



Annual Report

April 2015 to March 2016

Economy and Environment Program for Southeast Asia

ANNUAL REPORT

April 2015 to March 2016

Donors:

International Development Research Centre
Swedish International Development Cooperation Agency

Implementing Agency:
WorldFish

March, 2016

Contents

What we have done: A snapshot	1
SECTION 1: Building environmental economics research capacity in Southeast Asia	3
1. Increased understanding of environmental economics concepts & methods	3
2. Increased number of environmental economics researchers in the region	5
3. Contribution to professional development	13
SECTION 2: Promoting the relevance of environmental economics in decision making	15
1. Increased number of research users receiving training on environmental economics	15
2. Greater interaction between researchers and policymakers	17
SECTION 3: Increasing the visibility of EEPSEA researchers and their outputs	19
1. Presentation in regional and international conferences	19
2. Policy forum presentations	20
3. EEPSEA publications	21
4. Online dissemination efforts	23
5. Citations in media	24
SECTION 4: Safeguarding the sustainability of capacity building in environmental economics research in the region	25
The Economy & Environment Partnership for Southeast Asia	25
Economy and Environment Institute - Vietnam	26
Economy and Environment Institute - Lower Mekong Subregion	27
Economy and Environment Institute - Indonesia	28
Economy and Environment Group - Philippines	29
Economy and Environment Society - Cambodia	30
Economy and Environment Association - Malaysia	31
SECTION 5: Our impacts	32
Management	34
APPENDICES	35
A. List of courses and events held	35
B. List of research grantees by type of grant	38
C. List of books and journal publications by research grantees	40
D. University units with courses/programs that teach environmental economics concepts through the Program's influence	42
E. Conferences and other knowledge events attended by EEPSEA researchers	46
F. Research reports and policy briefs published	48
G. Previously published research reports translated into Vietnamese	53
H. Statistics on online dissemination efforts	54
I. Media citations	56

What we have done: A snapshot

The Program's goal is to strengthen local capacity in the economic analysis of environmental issues so that researchers can provide sound advice to policymakers. Ultimately, the Program aims to facilitate the improved design and implementation of policies and programs towards sustainable environmental and natural resource management. To do this, EEPSEA:

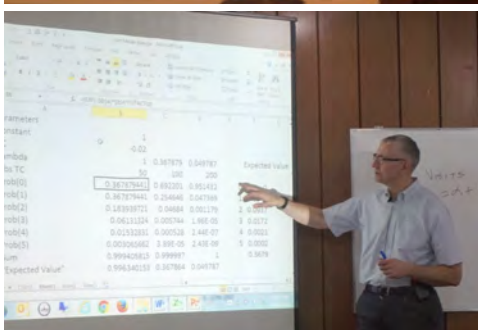
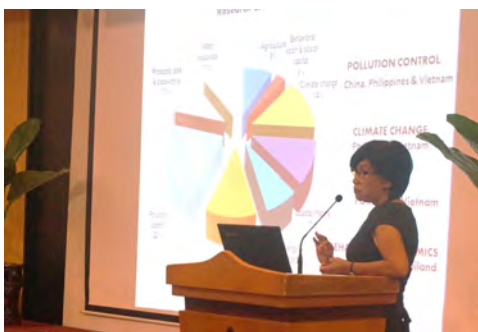
- **Builds environmental economics research capacity** in the region through its various training courses and research grants with mentoring support. This fiscal year, EEPSEA awarded **28 research grants**; conducted **one in-country and four regional training courses**; provided **travel grants to five researchers** to attend a regional course; supported **five small researchers' workshops**, which served as a venue for the researchers of its cross-country projects to coordinate; and held **two major events**, which featured concurrent working group sessions and one-on-one meetings that allowed the research grantees to meet with their respective EEPSEA advisers and receive feedback on their respective projects. All these are geared towards the capacity building of local researchers. This year, EEPSEA grantees reported **18 journal articles** as having been published based on their completed EEPSEA projects (see Section 1).
- **Promotes the relevance of environmental economics in decision making** by offering training courses to natural resource managers and policymakers as well as other non-traditional research users (e.g., justices). It also supports the conduct of events that serve as venue for EEPSEA researchers to share their research results and interact with natural resource managers and policymakers.

This fiscal year, EEPSEA conducted **three regional training courses** that were tailored for research users (i.e., justices, local government staff). The program also supported the conduct of **a regional conference**, which served as a venue for the grater interaction of researchers and government and NGO representatives (see Section 2).

- **Increases the visibility of EEPSEA researchers and their outputs** by supporting the participation of EEPSEA researchers in regional and international knowledge events as well as by taking advantage of various channels in sharing EEPSEA research results. This fiscal year, EEPSEA supported the participation of **14 researchers to eight conferences**. The Program also published **19 research reports, 11 policy briefs, and 4 books**.



***The Program
aims to
facilitate
the improved
design and
implementation
of policies and
programs
towards
sustainable
environmental
and natural
resource
management.***



Among the books published is a compilation of case studies that highlight the complexity of environmental decision making and which can be used for teaching and training. Another among the books published compiles stories from EEPSEA's alumni highlighting the Program's influence in the region during its 23 years of existence.

The Program also achieved **20 media citations**, **16,917 unique website visits**, and an average of **229 RePEC downloads per month**. Goggle Scholar citation analysis indicates that EEPSEA publications were cited 1,142 times in 2015 until February 2015 (see Section 3).

- **Safeguards the sustainability of capacity building in environmental economics research** in the region by strengthening links with national and regional organizations and contributing towards the development of a community of environmental economists in Southeast Asia.

This fiscal year, EEPSEA is proud to announce the formal establishment of the Economy and Environment Partnership for Southeast Asia (**EEPSEA Partnership**) and the six country-based EE organizations that federate under it, namely:

- o Economy & Environment Institute - Vietnam
- o Economy & Environment Institute - Lower Mekong Sub-region to cover Thailand, Lao PDR, and Myanmar
- o Economy & Environment Institute - Indonesia
- o Economy & Environment Group - Philippines
- o Economy & Environment Association - Malaysia
- o Economy & Environment Society - Cambodia

To support their establishment and help them ensure their sustainability, EEPSEA funded **21 in-country events** through the six country-based EE organizations under the EEPSEA Partnership (see Section 4).

EEPSEA also held an **Impact Conference** that showcased its impact and influence throughout its 23 years of existence (see Section 5).

These accomplishments are discussed in further detail in the succeeding sections.

SECTION 1

Building environmental economics research capacity in Southeast Asia

EEPSEA builds environmental economics (EE) research capacity in the region by offering training courses, awarding research grants, and providing research mentoring support. By doing so, the Program not only hopes to increase the analytical capacity of local researchers from national and regional institutions, particularly in dealing with environmental issues, it also contributes towards increasing the number of researchers doing EE research in the region. Increasing the conduct of EE research in the region, in turn, increases the probability that such economic analyses are considered in environmental and natural resource management and policymaking.

1. Increased understanding of environmental economics concepts & methods

Offering courses that build on local researchers' existing knowledge and skills in the conduct of EE research is one of EEPSEA's strategies in increasing the number of EE researchers in the region. This fiscal year, EEPSEA held five such courses; four are regional training courses and one is an in-country course (see Appendix A for full list EEPSEA regional and in-country events).

a. Regional training courses for researchers

EEPSEA's regional training courses for researchers focus on economic tools and techniques that can be used to develop an environmental research agenda. This fiscal year, two of the Program's regional training courses tailored for researchers were on spatial modeling and quasi experimental evaluation methods.

The one-day course on **spatial modeling** discussed how to apply its associated tools for resource management. Spatial natural resource economics enables economists to better analyze spatial data, to collaborate with natural scientists, and to address resource questions at a landscape scale. The course provided a foundation for the empirical application of spatial models and introduced spatial econometrics and how its tools can be applied to various natural resources. The course was facilitated by Dr. Heidi Joanne Albers of University of Wyoming's Haub School of Environment and Natural Resources.

The two-day course on **quasi-experimental evaluation methods** discussed the theory and practice of impact evaluation. Coverage was from design to data generation to impact estimation. Specific cases were used to illustrate the clear link between theory and practice. The course was facilitated by Dr. Aniceto Orbeta of the University of the Philippines' School of Economics.

A two-day course on **Facilitating Participatory Processes using Visualization Techniques** was also conducted since capacity building for research is not limited to the implementation of a research project. It also includes communicating research findings, facilitating dialogues with research users, and packaging successful



From the top: Dr. Heidi Joanne Albers in discussion with participants of the course on spatial modeling; and Dr. Aniceto Orbeta during the course on quasi-experimental evaluation methods.

proposals. These often include multi-disciplinary teams and liaising with donors, partners, government people, and community members. The course featured selected tools from the Visualization in Participatory Programs (VIPP) kit. The course was offered to senior EEPSEA researchers expected to lead in the field of EE in the region; the skills that the course aimed to enhance are expected to help them take on this leadership role. The course was facilitated by Dr. Lily Ann Lando of WorldFish.

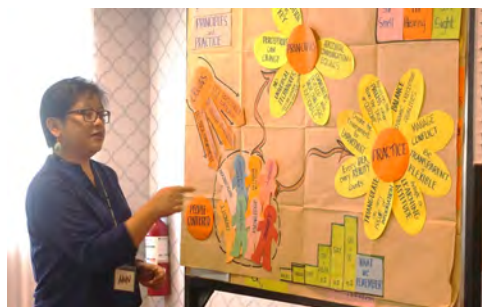
The **11th Regional Training Course in Environmental and Natural Resource Economics (ENRE)** was also conducted this fiscal year. As in previous offerings, the course is primarily conducted to train researchers in applying the principles of economic analysis to environmental problems through its three modules: (1) Welfare Economics and Cost-Benefit Analysis, facilitated by Dr. Benoit Laplante (Simon Fraser University); (2) Valuation and Econometrics Analysis of Survey-based Data, facilitated by Dr. Wiktor Adamowicz (University of Alberta); and (3) Natural Resource Economics and Policy Analysis, facilitated by Dr. Nancy Olewiler (Simon Fraser University). This intensive course was designed to prepare researchers and university lecturers to teach and conduct research on ENRE as well as to respond to government agencies' requests for analysis.

b. In-country training course for Myanmar researchers

EEPSEA's in-country training courses for researchers are specifically tailored to the needs of local researchers. This fiscal year, an in-country training course that focused on providing participants with an introduction to key EE concepts and tools was held in Myanmar. This is the second such course held in the country given its current efforts to advance their economic development in parallel with environmental conservation. As with the previous course held last fiscal year, this course was organized in collaboration with Myanmar's Co-operative University. EEPSEA's Deputy Director Dr. Orapan Nabangchang and Dr. Piyaluk Buddhawongsa (Chiang Mai University) served as the course facilitators.

c. Travel grants

EEPSEA supported the participation of five researchers to the **Regional Training on Natural Capital Assessment and Mainstreaming Tools**. Noor Aini Zakaria, Canesio Predo, Cheb Hoeurn, Charmaine San Pedro, and Megananda Suryana attended this five-day course, which aimed to strengthen participants' capacity in using and applying mapping and valuation tools to support natural capital assessments across the region. It was organized by the WWF Greater Mekong Cambodia Country Office.



From the top: Dr. Lily Ann Lando during the course on VIPP techniques; Dr. Benoit Laplante with the participants of the 11th regional training course on ENRE; Dr. Wiktor Adamowicz during the ENRE course's Module 2; Dr. Nancy Olewiler facilitating a discussion during the ENRE course's Module 3; and participants during a group exercise in the second in-country training course in Myanmar.

2. Increased number of environmental economics researchers in the region

To increase the number of EE researchers in the region, EEPSEA also awards research grants. Such awards provide researchers with the needed experience to further hone their EE research skills. The Program offers three types of research grants.

a) **Competitive research grants** (CRG) are chosen from those who responded to EEPSEA's Call for Proposals. They are evaluated in time for EEPSEA Annual Conference and include dissertation research grants secured by Southeast Asian graduate students in developed countries like the USA, Canada and Australia. This fiscal year, almost half (46%) of the grants awarded are in the CRG category (Figure 1), of which six are dissertation grants.

b) **Cross-country research grants** (XRG) are funded through a closed call for proposals on key research areas. Its researchers meet to set common objectives, develop a common framework and agree on common research instruments to be used. This year, EEPSEA started work on two cross-country projects: (1) *Coastal and Lake Resource Management, Poverty, and Value Chain Analysis in Cambodia, Philippines, Thailand and Indonesia*, which is composed of five individual grants; and (2) *Value of Statistical Life, Risk Baseline, and Change in Risk Perception in Thailand, China, and Vietnam*, which is composed of three individual grants.

c) **Small research grants** (SRG) are offered to research projects that have a shorter duration or to researchers from provincial colleges and universities in countries where there is a greater need for EE research capacity building. This year, more than half of the SRGs awarded were to Myanmar researchers.

