined Yunnan University under the Institute of Population, Resource and Environmental Economics. His research study, funded by EEPSEA, was the main basis for his getting this job.

Dr. Phouphet Kyophilavong was hired during the year as a consultant for the Mekong River Commission (MRC) on Wetland Valuation and also for the World Bank and MRC on a water management project in Laos and Thailand.

Dr. Rosalina Palanca-Tan served as a resource person at the seminar-workshop on “Resource Valuation” organized by the Miriam Environmental Studies Institute. She spoke on contingent valuation methodology using her EEPSEA research as a case study.

Dr. Orapan Nabangchang presented the Cross-country Study on Willingness to Pay for Marine Turtle Conservation at the SANDEE Introductory Course on Environmental and Natural Resource Economics on May 19, 2008, at the Asian Institute of Technology, Bangkok.

10.4 Journal Articles and Special Publications

Journals and books featured articles and papers derived from EEPSEA-funded research.

10.4.1 Journal Articles

- Zhong, Funing. 2007. Does Crop Insurance Influence Agrochemical Uses under the Current Chinese Situation? A Case Study in the Manasi Watershed, Xinjiang. *Journal of Agricultural Economics*. January.
- Labao, Rex; Herminia Francisco; Dieldre Harder; and Florence Ivy Santos. 2008. Do Colored Photographs Affect Willingness to Pay for Endangered Species Conservation? *Environmental and Resource Economics*. Volume 40. No. 2. June.
- Tuan, Tuan Huu and Stale Navrud. 2008. Capturing the Benefits of Preserving Cultural Heritage. *Journal of Cultural Heritage*. Vol. IX. No. 3.
- Palanca-Tan, Rosalina. 2008. The Demand for a Dengue Vaccine: A Contingent Valuation Survey in Metro Manila. *Vaccine*. Elsevier: ScienceDirect. Vol. 26. Issue 7. February.
- Junlian, Zhang. 2008. Mutual Monitoring in a Tradable Water Rights System: A Case Study of Zhangye City in Northwest China. *Agricultural Water Management*. Vol. 95. Issue 3. March.
- Nguyen, Van Song. 2008. Wildlife Trading in Vietnam: Situation, Causes, and Solutions. *The Journal of Environment and Development*. Vol. 17. No. 3. June.

10.4.2 Special Publications

- ASEAN Economic Bulletin. 2008. Special Focus on: “The Environment, Climate Change, and Natural Resources in Southeast Asia” edited by David Glover and Lee Poh Onn. Vol. 25. No. 1. April. The bulletin includes the following EEPSEA papers:
 - o Francisco, Herminia. Adaptation to Climate Change: Needs and Opportunities in Southeast Asia.
 - o Corong, Erwin. Tariff Reductions, Carbon Emissions, and Poverty: An Economy-wide Assessment of the Philippines.
 - o Yusuf, Arief Anshory and Budy Resosudarmo. Mitigating the Distributional Impact of Fuel Pricing Reform: The Indonesian Experience.
 - o Naz, Antonia Corinthia and Mario Tuscan Naz. Ecological Solid Waste Management in Suburban Municipalities: User Fees in Tuba, Benguet.
 - o Bui Dung The and Hong Bich Ngoc. Payments for Environmental Services in Vietnam: An Empirical Experiment in Sustainable Forest Management.
 - o Nabangchang, Orapan; Jin Jianjun; Anabeth L. Indab; Truong Dang Thuy; Dieldre S. Harder; and Rodelio F. Subade. Mobilizing Resources for Marine Turtle Conservation in Asia: A Cross-country Perspective.

- o Fatah, Luthfi. The Impacts of Coal Mining on the Economy and Environment of South Kalimantan Province, Indonesia.
- o Punyawadee, V.; R. Ponthisuwan; N. Winchaikule; and K. Satienperakul. Costs and Benefits of Flue-Gas Desulfurization for Pollution Control at the Mae Moh Power Plant, Thailand.
- EEPSEA Practitioner Series 1 (January 2008) entitled “Management Strategies for Protected Areas: Insights and Recommendations from Studies on Environmental and Resources Economics in Southeast Asia”.

10.5 Applications and Citations

In several cases, the methods employed by EEPSEA researchers were applied in research or development projects elsewhere. EEPSEA reports were also cited or re-published in other publications. This year’s applications/citations are listed below.