Altogether, EEPSEA approved a total of 28 research grants this fiscal year (see Appendix B for full list). The top three countries receiving the most grants are Vietnam (9), Thailand (6), and Myanmar (4) (Figure 2). Distribution of grant recipients by gender is relatively balanced (i.e., 43% male and 57% female).

While the topics of the cross-country research projects are partly determined based on the research priority setting of EEPSEA, the choice of topics for the CRG and the SRG are largely dependent on national priority research concerns. Based on the distribution of the CRGs and the SRGs by research area (Figure 3), research on *agriculture* and *protected area & biodiversity* issues dominated, closely followed by *climate change* issues.

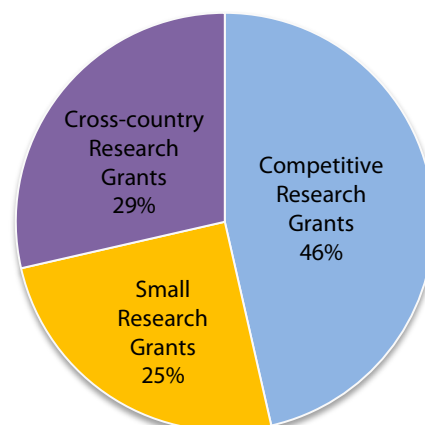


Figure 1. Research grants awarded by type

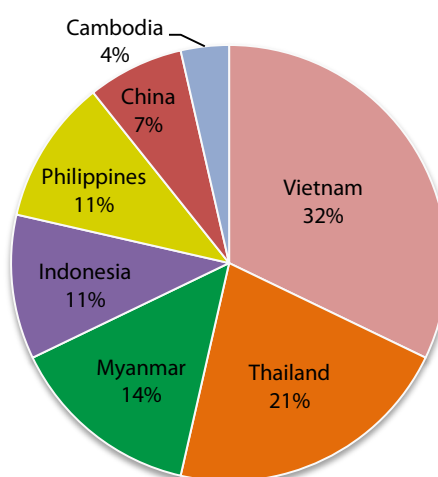


Figure 2. Research grants awarded by country

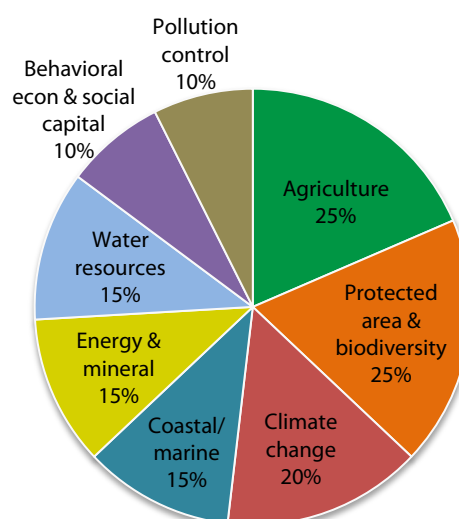


Figure 3. Research grants awarded by research area
(NOTE: Multiple response. A research project can focus on more than one research area.)

SPECIAL FEATURE:

Sustainable Land Management: Adoption & Implementation Constraints

Inputs to LDN Goal

An ELD-EEPSEA Research Initiative

More than half of the land base in many regions, including Southeast Asia (SEA), is constrained by poor soil quality, and 12 million additional hectares of land are degraded annually, where 20 million tons of grain could have been grown instead. In SEA, the value of ecosystem services lost due to land degradation is valued at about USD118,738/km² or USD836/person (ELD Initiative 2015). Clearly, land degradation threatens food security, the sustainability of livelihood, and the supply of ecosystem services.

The Land Degradation Neutrality (LDN) concept was first introduced at Rio+20 and is now reflected as SDG target 15.3. LDN activities include the “prevention and/or reduction of land degradation” through the implementation of Sustainable Land Management (SLM) practices.

In this context, EEPSEA partnered with the Economics of Land Degradation (ELD) Initiative in the conduct of a cross-country research project to evaluate past and on-going SLM projects in SEA. The project aims to investigate how SLM practices can be widely adopted to support the LDN goal of the region’s national governments in support of their commitment to UNCCD.

Four countries are covered by the study: Myanmar, Philippines, Vietnam, and Thailand. Hence, aside from contributing to EEPSEA’s advocacy to provide science-based information for informed environmental decision making, the project also allows EEPSEA to capacitate more Myanmar researchers.

The project receives funding support from EEPSEA and GIZ. It started on September 2015 and will end on February 2017.



SCOPE: Myanmar, Philippines Vietnam, Thailand

*“At the heart of the
Land Degradation
Neutrality strategy
are **Sustainable Land
Management practices**
that help close yield
gaps and enhance the
resilience of land
resources and
communities that
directly depend on
them while avoiding
further degradation.”*

*~ United Nations Convention
to Combat Desertification (UNCCD)*

MAIN ACTIVITIES

Framing SLM	Survey of farming households and SLM project implementers to determine the facilitating and constraining factors in SLM adoption .
Economic context	Economic analysis of SLM practices to assess their economic contribution to farmers’ livelihoods and ecosystem benefits.
Legal context	Assessment of legal, policy, and institutional environment supporting/constraining achievement of LDN goal with focus on national-level policies and links to UN conventions
Stakeholder involvement	Discussions of the research findings to generate solutions towards the widespread adoption of SLM practices by all actors in the study areas

RESEARCH APPROACH

Transdisciplinary research. The project brings together economists and social and natural scientists, who will work closely with local communities and national and local governments, towards the co-generation of knowledge on SLM in SEA.

Research in development (RiD). The project will be participatory and iterative, engaging relevant stakeholders throughout the research process to create ownership of the research recommendations, thereby increasing chances of uptake and scaling up.

Multi-level perspective. The project considers the conditions that facilitate/deter SLM adoption at the national, local and farm levels, considering the policy environment, the implementation challenges, and the farms' and farmers' conditions that affect local land use decisions.

Value-adding. The research will start off reviewing related studies in this field and will capitalize on existing database and network (WOCAT, LADA, others).



A young agroforest in the Philippines (top) and the dry zone in Myanmar (bottom).

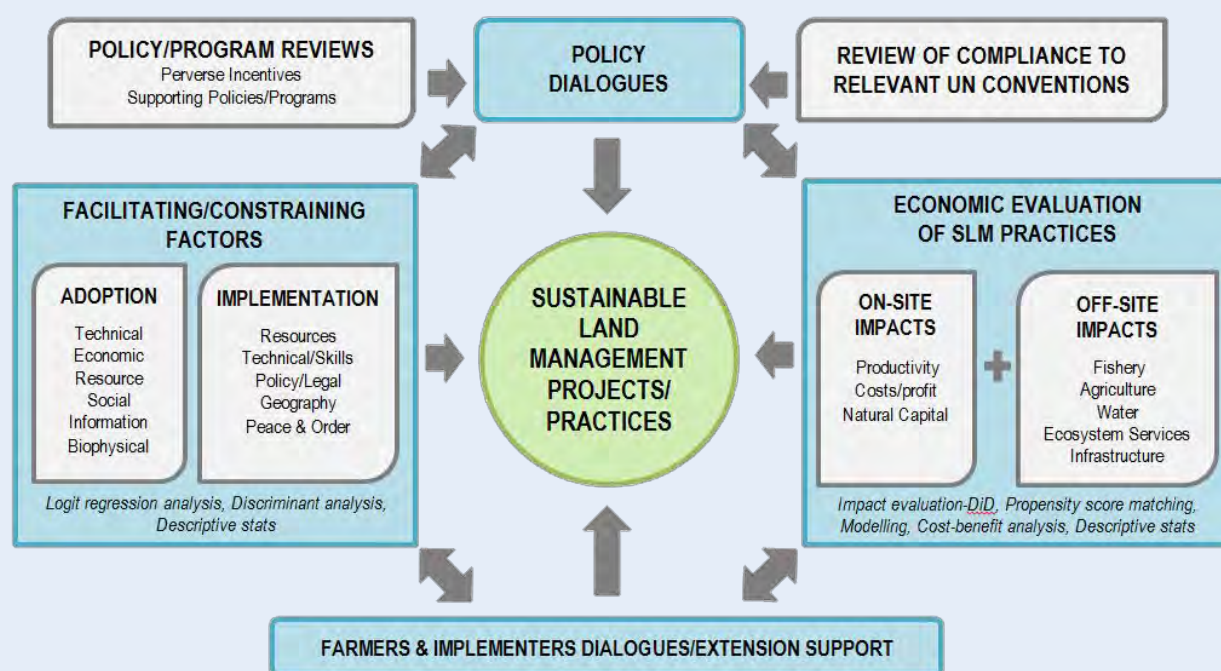


Figure 4. Research framework to understand how to support SLM implementation in Southeast Asia, an ELD-EEPSEA initiative

Research mentoring support

An important part of EEPSEA's capacity building recipe is the mentoring support provided to EEPSEA research grantees. This has been repeatedly identified as what sets EEPSEA apart from other capacity building programs.

Through EEPSEA's mentoring scheme, each research grantee is assigned an adviser from the Program's pool of regional and international experts. The EEPSEA advisers will guide the researcher throughout the grant period.

This support is seen as invaluable, especially by those with little EE research experience. The research grantee and his/her EEPSEA adviser meet face-to-face during the EEPSEA annual conferences, which are usually held in May.

EEPSEA's annual conference is the focal point of the Program. It brings together researchers, resource persons, eminent speakers, and the Sponsors Group and the Advisory Committee. The event includes individual consultations between researchers and their advisers; concurrent working group sessions during which research reports and proposals are presented for further comment; and plenary sessions with talks by international experts.

This fiscal year, EEPSEA held two big events that brought its research grantees together with their EEPSEA mentors: the **2015 Annual Conference** and the **2016 Researchers' Workshop**. The second event was held to provide those awarded research grants this fiscal year with additional face time with their respective EEPSEA mentors in light of the shorter duration of their project implementation as the Program will end in October 2016. This added opportunity to meet with their advisers and discuss their projects is invaluable to the successful completion of their respective projects.



Scenes from the 2015 Annual Conference and the 2016 Researchers' Workshop wherein EEPSEA researchers received advice and comments from EEPSEA resource persons.

2015 Annual Conference

EEPSEA's 2015 Annual Conference was held in Ho Chi Minh, Vietnam on 18-20 May. It was attended by 74 participants from 13 countries. Of these, 32 were researcher-presenters, 14 of which gave an interim report of their ongoing EEPSEA research projects, 4 presented their final research output, and 14 discussed their research proposals for possible funding by the Program.

The researcher-presenters represented seven of EEPSEA's member countries: Vietnam (10), Philippines (6), Thailand (5), China (4), Indonesia (3), Cambodia (3), and Lao PDR (1). Almost one-third (31%) of the presentations focused on *protected area & biodiversity* followed by *climate change* and *coastal/marine* issues (28% each) and *health* (22%) (Figure 5).

Two talks and two panel discussions were featured during the plenary sessions of the 2015 Annual Conference.

Plenary talks

The talks were delivered by Dr. Cielito Habito (Ateneo de Manila University) and Dr. Heidi Joanne Albers (University of Wyoming).

Dr. Habito's talk was on the environmental implications and imperatives of the ASEAN Economic Community (AEC). He pointed out that while the AEC is strong on the integration of economies, it weak on the integration of social and environmental dimensions of development. He shared that while environmental sustainability goals are addressed in the ASEAN Socio-Cultural Community (ASCC) blueprint, there is still the traditional hurdle of segmented implementation. He concludes that to achieve a holistic and integrative perspective in pursuing the ASEAN Community, multi-disciplinary, multi-stakeholder, multi-level councils for sustainable development should be established and/or empowered at the local, national and ASEAN-wide levels. This will, perhaps, contribute to averting the traditional compartmentalization in planning, policymaking and public investment programming.

Dr. Albers' talk was entitled "Spatial Extraction Decisions and Enforcement of Access Restrictions in Protected Areas: Modeling Results and Observation". She shared her experience in using spatial modeling tools and techniques in biodiversity conservation and poverty alleviation. She emphasized the need to remember the context in doing such analysis so as to avoid the blind application of standard models. She advocated the importance of purpose-collected data paired with appropriate models.

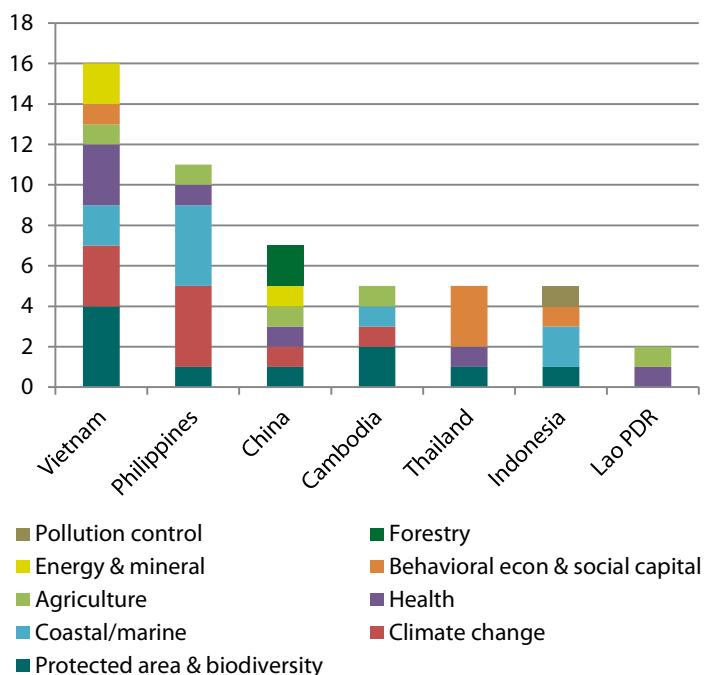


Figure 5. 2015 Annual Conference workshop presentations by country and research area (NOTE: Multiple response. A project can focus on more than one research area.)



Dr. Cielito Habito's talk on the environmental implications of the ASEAN Economic Community at the 2015 Annual Conference.

Plenary panel discussions

The two panel discussions featured during the conference focused on economic instruments and ecosystem services. The first panel discussed the effectiveness of economic instruments for environmental and natural resource management. The panel was moderated by Dr. Nancy Olewiler (Simon Fraser University). Among the panel members were Dr. Wiktor Adamowicz (University of Alberta), Dr. Dale Whittington (University of North Carolina at Chapel Hill), Dr. David James, Dr. Daigee Shaw (Academia Sinica), Ms. Tuan Marina Bt Tuan Ibrahim (Peninsular Malaysia's Forestry Department), and Ms. Nguyen Phan Thuy Linh (Vietnam's Pollution Control Department).

The second panel was made up of EEPSEA researchers who shared the results of their EEPSEA studies on ecosystem services. Dr. Gem Castillo (Resource and Environmental Economics Foundation of the Philippines, Inc.) shared the results of the EEPSEA cross-country research project on the fiscal gap and financing of Southeast Asia's protected areas. He concluded that current resources employed in protected areas in the region remain less responsive to prevailing pressures and that resource gaps in many are very high.

Dr. Pham Khanh Nam (University of Economics Ho Chi Minh City) talked about the EEPSEA cross-country project on the valuation of mangrove ecosystem services in the region. He pointed out that in Southeast Asia, ecosystem services provided by mangroves in terms of erosion control, coastal protection and mangrove-fishery linkages should be the key priorities for valuation as this may pave the way towards better management of these ecosystems.

Dr. Mia Amalia (Indonesia's State Ministry of National Development Planning or BAPPENAS) presented on the EEPSEA cross-country study on the implementation challenges of payment for ecosystem services (PES) schemes in the region. She concluded that the region needs a stronger institutional set-up for PES to be implemented successfully and that the valuation of environmental services is key to the success of PES or PES-like schemes.



Dr. Nancy Olewiler (*right*) moderating the panel discussion on the effectiveness of economic instruments for environmental and natural resource management.

2016 Researchers' Workshop

Held back-to-back with the EEPSEA Impact Conference (see Section 5 for details on this event), the 2016 Researchers' Workshop was held in Bangkok, Thailand on 19-20 February. While most of the participants of the 80 participants of the Impact Conference also attended the opening plenary program of this workshop, only 65 (from 13 countries) attended the full two-day workshop. Of this 65, 24 were researcher-presenters, 15 of which gave an interim report of their ongoing EEPSEA research and 9 presented their final research output.

The researcher-presenters represented eight of EEPSEA's member countries: Vietnam (7), China (5), Myanmar (4), Philippines (3), Thailand (2), Indonesia (1), Cambodia (1), and Malaysia (1). About one-third (36%) of the presentations focused on *agriculture* followed by *protected area & biodiversity* (20%) (Figure 6).

Plenary talks

Two talks were featured during the opening plenary session of the 2016 Researchers' Workshop. The talks were delivered by Dr. Theodore Horbulyk (International Water Management Institute) and Dr. Corbett Grainger (University of Wisconsin - Madison).

Dr. Horbulyk's talk was on what's new for policy research focusing on groundwater arsenic in Bangladesh. He emphasized that with the new technologies and approaches identified to address this massive public health crisis, there may be a very large social payoff from conducting policy research at the same time as the clinical or technological trials of these approaches so as to promote faster uptake of the best interventions.

Dr. Grainger presented on how economists should model climate change. He shared how his team used an econometric technique in analyzing time-series climate data in order to generate economic models of climate change in the presence of tipping points and/or (ir)reversibilities.

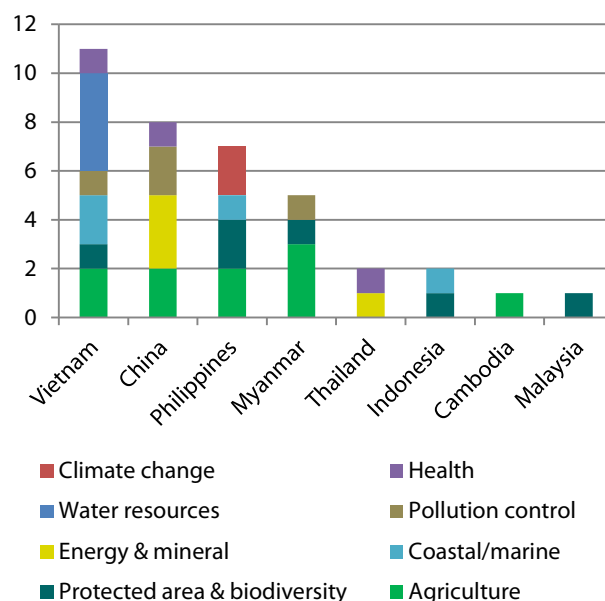


Figure 6. 2016 Researchers' Workshop presentations by country and research area (NOTE: Multiple response. A project can focus on more than one research area.)



Dr. Theodore Horbulyk (left) and Dr. Corbett Grainger (right) during their talk at the 2016 EEPSEA Researchers' Workshop.

Other researchers' workshops

Aside from the 2015 Annual Conference and the 2016 Researchers' Workshop, EEPSEA held smaller periodic researchers' workshops to provide a venue for the discussion of research implementation concerns encountered by the researchers of its cross-country projects.

Workshops of the cross-country coastal resource management (CRM) project

The researchers of the cross-country research project *Coastal and Lake Resource Management, Poverty, and Value Chain Analysis in Cambodia, Philippines, Thailand and Indonesia* met twice this fiscal year:

JUL 2015	Discussed research focus, study sites and survey instruments to be adopted across study countries.
FEB 2016	Country researchers presented on their progress. Questionnaire was revised based on pre-test/pilot testing results in each country.

The project has two main objectives: (1) to assess the contribution of marine and lake resources to poverty alleviation in coastal communities of three SEA countries and how this contribution can be improved by increased integration of fisher folks into the marketing chain; and (2) to assess the impact of coastal resource management projects on household welfare.



The researchers of the coastal resource management cross-country project meeting in Manila, Philippines during their second workshop in February 2016 (top). Dr. Francisco meeting with potential local collaborators in Myanmar for the EEPSEA-ELD project (bottom).

Workshops of the ELD-EEPSEA project

The researchers involved in the approved ELD-EEPSEA cross-country project on the adoption and implementation constraints to sustainable land management (SLM) in Southeast Asia have met four times thus far:

SEP 2015	Involved only the project's country managers and focused on the timetable of activities.
NOV 2015	First gathering to involve all the project team members and was held right after the formal launching of the project during the conference on the <i>Sustainable Management of Coastal and Land Resources in Southeast Asia</i> (discussed in Section 2). Each country manager presented the SLM program mapping in their respective countries. Based on this, study sites were selected and research focus and rationale for site selection was agreed upon. Participants were divided into teams (i.e., legal, policy, social, economics, and agronomy/soils teams). Each team prepared their list of deliverables, definition of variables to be collected, mode of collection and time table. A representative each from both UNCCD and ELD attended the meeting.
DEC 2015	Held in Nay Pyi Taw, Myanmar to meet with potential local collaborators for the project. EEPSEA's small research grantees in Myanmar also took advantage of the EEPSEA Director's visit to discuss their research project updates.
JAN 2016	Held to discuss the results of the study site visits which each country research team had conducted mid-January. Also the first time for the Myanmar researchers to meet with the other cross-country team members. The project timetable was also revisited.

3. Contribution to professional development

EEPSEA's main task is research capacity building. Our research grants program is recognized for its strong mentoring scheme where research grantees are not only given financial support but are also guided in the conduct of their study by eminent resource persons in the field of environmental and natural resource economics (ENRE). Complementing the Program's mentoring scheme are the training courses we conduct, which focus on providing participants with tools and techniques in ENRE that are relevant in their line of work.

Throughout the years, our research grantees have reported that the Program has helped further their professional development in many ways. Improved environmental economics research and teaching skills. Wider professional network. Key factor in getting promoted. Main impetus to publish and improve their credentials. EEPSEA's research and training alumni report these as the Program's contribution to their professional development.



Academic achievements

EEPSEA alumni have reported that the completion of EEPSEA research projects was a key factor in their professional advancement, whether in receiving a scholarship, getting a new job or in achieving a higher position. This is primarily because the EEPSEA research grant scheme provides publication opportunities, which improve grantees' credentials. EEPSEA not only publishes their research reports but also actively encourages them to submit articles for journal publication. In fact, a draft journal article is one of the required outputs of an EEPSEA research grant.

This fiscal year, 14 of EEPSEA's research grantees reported 18 journal articles published based on the results of their respective EEPSEA-funded studies. Two EEPSEA researchers also shared that they were part of book publications. (See Appendix C for full list of these publications.)

Increased capacity to secure research grants is also instrumental to professional development in the academe. Of the research grantees who responded to a short survey¹ we conducted, 31% reported that after the completion of their respective EEPSEA grants they were able to secure funding from other donors to conduct environmental economics research projects.

***The training
I received
from EEPSEA
enabled me
to write journal
articles and
a book chapter,
receive a grant for
a major research
project, receive a
PhD scholarship,
and write my PhD
dissertation.***

*- Nyda Chhinh, Royal University
of Phnom Penh*

¹ To find out more about the impact of EEPSEA grants, a short tracer survey was conducted on 7-11 March, 2016. The survey was sent only to those who received training and research grants during the last grant phase of the Program (i.e., November 2012 to present). Forty-eight (48) research grantees and 36 training grantees responded out of the 278 persons that the survey was sent to.

Increased recognition as an expert

Besides academic achievements, the conduct of EEPSEA research projects has also been reported to improve researchers' recognition as experts in their topic of study. This shows the policy relevance of EEPSEA research projects.

Thirty-eight percent (38%) of the research grantees who answered the short survey conducted reported that they were approached by government agencies to provide advice on a specific environmental issue/problem. Among them was Pini Wijayanti, a dissertation grantee.

Pini was approached by Jakarta disaster mitigation agencies to help in conducting a training course on how to do flood damage assessment given her study on the *Estimation of River Flood Damage in Jakarta: The Case of Pesanggrahan River*. Government agency representatives, who attended a workshop in October 2013 wherein she presented her findings, found her study's estimation more detailed and accurate than the results of the government flood damage survey for all Jakarta areas. The workshop was attended by representatives from the local governments of South Jakarta and West Jakarta, the Regional Disaster Management Agency DKI Jakarta, and the Indonesian Council for Meteorology Climatology and Geophysics. Pini credits the EEPSEA research grant she received for increasing her knowledge on flood assessment through the conduct of a detailed field research.

Improved teaching

The Program's alumni also report that their EE teaching skills were improved through the Program. Not only does their EEPSEA training enrich their teaching, they also use the materials from EEPSEA training courses in the classes they handle at their respective universities. A little more than three-fourths (76%) of those who responded to our short survey indicated that their EEPSEA training contribute to or influence the way they teach their environmental economics classes.

Based on the reports of the alumni who answered our short survey this year, there are at least 28 universities across the region with courses on environmental economics or with courses that incorporate a module on this field, as influenced by EEPSEA (see full list in Appendix D).

***Because of my
EEPSEA study,
I was invited to be
an environmental
economics expert
in revising the
government
wastewater
fee policy.***

*- Le Ha Thanh, Hanoi National
Economics University*

***All the courses I
helped develop are
influenced by how
EEPSEA delivers its
training courses---
a balance of theory,
practice and
policy relevance.***

*- Canesio Predo, University of the
Philippines Los Baños*

SECTION 2

Promoting the relevance of environmental economics in decision making

To facilitate the uptake of EEPSEA research results at the national and regional levels, EEPSEA holds learning and knowledge events that either include natural resource managers, policymakers and other research users or are specifically tailored for them. Such events aim to cultivate in them an appreciation of the relevance and usefulness of EE research results in natural resource management decision making and policymaking.