- David Glover’s paper on “What Makes a Good Policy Paper? Ten Examples” was translated into Lao and used in a World Bank short course at the Policy Research Center of the National Agriculture and Forestry Research Institute under the Lao Ministry of Agriculture and Forestry.
- The “User Manual for Benefit Cost Analysis Using Excel” written by Canesio Predo and David James is widely used at the Visayas State University in two courses: Project Feasibility Studies for graduate students and Benefit Cost Analysis for undergraduate economics students.
- The manuals written by Camille Bann, namely: "The Economic Valuation of Alternative Tropical Forest Land Use Options" and "The Economic Valuation of Mangroves", were used in the regional training course on “Forest Ecosystem Valuation: Focus on Mangrove Forests” sponsored by the ASEAN-Korea Environmental Cooperation Project (AKECOP) from February 12-16, 2008, in Puerto Princesa City, Palawan, Philippines. This course was attended by 15 researchers from Indonesia, Thailand, Malaysia, Philippines, Korea, Vietnam, Lao PDR, Cambodia, and Myanmar.
- The experience gained by Rosalina Palanca-Tan in her contingent valuation study at EEPSEA enabled her to co-lead a World Bank-funded project on Market Study for Manila’s Third Sewerage Project. This project involved another EEPSEA researcher, Dieldre Harder.
- At the last COP13 (UNFCCC Climate Change Conference) meeting in Bali in December 2007, Dr. Arief Yusuf’s EEPSEA-funded study, “The Distributional Impact of Environmental Policies: The Case of Carbon Tax and Energy Pricing Reform in Indonesia”, was cited in a report entitled “Mitigating Climate Change and the Portrait of the Indonesian Economy” which appeared in the business section of *Kompas*, the biggest national daily newspaper in Indonesia. Another big daily, *Pikiran Rakyat*, had published Dr. Yusuf’s summary of the research the previous week.

10.6 Conference Presentations

Several researchers presented work supported by EEPSEA at regional and international conferences, most with sponsorship from other agencies, as listed below.

- Subade, R.F. Do Off-site Communities Matter in Marine Oil Spill Damage Assessment? A Critical Review and Empirical Results from Two Marine Oil Spills in the Visayas, Philippines. Paper presented at the 8th Asian Fisheries Forum held in Cochin, India. November 20-23, 2007.
- Subade, R.F. Economic Valuation in Sustainable Marine Resource Management: Demonstration, Appropriation, and Utilization of Economic Values of Marine Resources for Sustainability and Conservation. Paper presented at the 8th Asian Fisheries Forum held in Cochin, India. November 20-23, 2007.
- Calderon, Marge. Households' Willingness to Pay for Improved Watershed Management: Evidence from the Philippines. Paper presented at the Fifth International Symposium on Southeast Asian Water Environment held at the Green Lake Resort, Chiang Mai, Thailand. November 7-9, 2007.
- Catelo, Ma. Angeles. The Environmental User Fee System: The Laguna de Bay Experience. Presented to the FAO-Rome at the 2nd Livestock Waste Management in East Asia Project Workshop held in Bangkok, Thailand. December 6-7, 2007.
- Nabangchang, Orapan. Willingness to Pay for Marine Turtle Conservation: A Cross-country Comparison in Asia. Presented at a seminar at the Prince of Songkhla University, Songkhla Province, South Thailand, on September 14, 2007.
- Nabangchang, Orapan and Dang Thuy Truong. Methods for Valuing Beneficiary Willingness to Pay: Contingent Valuation of Marine Turtles in East and Southeast Asia. Presented at the IWLEARN Regional Workshop on Payments for Environmental Services, Hanoi. April 3-5, 2008. Sponsored by the IUCN and WBI.
- Wang, Zanxin. The Theory and Application of Choice Modeling: A Case Study of Water Quality Improvement in Tianmuhu Lake. Paper presented on January 8, 2008, during the academic week at Jiangsu Polytechnic University, China.
- Wang, Zanxin. Estimating the WTP for Water Quality Improvement in Tianmuhu Lake. Paper presented at the Workshop for Environmental Protection in Changzhou on June 26, 2008.
- Tuan, T.H. and S. Navrud. Capturing the Benefits of Preserving Cultural Heritage. Paper presented by Stale Navrud at the First Conference of the International Association for Tourism Economics, Palma de Mallorca, Spain. October 25-27, 2007.
- Orapan Nabangchang participated in a seminar on "The Review of the Use of Environmental Economic Research Tools to Valuate Natural Resources and the Environment to Support Policy Making" organized by the Thailand Research Fund on May 12, 2008.