1. Increased number of research users receiving training on environmental economics

This fiscal year, EEPSEA held three learning events with research users as participants. Such events aim to provide them with a working knowledge of EE tools and techniques so that they may appreciate how useful these are in decision making (see Appendix A for full list EEPSEA regional and in-country events).

a. Training course for Thai justices

Participants of EEPSEA's previous training courses for justices have expressed the need for continued dialogue and interaction on the topic of economic valuation of environmental impacts and the setting of compensation in cases of environmental litigation. Hence, EEPSEA organized a four-day training-workshop on ***Determining the Economic Value of Natural Resources and Environmental Damages*** specifically for Thai justices and legal personnel.

The course was structured around cases of environmental conflict such as deforestation, oil spill, mining and pollution and natural resource damages that have direct and indirect health impacts. Economist Dr. Benoit Laplante (Simon Fraser University) and Justice Brian Preston (Australia's Land and Environment Court of New South Wales) served as the resource persons.

The importance of the economic value of resources and ecosystems and how understanding it can support the judiciary process in cases of environmental conflict was emphasized. Economic valuation methodologies were discussed and served as input to the workshop group activity in which participants were asked to prepare a roadmap on how to incorporate the economic analysis of natural resources damage assessment in the Thai court system.

The course is the latest in a series of trainings conducted by EEPSEA for green bench justices, the first being the 2008 training course that EEPSEA jointly organized with the Asian Environmental Compliance and Enforcement Network (AECEN).



The training-workshop for Thai justices brought together 13 justices from the Supreme Court of Thailand, 9 justices from lower courts, and 11 participants from the legal sector (i.e., lawyers, legal officers).

b. Training course for local government staff in the Philippines

Supporting local level climate change adaptation planning by providing science-based information is an ongoing thrust of EEPSEA. The use of popular economic tools such as cost-benefit analysis (CBA) and cost-effectiveness analysis (CEA) have always been useful in prioritizing and identifying efficient and effective adaptation options. However, feedback from local government unit (LGU) counterparts in the Philippines reveal that among the various tools used for adaptation planning, CBA and the related economic concepts behind it are the least understood and appreciated. This is a major concern for future researchers since CBA is a primary tool in determining viable adaptation options.

Hence, the training course on ***Economic Analysis of Climate Change Adaptation Projects for LGU Planners*** was developed and implemented by the University of the Philippines Los Baños (UPLB) Department of Economics, with funding support from EEPSEA. The course aimed to increase LGU appreciation and understanding of what economic analysis techniques can offer in terms of local adaptation planning and prioritization.

Two two-day training courses were offered, one each in the country's Luzon and Visayas regions. Invited participants were mostly involved in planning and development, disaster risk reduction management, and environmental resource management at the municipal and provincial levels.

The training emphasized that although LGUs have different planning tools, CBA offers a more transparent and systematic way of climate adaptation project planning and prioritization. The course walked the participants through the various steps of the CBA, culminating in their computing for the Net Present Value of their hypothetical climate adaptation projects.

Participants were also provided with an LGU-friendly manual on the use of CBA. A training schedule and activity modules compatible with this manual were also provided, which can be replicated for future LGU trainings.



Scenes from the LGU course in Luzon (above) and Visayas (below).



2. Greater interaction between researchers and policymakers

Aside from learning events, EEPSEA also supports the conduct of knowledge events that aim to serve as a venue for: (a) the sharing of EEPSEA research results to policymakers; and (b) the deeper discussion of a current environmental concern, which the Program can further develop as part of its research agenda or which can be used as a takeoff point to further promote the relevance of environmental economics research in decision making. This fiscal year, EEPSEA supported the conduct of one such event—a regional conference on the sustainable management of coastal and land resources in the region.

EEPSEA leads talks on the sustainable management of coastal and land resources

The conference on the ***Sustainable Management of Coastal and Land Resources in Southeast Asia*** was co-sponsored by EEPSEA with the Konrad-Adenauer-Stiftung Foundation, the Thailand Research Fund, Land Policy Study Forum, and the Thailand Department of Marine and Coastal Resources. With 78 participants, the conference brought together natural scientists, social scientists, environmental economists and government representatives from Thailand, Philippines, Vietnam, Myanmar, China, and India. It provided a platform for the sharing of knowledge and research experiences on issues related to the sustainable management of coastal/marine resources and the combat of land degradation problems.

Speakers from a mixture of public, non-government and international agencies provided inputs towards the development of economic, legal and social themes across a range of resource management contexts. The economic sectors that rely on the quality of marine/coastal and land resources were highlighted and the tools and economic instruments that can be used to support policymakers in fulfilling their pledge towards the attainment of the UN Sustainable Development Goals were discussed. The keynote address was delivered by General Surasak Karnjanarat, Thailand's Minister of Natural Resources and Environment.

While the first day of the conference focused on coastal resources, the second day focused on the economics of land degradation. This second day was co-sponsored by the Economics of Land Degradation (ELD) Initiative, EEPSEA's partner in its ongoing cross-country project entitled on sustainable land management, which is featured in Section 1.

Speakers from government agencies tasked to support the Land Degradation Neutrality (LDN) goal as per their respective national government's commitment to the UN Convention to Combat Desertification (UNCCD) were invited from the four countries covered in the ELD-EEPSEA project. These included Dr. Sathaporn Jaiarue from Thailand's Land Development Department, Engr.



The keynote address of the conference on the *Sustainable Management of Coastal and Land Resources in Southeast Asia* was delivered by Thailand's Minister of Natural Resources and Environment, General Surasak Karnjanarat (top). Speakers during the panel on the human dimension of coastal and marine resources, which includes EEPSEA alumni Alice Ferrer and Pham Thi Thanh Thuy, pose for a photo (bottom).

Samuel Contreras from the Philippines' Bureau of Soils and Water Management, and Dr. Vu Manh Quyet of Vietnam's Soils and Fertilizers Research Institute. These speakers provided an overview of the land degradation situation in their respective countries. Their respective units are involved as partners in the ELD-EEPSEA cross-country research project.

The following speakers were also invited to share their experience on land conservation: Dr. Rex Victor Cruz (UPLB's College of Forestry and Natural Resources), who spoke on the Conservation Farming Village (CFV) modality as an approach towards sustainable land management in the Philippines; Dr. Pitayakon Limtong (Kasetsart University's Soil Science Department), who spoke on the experience of soil doctors in Thailand; Dr. Tran Duc Toan (Vietnam's Soils and Fertilizers Research Institute) who spoke on soil erosion and land use management for sustainable agricultural production in Vietnam's sloping land; and Dr. Nathaniel Añasco (UP Visayas' Marine Pollution & Ecotoxicology Laboratory), who spoke on sedimentation and coastal productivity linkages.

The conference was organized by the Economy and Environment Institute for the Lower Mekong Sub-region (EEI-LMS), an organization established by EEPSEA alumni in Thailand, Lao PDR and Myanmar and which will take over EEPSEA role in these three countries upon the Program's end in October 2016.



Mr. Wisit Ngamson (*top*) of Thailand's Land Development Department sharing Thailand's agenda for connecting the Sustainable Development Goals with land development, Engr. Samuel Contreras (*bottom left*) of the Philippines' Bureau of Soils and Water Management during the session *Overview of Land Degradation in Southeast Asia*, and Dr. Tran Duc Toan (*bottom right*) of Vietnam's Soils and Fertilizers Research Institute during his talk on land use management in Vietnam's sloping agricultural lands.

SECTION 3

Increasing the visibility of EEPSEA researchers and their outputs

To facilitate the uptake of EEPSEA research results, the Program invests in efforts to increase the visibility of EEPSEA researchers and their outputs. Hence, the Program provides its research grantees with travel support to participate in international and regional conferences, both those conducted by EEPSEA and by other organizations. Research outputs are also packaged into print publications, which are also made available through online channels such as the EEPSEA website and the *Research Papers in Economics* (RePEC) database.

1. Presentation in regional and international conferences

The Program provides its researchers with travel support so that they may participate in conferences that EEPSEA sponsors as well as those organized by other institutions. EEPSEA researchers' participation in such events not only allow research grantees to present and disseminate the findings of their EEPSEA-funded research to the wider scientific community, it also allows them to participate in discussions on issues pertaining to environmental and resource economics. Attendance in such events also gives EEPSEA researchers a chance to network with other researchers and receive feedback on their work. The EEPSEA director and her Senior Economists also attend such events to contribute in discussions on emerging issues in environmental and resource economics.

Travel grants to EEPSEA regional partnership events

This fiscal year, EEPSEA provided travel support for its researchers to participate in two EEPSEA-sponsored conferences. Three researchers were supported to present their respective studies at the *1st International Energy Conference* organized by the UPLB Department of Economics. EEPSEA convened the session *REstore: Renewable Energy and the Environment in Asia*, which was moderated by EEPSEA Director Herminia Francisco.

Three researchers were also supported to present at the conference on the *Sustainable Management of Coastal and Land Resources in Southeast Asia*, which was discussed in Section 2. The EEPSEA researchers who presented in these conferences as well as their respective papers are indicated in Appendix E.

Travel grants to other conferences and workshops

EEPSEA also supported the attendance of eight researchers in six conferences organized by other institutions. In five of the conferences, the researchers presented their respective EEPSEA research projects. The researchers supported to these various knowledge events are summarized in Appendix E along with the topic of their presentation.

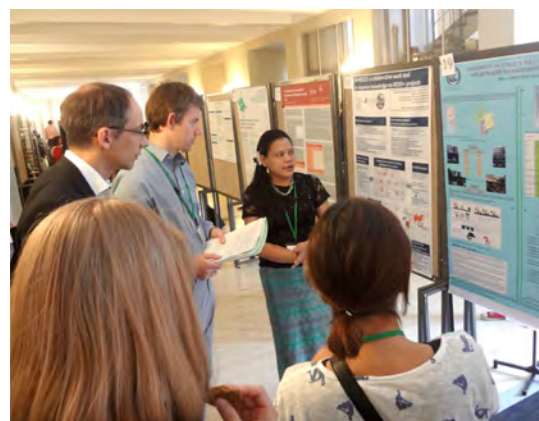


EEPSEA researchers Pham Thi Thanh Thuy (rightmost) and Alice Ferrer (third from the left) were among the speakers in the session on the human dimension of coastal and marine resources during the conference on the Sustainable Management of Coastal and Land Resources in Southeast Asia.

On the other hand, the researchers who attended the *International Symposium on Business and Economics 2015: Frontier of Behavioral Economics: Application for Policy Maker, Marketer, and Beyond* did not present papers but are part of EEPSEA's cross-country research project on behavioral economics and were seen to benefit greatly from attending the symposium. They also took advantage of the opportunity to consult with Dr. Jack Knetsch, their EEPSEA research adviser, who was a speaker at the symposium.

Other conference presentations

Aside from those who requested for and received EEPSEA travel support to present at conferences, seven other EEPSEA researchers reported that they presented at international conferences through the support of their home institutions. Their participation in these conferences and the papers they presented are also summarized in Appendix E.



Myanmar researcher Mya Lwin Lwin Aung (*middle*) at the 21st Annual Conference of the European Association of Environmental and Resource Economists in Helsinki, Finland last June 2015. Aung presented her EEPSEA study on the Assessment of the Public's Willingness to Pay for Solid Waste Management in Yangon, Myanmar.

2. Policy forum presentations

While conference presentations increase the visibility of EEPSEA researchers and their outputs to the wider scientific community, presentations during policy forums target those working in government agencies that manage the environment. This year, three EEPSEA researchers report that they shared their findings in policy forums:

- (a) Dr. Awang Noor Abd. Ghani shared the results of his EEPSEA research project on payment for ecosystem services (PES) in Malaysia during a workshop organized by the Forestry Department of Peninsular Malaysia in November 2015.
- (b) Dr. Alin Halimatussadiah shared her findings during a focus group discussion organized by Universitas Indonesia's Institute for Economic and Social Research in February 2015 in Malacca, Malaysia. The discussion was on the role of waste banks on waste management in Depok, Indonesia, which was the topic of her EEPSEA research project. The discussion was attended by staff from Depok City's Cleansing Department, Environment Department, and Planning Department.
- (c) Dr. Achilles Costales and Prof. Maria Angeles Catelo shared the results of their EEPSEA project in the dissemination seminar "Clean Air In, Bad Fumes Out: Reducing Air Pollution in the Baguio Central Business District". The seminar was sponsored by EEPSEA and the University of the Philippines Baguio's Cordillera Studies Center. It was attended by key officials from the Cordillera Administrative Region's Department of Environment and Natural Resources, Department of Science and Technology, Baguio City Health Department, and Baguio City's Office of the Mayor.



Dr. Achilles Costales and Prof. Maria Angeles O. Catelo during their dissemination seminar in 2015 wherein they presented the findings of their EEPSEA-funded research project on the cost of illness of exposure to Baguio City's air pollution and the cost of an alternative mode of public transport to reduce it.

3. EEPSEA publications

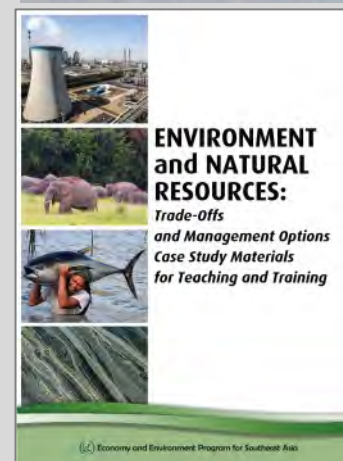
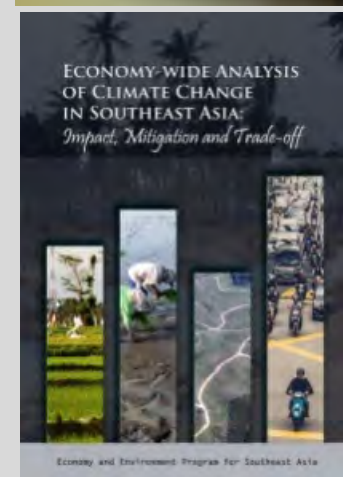
EEPSEA generates several types of publications (i.e., research reports, policy briefs, books and other special publications). All are available for free download at the EEPSEA website (www.eepsea.org). Some have versions translated into the local dialect to facilitate research results dissemination to policymakers and natural resource managers. Most have a hard copy version, which the Program sends to selected university libraries all over the region. This fiscal year, EEPSEA published 4 books, 19 research reports, and 11 policy briefs.

a. Books

Started last year, the book ***Marine and Coastal Ecosystem Valuation, Institutions, and Policy in Southeast Asia*** was published through Springer in February 2016. It is a collection of EEPSEA-funded research on fishery and marine coastal resources divided into three sections. Part 1 consists of seven studies that value the services of marine resources (i.e., coral reefs, sea grasses, and marine protected areas) and includes the valuation of endangered species conservation. Part 2 features four studies that cover the valuation of damages to coastal resources (i.e., overstocking of fish cages, overfishing, and land reclamation). Part 3 includes studies that look into fishery policies and institutions governing marine resource management. Dr. Nancy Olewiler, Dr. Herminia Francisco, and Dr. Alice Ferrer are the book's editors.

The book ***Economy-wide Analysis of Climate Change in Southeast Asia*** is a compilation of EEPSEA-funded research studies using computable general equilibrium (CGE) modeling. Published in December 2015, the book features four studies that resulted from proposals submitted by participants to an EEPSEA training course on economic modeling for environmental and natural resource management in July 2011 in Bandung, Indonesia. The training was held in partnership with Universitas Padjadjaran's Center for Economics and Development Studies (UNPAD-CEDS). The book's introduction was written by UNPAD-CEDS Director Dr. Arief Anshory Yusuf.

Environment and Natural Resources: Trade-offs and Management Options is a book of case study materials for teaching and training. It is meant for teachers of undergraduate and graduate environment and natural resource economics courses but can also be used to engage natural resource managers to tackle complex environmental problems from the perspective of the various interest groups. Published in December 2015, the book features 15 problem-oriented case study papers developed from EEPSEA research projects. The case studies were prepared by EEPSEA researchers based on their completed research studies during a workshop in March 2014 facilitated by Dr. Eduardo Araral of the National University of Singapore's Lee Kuan Yew School of Public Policy. The cases highlight environmental problems while providing options on how to address it as well as discussion points that students or training participants can debate on or engage in through role-playing.



Three books published by EEPSEA this fiscal year: a collection of 16 studies on fishery and marine resources (*top*), a compilation of four studies that use CGE modeling (*middle*), and a book of 15 problem-oriented case papers that highlight the complexity of environmental problems (*bottom*).

Each case highlights the following: (a) tradeoffs in the use of environment and natural resources; (b) the value of the benefits and the costs of the various options to improve environment and resource management; (c) the perspectives and interests of different actors/stakeholders in the decision-making process; and (d) the challenges faced by decision makers in addressing environmental problems. The cases attempt to capture real-life situations that highlight the complexity of environmental problems and the various issues that should be considered in deciding how to manage natural and environmental resources.

The fourth book published is a compilation of narratives on EEPSEA's impact in the region. It is further described in Section 5.

b. Research reports & policy briefs

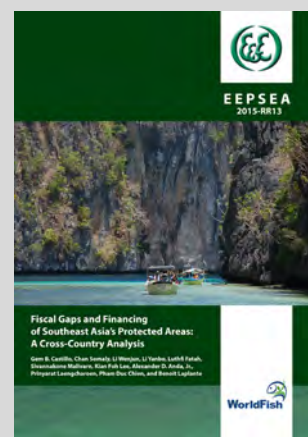
This fiscal year, EEPSEA published 19 research reports, 2 of which are from its completed small research grants and 17 from its completed competitive research grants. Those with policy value are further packaged into policy briefs to aid the researcher in communicating the results to policy and decision makers. Of the 19 research reports published this fiscal year, 11 were further packaged into policy briefs. A list of these publications, including a short description of each is provided in Appendix F.

EEPSEA also supported the Vietnamese translation of 12 of its previously published research reports. The translation was done through the Economy and Environment Institute - Vietnam (EEI-Vietnam) (see Appendix G for list of research reports translated). The translations were made as part of the preparations for EEI-Vietnam's *Training-Workshop on Regulations and Policies for Pollution Control and Environmental Impact Evaluation*, which targets both researchers and policymakers (more on this in Section 4).

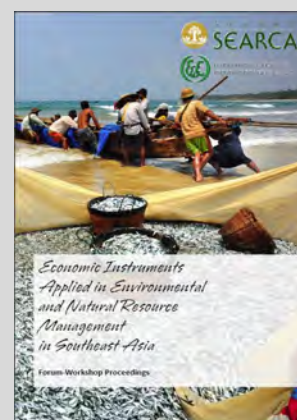
c. EEPSEA in other publications

In September 2011, EEPSEA conducted the *Forum-workshop on Economic Instruments Applied in Environmental and Natural Resource Management (ENRM) in Southeast Asia* with the Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA) in Bali, Indonesia. This fiscal year, the proceedings of the said forum was published in the SEARCA website.

This three-day forum-workshop amongst government-based stakeholders and decision makers provided a timely and innovative opportunity to know who is doing what and to exchange experiences on what works and what does not in the realm of environmental and natural resources management using economic instruments. Sixteen representatives from China, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Thailand, and Vietnam were invited to serve as paper presenters. Each representative was endorsed by their respective ministries in charge of ENRM. They wrote and presented papers consolidating experiences, findings, lessons, and recommendations on the application of various economic instruments in ENRM in their respective countries.



EEPSEA Research Reports (*top*) are outputs of projects supported by the Program. All have been peer reviewed and edited. In some cases, longer versions may be obtained from the author(s). Selected Research Reports are sent biannually to selected university libraries all over Southeast Asia. Research Reports with policy value are further developed into Policy Briefs (*middle*), which summarize the key findings generated by research projects and provide policy recommendations based on these results.



The proceedings of the 2011 forum-workshop on the use of economic instruments were published by SEARCA with EEPSEA fund support.

4. Online dissemination efforts

EEPSEA makes use of online channels to disseminate its various publications as well as increase the visibility of the Program and its activities. Primarily, the Program focuses its web-based efforts in disseminating its outputs through its own website (www.eepsea.org) and through the *Research Papers in Economics* (RePEC) database (<http://repec.org>).

a. Website visits and downloads

Launched in July 2014, the EEPSEA website has been visited 22,181 times by 16,917 unique visitors as of February 2016. The top ten countries where most website visitors are from are the Philippines, Vietnam, Russia, USA, Indonesia, Thailand, China, Malaysia, Australia, and Cambodia, respectively.

A decrease in visits was experienced towards September 2015 when the website down because of problems with the web host. Since then, visits have been increasing once again with the most visits being to pages pertaining to EEPSEA publications like in previous years. User downloads from the website are mostly of EEPSEA Research Reports. An increase in the download of books is noticeable in December when EEPSEA published two books. (see Appendix H for website statistics)

b. RePEC downloads and citations

Since 2009, EEPSEA has listed three publication series (i.e., research reports, special and technical reports, policy briefs) in the Research Papers in Economics (RePEC) database (<http://repec.org>). As of December 2015, the papers in RePEC have been downloaded 18,520 times or at a monthly average of 229 times.

According to citation analysis by Google Scholar, EEPSEA publications have been cited by 6,593 papers since 2009. Of this, 1,142 papers cited EEPSEA publications in 2015 to February 2016. (see Appendix H for statistics)

c. EEPSEA Partnership website

A website for the newly developed Economy and Environment Partnership for Southeast Asia (EEPSEA Partnership) is currently being developed with funding support from the EEPSEA Program. The website also features webpages dedicated to each of the six country-level Economy and Environment Institutes federating under it. The establishment and role of the EEPSEA Partnership and the national organizations that make it up are further discussed in the next section.

This new website also features the EEPSEA Program's publications and will serve as the main repository of these publications upon the Program's end. It also showcases the videos produced by EEPSEA researchers on the impact that their respective projects have made.



The EEPSEA Program website (top) and the design of the EEPSEA Partnership website being developed (bottom). The EEPSEA Partnership website is due to be unveiled by April 2016.

5. Citations in media

As a result of EEPSEA's efforts to increase its visibility, the Program achieved 20 media citations during the reporting period (see full list in Appendix I).

Most are citations in online newspapers focusing on the implications of the findings of EEPSEA research projects. Others are media interviews resulting from the attention received by newly completed EEPSEA research projects, such as that of Dr. Chunhua Wang's research on pollution control and regional development in China and the research project on Baguio City's air pollution by Dr. Achilles Costales and Prof. Maria Angeles Catelo (discussed in page 20).

Dr. Awang Noor Abd. Ghani's research on payment for ecosystem services in Malaysia also led to his being consulted in a proposed project to turn a mangrove area in Malaysia into an aquaculture site. Several local stakeholders were opposing the plans of a community group to convert the mangrove area in Penaga, Penang for aquaculture. If the conversion will push through, Dr. Awang valued the ecosystem service loss at MYR 67 million. His valuation was featured in an article in *KOSMO*, a community newspaper in Malaysia.



Dr. Chunhua Wang (*rightmost, right photo*) during his interview with China Radio International to discuss pollution control and regional development in China and the *KOSMO* article citing Dr. Awang Noor Abd. Ghani, who valued the ecosystem services of the mangrove forest in Penaga, Penang (*left photo*).

SECTION 4

Safeguarding the sustainability of capacity building in environmental economics research in the region

To ensure the sustainability of capacity building activities in environmental economics (EE) research in Southeast Asia, EEPSEA collaborates with national and regional organizations in the conduct of its training courses as well as supports the development of a community of environmental economists in the region by supporting environmental economics associations. Given the Program's approaching end in October 2016, such work has become more important.

Thus, continuing the work reported last fiscal year, EEPSEA has been supporting the establishment of environmental economics organizations in several of its member countries so that they may continue EEPSEA's legacy of capacity building of young researchers through research mentoring and conducting training courses. The need to establish such organizations came about during the Program's 2014 Annual Conference wherein there was a comprehensive discussion on charting EEPSEA's future.



This fiscal year, EEPSEA is proud to report the formal establishment of the Economy and Environment Partnership for Southeast Asia (EEPSEA Partnership). The EEPSEA Partnership is based in the University of Economics Ho Chi Minh City (UEH), EEPSEA's long-time local partner in the conduct of in-country events in Vietnam. The Partnership is under the capable leadership of Dr. Pham Khanh Nam, currently EEPSEA's Deputy Director for Research and serving as Deputy Dean of the UEH Faculty of Development Economics.

Under the EEPSEA Partnership, six country-based Economy and Environment organizations federate, all of which were also formally established late 2015 to early 2016. Depending on what the EEPSEA alumni who formed the organization in each country believes would work best in terms of sustainability, an institute, group, association or society was established in each of the following countries: Vietnam, Indonesia, Philippines, Malaysia and Cambodia. A sub-regional institute was also established, which covers the lower Mekong countries of Thailand, Lao PDR and Myanmar.



September 2014: EEPSEA Director Herminia Francisco with the then future EEPSEA Partnership Director, Dr. Pham Khanh Nam, during the donor mapping exercise at the EEPSEA resource mobilization course (*above*). The course was attended by other senior EEPSEA alumni involved in the planned establishment of the country-based EE organizations.

April 2015: EEPSEA alumni met in Manila to discuss the implementation of a fund-raising strategic plan in order to sustain EE capacity building through the country-based EE organizations that were about to be established (*below*). EEPSEA also enlisted the help of a marketing agency to help the country-based EE organizations make themselves known to potential donors and partners (*bottom*). The agency developed the Partnership's and its country-based organizations' logos and is currently developing their website, set to be finished by April 2016.