- Orapan Nabangchang was invited to speak on “The Economic Values of Biodiversity Resources” in a meeting organized by the Ministry of Natural Resources and Environment (MONRE) on August 6, 2007.
- Phouphet Kyophilavong presented a paper on the “Economic Value of That Luang Marsh” at the first Laos-Japan Seminar on Growth and Environment in November, 2007.
- Bhadranie Thoradeniya presented a paper on “Educated Trade-offs for Sustainable Resource Development through Stakeholder Participation” at the International Conference on Building Education and Research held in Kandalama, Sri Lanka, on February 15, 2008. This paper is part of her ongoing EEPSEA research project.
- Hermi Francisco gave a talk on “Marine Turtle Valuation – A Cross-country Experience in Asia” at a seminar at the S. Rajaratnam School of International Studies in Singapore in April, 2008.
- Hermi Francisco presented a paper on “The Economics of and Institutions for Adaptation to Climate Change Impacts: A Regional Outlook for Asia” at the ISEAS Regional Outlook Forum 2008, on January 8, 2008.

EEPSEA also supported the participation of five researchers at EAERE’s 16th Annual Conference in Sweden from June 25-28, 2008. The researchers and the papers that they presented were as follows:

- Arief Anshory Yusuf. On the Distributional Impacts of Carbon Tax in Developing Countries: The Case of Indonesia.
- Orapan Nabangchang. Private Contribution to the Provision of Public Goods: Valuation of Thailand’s Endangered Species.
- Thang Nam Do. Would Wetland Biodiversity Conservation Improve Social Welfare? A Case Study in Vietnam’s Mekong River Delta.
- Rosalina Palanca-Tan. The Value of Statistical Life Estimates for Children in Metro Manila.
- Jing Cao. The Co-benefits of Greenhouse Gas Mitigation Policies in China – An Integrated Top-down and Bottom-up Modeling Analysis.



Prof. John Hartwick with EEPSEA researchers at the 16th EAERE Congress

10.7 Course Development

Ms. Kunlayanee Pornpinatepong of the Department of Economics, Prince of Songkla University, Thailand, developed a four-hour credits core course on Project Analysis for students of economics in the university. It is a new course which includes CBA (cost benefit analysis), CEA (cost effectiveness analysis), and economic evaluation techniques based on the EEPSEA training courses attended by Ms. Pornpinatepong.

Dr. Zanzin Wang developed a new course at Yunnan University called “Valuation of Environmental Resources”, largely as a result of his participation in EEPSEA training courses and the knowledge and experience gained from his research project funded by EEPSEA.

11. Management

11.1 Secretariat

EEPSEA’s management is composed of the Director, Dr. Herminia Francisco, and three senior economists; Dr. Orapan Nabangchang from Thailand, Dr. Bui Dung The from Vietnam, and Dr. Arief Anshory Yusuf from Indonesia. All three have been long-standing EEPSEA researchers. They continue to work from their home institutions, e-communicating with EEPSEA on a half-time basis.

Ms. Catherine Ndiaye continues as Program Assistant, with full-time assistance from Ms. Ang Cheng Hiang.

11.2 Sponsors Group

The Sponsors Group of participating donors sets policy, provides financial support, and approves the annual work program and budget. It comprises donors that contribute at least USD 100,000 per year. The current membership is listed below.

- International Development Research Centre (IDRC), Canada, CAD1,000,000/year
- Swedish International Development Cooperation Agency (Sida), CAD 575,000/year
- Canadian International Development Agency (CIDA), CAD 400,000/year

11.3 Advisory Committee

The Advisory Committee advises the Director on priorities for research and training and recommends the annual work program to the Sponsors Group. The Committee consists of senior scholars and policy-makers active in environmental management in Asia. The majority of the Committee's members come 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 committee members are:

- Dr. Zhang Shiqui (Susan), Beijing University, China.
- Dr. Mingsarn Kaosa-ard, Chiang Mai University, Thailand.
- Dr. Ben Malayang III, Silliman University. Former Under-secretary of the Department of Environment and Natural Resources, Philippines.
- Dr. Monemany Nhoybouakong, Environmental Research Institute, Lao PDR.
- Dr. Wiktor Adamowicz, University of Alberta, Canada.

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