Each of these country-based EE organizations received funding and technical support from EEPSEA to facilitate their establishment. Of foremost priority for these country-based organizations is to find the needed funding to support their planned activities towards continuing the EEPSEA Program's legacy of capacity building in the region. Hence, EEPSEA supported each country-based organization's activities that would not only help them create a membership but also attract the attention of potential partners and donors.



The Economy & Environment Institute - Vietnam (EEI-Vietnam) is headed by Dr. Bui Dung The. It is based at Hue University where Dr. The serves as lecturer at the College of Economics. EEPSEA supported two EEI-Vietnam activities.

A **membership meeting and scientific workshop** was held in Cantho University to discuss the future direction of EEI-Vietnam. The meeting also served as a venue for Vietnam EE researchers to present their studies. Lecturers (both EEPSEA and non-EEPSEA alumni) from various universities and institutions attended (i.e., Nong Lam University, University of Economics Ho Chi Minh City, NhaTrang University, Da Nang University, National Economics University, Institute of Strategy and Policy on Natural Resources and Environment, Forestry University, Vietnam National University of Agriculture, and Can Tho University). Six papers were presented during the scientific workshop, five from Vietnamese researchers and one delivered by Dr. Mitsuyasu Yabe of Japan's Kyushu University on *Globally Important Agricultural Heritage Systems and its Perspective in Vietnam*.

The discussion on the future direction of EEI-Vietnam focused on its sustainability and membership, specifically on fund-raising strategy and management options, especially given the laws of the country. Suggested key research areas are air and water pollution, natural resource conservation, climate change, and green economy.

A **training-workshop** on the regulations and policies for pollution control and environmental impact evaluation was also conducted for researchers. It was attended by university-based researchers as well as researchers from government agencies such as the Department of Agriculture and Rural Development of Cantho province, the Department of Science and Technology of An Giang and Tra Vinh provinces, the Department of Aquaculture and Fishery Protection in Soc Trang province, and the Economic and Social Institute of Cantho City.

Participants were introduced to economic methods that they can use in conducting research on pollution control and environmental impact evaluation, such as stated preference methods, contingent valuation method, multi-criteria analysis, and cost-benefit analysis. After the lectures, participants developed a short environmental policy analysis proposal. The workshop aimed to provide the researchers with evaluation methods/tools to help them deal with pollution concerns and other environmental problems. EEI-Vietnam translated 12 EEPSEA research reports into Vietnamese to be used for this training-workshop (also discussed in page 22).



Dr. Herminia Francisco during EEI-Vietnam's membership meeting and scientific workshop (left) and some of the participants and instructors of the training-workshop on the regulations and policies for pollution control and environmental impact evaluation conducted in Can Tho University (right).

The Economy & Environment Institute for the Lower Mekong Sub-region (EEI-LMS) covers three countries: Thailand, Lao PDR and Myanmar. It was established in September 2015 as non-profit foundation in Thailand and is headed by Dr. Orapan Nabangchang, currently EEPSEA Deputy Director for Training and Partnership. Aside from the conference on the *Sustainable Management of Coastal and Land Resources in Southeast Asia* (discussed in Section 2), EEPSEA supported four other EEI-LMS activities.

The **Myanmar policymakers' course** was held to introduce EEI-LMS to environmental policymakers in the country as well as to introduce them to key concepts and tools in environmental economics. The course highlighted the usefulness of these tools to their work, particularly with regards to decision-making on natural resource management. Policymakers from various government agencies in Myanmar, such as the Ministry of Environmental Conservation and Forestry, the Ministry of Agriculture and Irrigation, and the Yangon City Development Committee, among others, attended in the three-day course. EEI-LMS Director Dr. Orapan Nabangchang, Dr. Adis Israngkura of the Thailand Development Research Institute, Dr. Htay Htay Lwin, Rector of Myanmar's Co-operative University, and Ms. Mya Lwin Aung, EEI-LMS Deputy Director in Myanmar, served as the course resource persons.

The **EEI-LMS launch conference** was held to formally launch the Institute to the community of researchers and students in environmental and natural resource economics. Dr. Jack Knetsch and Dr. Benoit Laplante, both seasoned EEPSEA Program resource persons, gave keynote talks on research productivity and climate change research, respectively. The conference also served as a venue to further refine the Institute's mission and targets. This was discussed during the EEPSEA alumni session that followed the keynote talks. In the afternoon, 16 papers from the following universities and institutions were presented: Chulalongkorn University, Mahidol University, Chiang Mai University, Sukhothai Thammathirat Open University, Khon Kaen University, Prince of Songkla University, and Thailand Development Research Institute. Focus was on pollution and natural resources.

Held back-to-back with the launch conference was the first EEI-LMS **advisory board meeting**. Discussion focused on potential sources of funding during the remaining period of EEPSEA and beyond. EEI-LMS board members include Mr. Petipong Pungbun Na Ayudhya (Thailand Minister of Agriculture and Cooperatives), EEPSEA Director Dr. Herminia Francisco, Dr. Phouphet Kyophilavong (National University of Laos), Dr. Daigee Shaw (Academia Sinica, Taiwan), and Dr. Htay Htay Lwin (Co-operative University, Myanmar). Dr. Knetsch also took part in the discussions.

The first of three planned **proposal writing workshops** was also held back-to-back with the launching conference. Discussions centered on progress made in identifying potential sources of funding. It was recognized during the meeting that technical support from someone with practical experience in packing proposals to donors is needed.



Participants of the Myanmar policymakers' course.

The Economy & Environment Institute - Indonesia (EEI-Indonesia) is headed by Dr. Arief Anshory Yusuf. It is based at Padjadjaran University where Dr. Yusuf serves as Director of the Center for Economics and Development Studies. EEPSEA supported four EEI-Indonesia activities.

EEI-Indonesia's **proposal development workshop** was attended by 14 of the Institute's research associates. The workshop was divided into working groups to write proposals for the Institute's future activities for submission to donors. The planned EEI-Indonesia activities include School of Valuation, provision of research grants and PhD research grants for EE research, behavioral and experimental research, and community engagements in waste management, discrete choice study on tourism, and damage assessment training for judiciaries.

Interest to attend EEI-Indonesia's **School of Valuation (Sekolah Valuasi)** batch I was quite high. More than 120 people applied competing for the 25 seats available. The second batch of Sekolah *Valuasi* attracted a similar level of interest. The three-day course aimed to introduce the idea that many environmental problems are caused by undervaluation of resources due to the nature of externalities, public goods setting, or open-access resources. Topics covered include cost-benefit analysis, contingent valuation method, travel cost method, cost of illness and choice modeling, among others. The course was facilitated by EEPSEA training and research alumni.

With the theme "Integrating Ecosystem Services into the Development Agenda", EEI-Indonesia was launched late February 2016 through a half-day **launching seminar**. The seminar explored the extent by which the value of environmental services has been taken into account in the Indonesian development agenda. A keynote talk was given by the Director of the Environmental Division of the Indonesian Ministry of National Development Planning (BAPPENAS). Prof. Robert Costanza of the Australian National University also gave a talk on the global value of the ecosystem. The program ended with the following institutions signing a Memorandum of Understanding to formalize their partnership with EEI-Indonesia: (1) Universitas Padjadjaran (Center for Economics and Development Studies); (2) Universitas Indonesia (Institute of Economic and Social Research); (3) Universitas Gadjah Mada (P2EB); (4) Universitas Lambung Mangkurat (Faculty of Agriculture); (5) Institut Teknologi Bandung (Meteorology Department); (6) Ministry of Agriculture (ICASEPS); (7) International Centre for Research on the Environment and the Economy (ICRE8), Greece; (8) Center for Climate Change and Multilateral Finance, Fiscal Policy Office, Ministry of Finance, Indonesia; (9) Indonesian Marine and Fisheries Socio Economics Research Networking (IMFiSERN); and (10) BAPPENAS.



*From the top: The EEPSEA alumni who took part in EEI-Indonesia's proposal development workshop; participants of Sekolah *Valuasi* batch I with their EEI-Indonesia facilitators, all of whom are EEPSEA training alumni; and Prof. Robert Costanza of the Australian National University with EEI-Indonesia Director Dr. Arief Anshory Yusuf during the Institute's launching seminar.*

The Economy & Environment Group - Philippines (EEG-Philippines) is headed by Dr. Gem Castillo. It forms a group under the Resource and Environmental Economics Foundation of the Philippines, Inc. (REAP), in which Dr. Castillo is serving as President. EEPSEA supported three EEG-Philippines activities.

Fifteen (15) REAP members gathered for a three-day **strategic framework development and proposal writing workshop**. During the workshop, plans for the future activities of the Group were laid and its structure and key officials identified. The workshop also served as venue to develop a common understanding of what the EEG envisions to be and to set strategies to fulfill its mission.

One of the main outputs of the event is a capsule proposal on *Sustainable Conservation Financing for Ecosystem Services and Biodiversity*. The proposed project aims to assess and design science-based incentive mechanisms for the conservation of ecosystem services and biodiversity. It intends to serve the Protected Area Superintendents under the Philippine Department of Environment and Natural Resources (DENR), the Ecosystems Research and Development Bureau, and local government units. It has three main components: (1) capacity building; (2) conduct of participatory research; and (3) development of policy and communication strategies. Once finalized, it will be submitted to DENR.

The **formal launching** of EEG Philippines immediately followed the workshop. It was witnessed by representatives from various government agencies, academic institutions and private organizations. Dr. Nancy Olewiler (Simon Fraser University) delivered a keynote talk on *Ecofiscal Environment Pricing: Carbon and Congestion*. Dr. J. Prospero E. De Vera III, Vice-President for Public Affairs of University of the Philippines System, also gave a short talk on science communication. One of the highlights of the event was the panel discussion on transdisciplinary research, which resulted in a better understanding of the concept and areas where EEG-Philippines can apply it.

To make EEG-Philippines visible in the Visayas region of the country, the **1st Regional Forum on Economy and Environment** was held at the University of the Philippines Visayas (UPV). Recognizing the importance of the academe in the realization of its mission, the Group partnered with UPV and Oeconomicus (an academic UPV student organization) in holding the forum. Besides introducing EEG-Philippines, the forum featured a series of presentations on the economy and the environment delivered by EEPSEA alumni. More than 100 students and faculty members from various universities and institutions in the region attended the event. Among the forum presentations was Dr. Emelyn Peñaranda's (DENR Region VI) talk on the present economic and environmental issues in the Visayas.



From the top: EEG-Philippines members during the workshop on developing the Group's strategic framework; Dr. Nancy Olewiler (left) and Dr. Prospero De Vera (right) during their talks at the EEG launching event; and UPV Chancellor Dr. Rommel Espinosa welcoming participants to the 1st Regional Forum on the Economy and Environment.

The Economy & Environment Society – Cambodia (EES-Cambodia) is headed by Dr. Thun Vathana. It is based at the Prek Leap National College of Agriculture (PNCA) wherein Dr. Vathana serves as Executive Director. EES-Cambodia held six events with EEPSEA's support.

The Society co-sponsored several events with organizations considered to be potential partners in the future. The first is a **workshop** on *Green Economy, Environmental Protection and Agricultural Development*, which it jointly organized with PNCA, Union Federation of Youth of Cambodia, and China Foundation for Peace and Development. It also jointly organized **three half-day seminars** with PNCA and Winrock International on the following topics: (1) land conflict; (2) forest restoration in the Southern Cardamon Mountain; and (3) agricultural management under climate change. These seminars were mainly attended by students and faculty from Phnom Penh universities. The last seminar, which featured speakers from the International Monetary Fund and the National University of Singapore, drew a crowd of about 150.

A **policy dialogue** on the *Challenges in Managing State Land: Managing Competing Interests for Lands inside Protected Areas* was held to discuss issues confronting protected areas (PAs) managed by Cambodia's Ministry of Environment (MOE). Among the issues discussed are the influx of migrants from lowland provinces and the long-term land lease to private investors for agro-industrial development in order to accelerate economic development. The policy dialogue aimed to stimulate discussion among concerned stakeholders on appropriate interventions and policy instruments to address these challenges as well as harmonize competing interests for PA lands. The event involved stakeholders from MOE, the Mekong Region Land Governance Project, UN Development Programme, World Wildlife Fund (WWF), Centre for Policy Studies, Royal University of Phnom Penh, Winrock International, and RECOFTC-The Center for People and Forests.

EES-Cambodia was formally introduced in a half-day **launching workshop**, which also featured a short talk on the application of Integrated Valuation of Ecosystem Services (In-VEST) tools for mapping and valuing ecosystem services. A breakout session was done during the event to facilitate the discussion of EES-Cambodia's research prioritization, resource mobilization and network building strategy. The workshop was attended by EEPSEA alumni in Cambodia along with representatives from potential partners such as the German Development Bank, IUCN-Cambodia, MOE's Department of Green Growth, Birdlife International, EU, WWF, Conservation International, and USAID.



From the top: The opening remarks during the workshop on *Green Economy, Environmental Protection and Agricultural Development*; Sopheak Kong, an EEPSEA researcher, speaking on payment for ecosystem services implementation in Cambodia during the seminar with Winrock International on forest restoration; the policy dialogue on the *Challenges in Managing State Land*; and one of the discussion groups during the EES-Cambodia launching workshop.

The Economy & Environment Association - Malaysia (EEA-Malaysia) is headed by Dr. Awang Noor Abd. Ghani. It is based at the Universiti Putra Malaysia where Dr. Awang is a Professor at the Faculty of Forestry. EEPSEA supported two EEA-Malaysia activities.

EEA-Malaysia was formally introduced during a half-day **launching event**. The launch was opened by YA Dato' Paduka Haji Azman Abdullah, a Kuala Lumpur high court judge who is also an alumnus of an EEPSEA training course for green bench justices. He drew attention to the pertinent need for the development of policy and technical advice in the conservation of ecosystem resources. The role of judges in giving judgement on environmental crime was also highlighted.

The launch was attended by officers from government departments and agencies, research institutions, NGOs and the academe. It also featured talks on mainstreaming ecosystem valuation in addressing national environmental challenges and on the past, present and future challenges in environmental economics in Malaysia.

The **training course** on the introduction to environmental economics was attended by researchers from various universities, research institutions, and government agencies in Malaysia. The course aimed to equip researchers, natural resource managers and decision makers in Malaysia with a basic understanding of the underlying concepts in environmental economics, economic valuation and its applications in natural resource management. Focus was given on stated preference approaches (i.e., contingent valuation method and discrete choice modeling), revealed preference method (i.e., travel cost method), and hedonic pricing. EEPSEA alumni capped the course by sharing their studies as an illustration of how these methods are applied.



Dr. Awang Noor Abd. Ghani talking about mainstreaming ecosystem valuation in addressing national environmental challenges during the launch of EEA-Malaysia (*top*) and the participants of the training-workshop on the introduction to environmental economics (*bottom*).

SECTION 5

Our impacts

As EEPSEA approaches its end, there is no better time than now to showcase how the Program has influenced environmental policies and natural resource management and improved environmental economics (EE) research capacity in the region. Hence, the Program held its 2016 Impact Conference on 18 February 2016.

2016 Impact conference

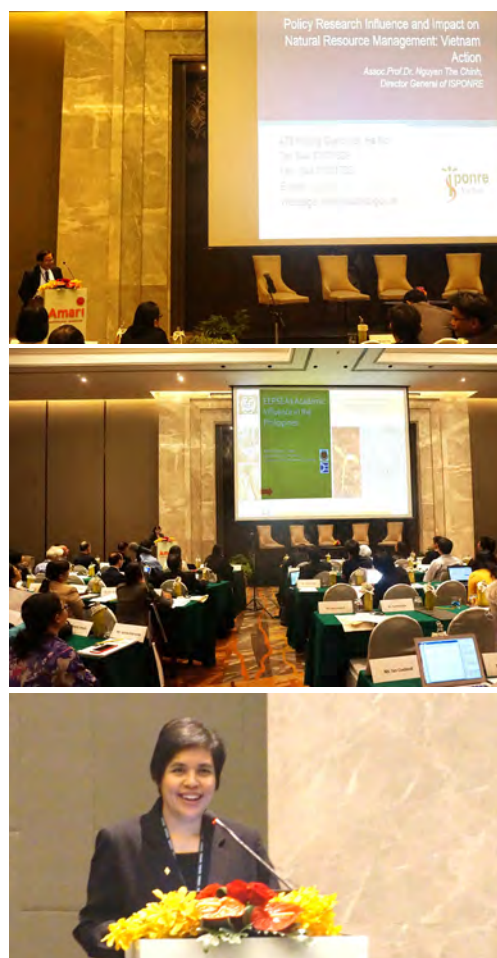
The 2016 EEPSEA Impact Conference showcased the impact that the Program has made on environmental management and policymaking in the region as well as served as a venue to discuss how environmental economics can continue to contribute meaningfully in these areas. Attending the conference are policymakers, decision makers, and environmental economists from all over the region as well as representatives from international NGOs working in natural resource management.

The conference was attended by over 80 participants from 14 countries (i.e., Australia, Cambodia, Canada, China, Indonesia, Japan, Lao PDR, Malaysia, Myanmar, Philippines, Taiwan, Thailand, USA, and Vietnam). It was opened by Dr. David James, a long-time resource person of the Program and currently the chairman of the EEPSEA Advisory Committee.

Dr. Benoit Laplante delivered the keynote talk entitled “From Research to Policy: Setting Expectations and Building Trust”. He drew from his many years of experience working in the region to share valuable insights as to how to facilitate the uptake of research findings so that they may better inform environmental policies.

The conference showcased four sessions. The first three featured EEPSEA’s influence in the following areas: (a) policy and natural resource management (Session 1); (b) academe and the professional development of its alumni (Session 2); and (c) environmental adjudication (Session 3). The speakers were EEPSEA research and training alumni as they can best share how EEPSEA has helped them in their area of work as well as provide useful insights as to what more can be done to further ensure the relevant contribution of environmental economics to natural resource managers, to decision makers, and to those within the academic circle.

The last session (Session 4) introduced the Economy and Environment Partnership for Southeast Asia (EEPSEA Partnership), and the various country-based organizations that federate under it, as that which will continue EEPSEA’s work in the region upon its end on October 2016. The various organizations, which were established by EEPSEA alumni, presented their past activities (reported in Section 4) and their plans for the future.



From the top: Dr. Nguyen The Chinh of Vietnam’s Institute of Strategy and Policy on Natural Resources and Environment speaking on how EEPSEA research projects have been used to inform natural resource management and policymaking in Session 1; Prof. Maria Angeles Catelo sharing on EEPSEA’s academic influence in the Philippines in Session 2; and Suntariya Muanpawong, Justice from the Supreme Court of Thailand’s Research Division, talking about EEPSEA’s impact on environmental adjudication in Thailand in Session 3.

Showcasing our impacts

With the help of its alumni, EEPSEA produced communication collaterals that showcase EEPSEA's impact in the region. These were also featured during Impact Conference.

Posters and videos

Nineteen (19) poster papers and 10 videos were featured in an exhibit outside the conference hall. The posters were prepared by EEPSEA alumni and share how EEPSEA has influenced their professional development or how their respective EEPSEA study findings have been used to influence natural resource management.

Also prepared by EEPSEA alumni, the videos discuss the policy impacts of their research. Among the videos featured were how Raul Bradecina's findings largely informed the ecotourism masterplan in the Philippines' Partido area and how Rosalina Tan's findings were used in advocating for the establishment of a users' fee in groundwater abstraction in Cagayan de Oro, Philippines. The videos and the posters are now featured in the EEPSEA website.

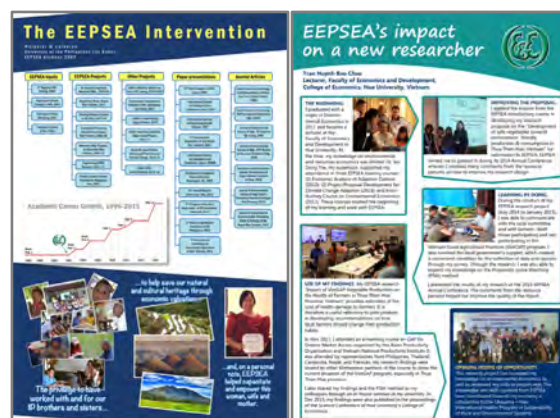
Impact narratives

A booklet compiling more than 30 stories of the Program's impacts during its 23 years was also launched during the conference. The booklet's narratives reflect how EEPSEA's research and training grants have supported the career and work of the Program's alumni.

The booklet features alumni's account of how they influenced environmental policies and decision making using their research findings. Others create this influence by serving as policy advisors or consultants to assist in their respective government's efforts to incorporate environmental values in economic analysis of policies and programs.

With 85% of EEPSEA's training grants and almost all of its research support going to those from within the academe, many of the stories in the booklet talk about EEPSEA's influence in promoting career advancement and supporting environmental economics education in the region. On these academics lie the Program's hope of continuing the work that it has started, capitalizing on the synergy that has been built through networking and cross-country research projects, and their long years of interaction with the international experts who mentored them in their research projects.

Entitled "Creating greater synergy in the economic analysis of environmental issues: Our stories", the book illustrates EEPSEA's confidence that its alumni all over the region will help continue its legacy of capacity building for EE research.



The posters featured in the Impact Conference were made by senior EEPSEA researchers, like that by Margaret Calderon (left), as well as by newer EEPSEA alumni, such as that by Tran Huynh Bao Chau (right).



A booklet compiling over 30 stories of EEPSEA's impact in the region was showcased during the Impact conference.

Management

EEPSEA management is composed of Dr. Herminia A. Francisco, Program Director; Dr. Pham Khanh Nam of the University of Economics Ho Chi Minh City as Deputy Director for Research; Dr. Orapan Nabangchang of Sukhothai Thammathirat Open University as Deputy Director for Training and Partnership; and Senior Economists Dr. Arief Anshory Yusuf of Padjadjaran University in Indonesia, Dr. Bui Dung The of Hue University in Vietnam, and Dr. Canesio D. Predo and Dr. Asa Jose U. Sajise of the University of the Philippines Los Baños in the Philippines. All Deputy Directors and Senior Economists are long-standing EEPSEA researchers who continue to work from their home institutions.

The Secretariat is also supported by five other personnel: Dr. Noor Aini Zakaria, Research Manager; Ms. Julienne Bariuan-Elca, Grant Administrator and Training & Communication Manager; Ms. Mia Mercado, Program Assistant; Ms. Rhona Coronado, Finance Officer; and Ms. Kalikasan Cuevas, In-house Manuscript Editor.

Sponsors Group

The Sponsors Group of participating donors sets policy, provides financial support and approves the annual program of work and budget. It is comprised of representatives from:

- The International Development Research Centre (IDRC)
- The Swedish International Development Cooperation Agency (Sida)
- WorldFish

Advisory Committee

The Advisory Committee advises the Director on priorities for research and training and recommends the annual program of work and budget to the Sponsors Group. The Committee consists of senior scholars and policymakers active in environmental management in Asia. Most of the Committee members are from Asia. Each member has a two-year term, renewable once for Asian members. The Committee meets once a year in conjunction with the EEPSEA Annual Conference. The current Committee members are listed below.

- *Dr. David James*, Environmental Economist, Australia
- *Dr. Xu Jintao*, Beijing University, China
- *Dr. Daigee Shaw*, Academia Sinica, Taiwan
- *Dr. Budy Resosudarmo*, Australian National University
- *Dr. Roberto Oliva*, ASEAN Centre for Biodiversity
- *Dr. Sitanon Jesdapipat*, Rangsit University, Thailand
- *Dr. Nguyen Trong Hoai*, University of Economics Ho Chi Minh City, Vietnam
- *Dr. Maripaz Perez*, WorldFish (ex-officio member)

Resource Persons Group

The Resource Persons Group consists of the Program's international and regional experts. These experts are tapped by the Program as instructors and speakers during its various learning and knowledge events. The members of this pool of experts are listed below.

- *Dr. Wiktor Adamowicz*, University of Alberta, Canada
- *Dr. Theodore Horbulyk*, University of Calgary, Canada
- *Dr. David James*, Environmental Economist, Australia
- *Dr. Jack Knetsch*, Simon Fraser University, Canada
- *Dr. Benoit Laplante*, Simon Fraser University, Canada
- *Dr. Nancy Olewiler*, Simon Fraser University, Canada
- *Dr. Budy Resosudarmo*, Australian National University, Australia
- *Dr. Daigee Shaw*, Academia Sinica, Taiwan
- *Dr. Jeffrey Vincent*, Duke University, USA
- *Dr. Dale Whittington*, University of North Carolina at Chapel Hill, USA
- *Dr. Ma Zhong*, Renmin University, China
- *Dr. Shiqui Zhang*, Peking University, China

Appendix A. List of courses and events held

No.	Event	Partner	Date and venue	No. of Pax	Country representation	% Female
REGIONAL TRAINING COURSES			SUB-TOTAL	87	AVERAGE	43
1	Spatial Modeling	-	17 May 2015, Ho Chi Minh, Vietnam	19 researchers (by invitation)	Cambodia, China, Indonesia, Malaysia, Philippines, Thailand, Vietnam	42
2	Quasi Experimental Evaluation Methods	-	17-18 Aug 2015, Manila, Phils.	24 researchers (by invitation)	Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Thailand, Vietnam	46
3	Facilitating Participatory Processes using Visualization Techniques	-	19-20 Aug 2015, Manila Phils	18 researchers (by invitation)	Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Thailand, Vietnam	39
4	13 th Regional Course on Environmental and Natural Resource Economics	-	2-19 Nov 2015, Los Baños, Phils.	26 researchers (by application)	Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Thailand, Vietnam	46
RESEARCHERS' WORKSHOPS			SUB-TOTAL	65	AVERAGE	66
1	1 st Researchers' workshop on coastal resources and poverty in Southeast Asia	-	28-30 Jul 2015, Bangkok, Thailand	11 researchers	Philippines, Cambodia, Thailand, Indonesia	55
2	2 nd Researchers' workshop on coastal resources and poverty in Southeast Asia	-	1-2 Feb 2016, Manila, Phils.	7 researchers	Philippines, Thailand, Indonesia, Cambodia	57
3	ELD-EEPSEA project planning meeting	-	11-13 Sep 2015, Bangkok, Thailand	4 researchers	Philippines, Thailand, Vietnam	50
4	ELD-EEPSEA project planning meeting	-	6 Nov 2015, Bangkok, Thailand	20 researchers	Philippines, Thailand, Myanmar, Vietnam	-
5	ELD-EEPSEA project meeting & Myanmar research grantees' consultation workshop	-	10-11 Dec 2015, Nay Pyi Taw, Myanmar	5 researchers	Myanmar	100
6	ELD-EEPSEA project workshop	-	23-24 Jan 2016, Yangon, Myanmar	18 researchers	Philippines, Vietnam, Thailand, Myanmar	67
IN-COUNTRY EVENTS			SUB-TOTAL	141	AVERAGE	42
1	2 nd Short Course on Environmental Economics in Myanmar	Myanmar Co-operative University	25-29 May 2015, Yangon, Myanmar	27 researchers (by application)	Myanmar	78
2	Training-Workshop for Justices on Determining the Economic Value of Natural Resources & Environmental Damages	The Office of Health Society & Coordination	2-5 Jun 2015, Khao Yai, Thailand	33 justices (by invitation)	Thailand	30
3	Economic Analysis of Climate Change Adaptation Projects for Local Government Unit Planners	University of the Philippines Los Baños (UPLB)	26-27 Jun 2015, Los Baños, Phils.	46 LGU reps (by invitation)	Philippines	33

No.	Event	Partner	Date and venue	No. of Pax	Country representation	% Female
4	Economic Analysis of Climate Change Adaptation Projects for Local Government Unit Planners	UPLB	13-14 Jul 2015, Cebu, Phils.	35 LGU reps (by invitation)	Philippines	26
IN-COUNTRY EVENTS (through EEIs)			SUB-TOTAL	1,062	AVERAGE	49
1	EEI-Vietnam Membership Meeting & Scientific Workshop	EEI-Vietnam	23 Nov 2015, Cantho, Vietnam	33 researchers	Vietnam	33
2	Training-Workshop on Regulations and Policies for Pollution Control and Environmental Impact Evaluation	EEI-Vietnam	22-25 Mar 2016, Cantho, Vietnam	20 researchers (9 from univs, 11 from govt agencies)	Vietnam	40
3	Myanmar Policymakers Course	EEI-LMS	26-28 Jan 2016, Yangon, Myanmar	26 policymakers	Myanmar	58
4	EEI-LMS Launching Conference	EEI-LMS	16 Feb 2016, Bangkok, Thailand	57 researchers	Thailand, Lao PDR, Myanmar	60
5	EEI-LMS Advisory Board Meeting	EEI-LMS	17 Feb 2016, Bangkok, Thailand	13 (advisory board members, LMS mgt team)	Thailand, Lao PDR, Myanmar	54
6	EEI-LMS Proposal Writing Workshop	EEI-LMS	17 Feb 2016, Bangkok, Thailand	6 (LMS mgt team)	Thailand, Lao PDR, Myanmar	83
7	EEI-Indonesia Proposal Development Workshop	EEI-Indonesia	27-29 Dec 2015, Bandung, Indonesia	15 researchers	Indonesia	54
8	School of Valuation: batch 1	EEI-Indonesia	14-16 Jan 2016, Bandung, Indonesia	22 researchers (by application)	Indonesia	64
9	School of Valuation: batch 2	EEI-Indonesia	mid-Feb 2016, Bandung, Indonesia	23 researchers (by application)	Indonesia	30
10	EEI-Indonesia Launching Seminar	EEI-Indonesia	29 Feb 2016, Bandung, Indonesia	98 (academe, govt research institutes, NGOs)	Indonesia	45
11	EEG-Philippines Strategic Framework Development and Proposal Writing Workshop	EEG-Philippines	17-19 Nov 2015, Pasig, Phils.	15 researchers	Philippines	53
12	EEG-Philippines Launching Conference	EEG-Philippines	20 Nov 2015, Pasig, Phils.	48 (academe, govt, private orgs)	Philippines	54
13	Regional Forum on Economy and Environment	EEG-Philippines	2 Mar 2016, Cebu, Phils	157 students & faculty	Philippines	76
14	Workshop on Green Economy, Environmental Protection and Agricultural Development	EES-Cambodia	4 Dec 2015, Phnom Penh, Cambodia	50 students & faculty, NGO & govt reps	Cambodia	30

No.	Event	Partner	Date and venue	No. of Pax	Country representation	% Female
15	Policy Dialogue on Challenges in Managing State Land: Managing competing interests for lands inside protected areas	EES-Cambodia	21 Dec 2015, Phnom Penh, Cambodia	28 students & faculty, NGO & govt reps	Cambodia	18
16	Seminar on Constructive Dialogue on Land Conflict and Solution	EES-Cambodia	22 Jan 2016, Phnom Penh, Cambodia	99 students & faculty	Cambodia	38
17	Seminar on Forest Restoration in the Southern Cardamon Mountain	EES-Cambodia	29 Jan 2016, Phnom Penh, Cambodia	105 students & faculty	Cambodia	36
18	Seminar on Agricultural Management under Climate Change	EES-Cambodia	25 Feb 2016, Phnom Penh, Cambodia	110 students & faculty	Cambodia	36
19	Launching Workshop	EES-Cambodia	25 Feb 2016, Phnom Penh, Cambodia	27 researchers, NGO & govt reps	Cambodia	30
20	Launching: Economy and Environment Association of Malaysia (EEA-Malaysia)	EEA-Malaysia	8 Mar 2016, Malaysia	62 (govt, private orgs, reps from research institutes & academe)	Malaysia	58
21	Introduction to Environmental Economics	EEA-Malaysia	9-11 Mar 2016, Malaysia	48 researchers	Malaysia	70
REGIONAL PARTNERSHIP EVENTS			SUB-TOTAL	31	AVERAGE	36
1	1 st International Energy Conference	UPLB	23-24 Jul 2015, Alabang, Phils.	4 researchers	China, Indonesia, Vietnam	33
2	Sustainable Management of Coastal and Land Resources in Southeast Asia	Konrad-Adenauer-Stiftung (KAS) Foundation, Economics of Land Degradation (ELD) Initiative, Thailand Research Fund (TRF), Thailand Dept. of Marine and Coastal Resources, Land Policy Forum, EEI-LMS	4-5 Nov 2015, Bangkok, Thailand	27 (78 natural scientists, social scientists, environmental economists, government representatives)	Thailand, Phils., Vietnam, Myanmar, China, India	38
			TOTAL	1,386	AVERAGE	49

NOTE: Figures in parenthesis indicate the complete number of event participants, including those not directly supported by EEPSEA but also benefited from the sessions wherein EEPSEA served as convenor/speaker.

Appendix B. List of research grantees by type of grant

Researcher/Grantee	Research project title
Competitive Research Grants	
1. Mr. Chunhua Wang, <i>China</i>	Residential electricity consumption in China: The roles of weather and household income
2. Ms. Eva Anggraini, <i>Indonesia</i>	Opportunity Costs and Externality Problems of Arable Land Conversion for Oil Palm: A Field Experiment
3. Mr. Moises Neil Seriño, <i>Philippines</i>	Valuing the protection service provided by mangroves in the typhoon-hit areas in the Philippines
4. Mr. Sarun Kamolthip, <i>Thailand (dissertation)</i>	Landowners' Preferences for the Design of Payment for Environmental Services (PES) Program: Case Of Khao Yai And Thap Lan National Parks, Thailand
5. Ms. Thanicha Ruangmas, <i>Thailand (dissertation)</i>	An evaluation of Thailand's price regulation in natural gas for vehicles (NGVs)
6. Ms. Kanittha Tambunlertchai, <i>Thailand</i>	Optimal Regulatory Design in the Context of Weak Enforcement: Do Regulatory Stringency and Regulatory Approach Matter in Determining Common Pool Resource Extraction Behavior?"
7. Mr. Thong Quoc Ho, <i>Vietnam (dissertation)</i>	Measuring environmental sustainability of coffee production using econometric and frontier-based models: Vietnam as a case study
8. Mr. Phung Thanh Binh, <i>Vietnam (dissertation)</i>	Rebate rules in local public good provision: Evidence from the field experiment in the Mekong Delta, Vietnam
9. Mr. Phan Duy Thuc, <i>Vietnam (dissertation)</i>	An integrated approach for identifying and prioritizing cost-effective adaptation actions for a coastal water supply and demand system in Hai Phong city, Vietnam
10. Mr. Le Thanh Nhan, <i>Vietnam (dissertation)</i>	Urban Flooding Adaptation In Ho Chi Minh City: Adaptive Capacity, Investment Behavior and Values
11. Ms. Ngo Thi Thanh Truc, <i>Vietnam</i>	Does Tourism Contribute to the Conservation of Biodiversity and Community Economic Well-being in Tram Chim National Park, Vietnam?
12. Ms. Quach Thi Khanh Ngoc, <i>Vietnam</i>	How Coral Reef Conservation and Marine Protected Areas Impact Human Well-Being – a Study of Fishing Communities and Marine Protected Areas in Central Vietnam
13. Mr. Nguyen The Chinh, <i>Vietnam</i>	Trade-Off Analysis Between Ecosystem Services, Habitat Quality And Development Plans In Order To Propose Suitable Solutions For Pù Mát National Park In Nghệ An Province
Small Research Grants	
1. Ms. Connie Dacuycuy, <i>Philippines</i>	Welfare impacts of extreme weather events in the Philippine agricultural households
2. Ms. Jaruwan Chontanawat, <i>Thailand</i>	Relationships between energy consumption, economic growth and environmental pollution: Evidence from Southeast Asian Countries
3. Ms. Le Thi Phuong Dung, <i>Vietnam</i>	Willingness to pay for water quality improvement in handicraft villages of Bacninh Province

Researcher/Grantee	Research project title
4. Ms. Thida Htoo, <i>Myanmar</i>	Land Degradation and Sustainable Management Practices in Myanmar
5. Ms. Tin Tin Htwe, <i>Myanmar</i>	Economic Losses to the Agricultural Sector from Water Pollution (A Case Study on Meiktila Industrial Zone)"
6. Ms. Khin Thida Nyein, <i>Myanmar</i>	Estimating Willingness to Pay for Bawditataung Nature Reserve, Monywa, Sagaing Region
7. Ms. Shwe Mar Than, <i>Myanmar</i>	Impact of soil conservation on crop productivity and factors influencing adoption decision for soil conservation practices
Cross-country Research Grants	
A. Coastal and Lake Resource Management, Poverty, and Value Chain Analysis in Cambodia, Philippines, Thailand and Indonesia	
1. Mr. Kong Sopheak, <i>Cambodia</i>	Assessment of the Impact of Community Fishery and marketing Integration on the Fishermen's Income in Tonle Sap Lake in Cambodia
2. Mr. Sopian Hidayat, <i>Indonesia</i>	Impact Evaluation and Marketing Analysis of COREMAP Program in Indonesia
3. Ms. Umi Muawanah, <i>Indonesia</i>	Impact Evaluation of COREMAP program in Indonesia
4. Ms. Kunlayanee Pornpinatepong, <i>Thailand</i>	The Effects of Conservation Groups and Marketing Integration on Income of Coastal-Dependent Households
5. Ms. Alice Ferrer, <i>Philippines</i>	Coastal Resource Management: Case of the Philippines
B. Value of Statistical Life, Risk Baseline, and Change in Risk Perception in Thailand, China and Vietnam	
1. Ms. Jin Jianjun, <i>China</i>	Valuing health risk in agriculture: a choice experiment approach to pesticides in Anqiu County, China
2. Mr. Nguyen Tuan Kiet, <i>Vietnam</i>	Value per Statistical Life: Pesticide Risk in the Mekong River Delta, Vietnam
3. Mr. Phumsith Mahasuweerachai, <i>Laos & Thailand</i>	Is the value of statistical life sensitive to choice of measure and change of probability?: The comparative study between Laos and Thailand

Appendix C. List of books and journal publications by research grantees

Books	Ward, PJ; EC van Ierland; Y Budiyo; P Wijayanti ; S Muis; MA Marfai; Poerbandono; MM Julian; A Fauzi. 2014. Jakarta Climate Adaptation Tools. National Research Programme Knowledge for Climate.
	Dinh DT and Le HT (eds). 2013. Valuing environmental and natural resources: From theory to application in Vietnam. Vietnam Development Forum (VDF). (in Vietnamese)
Journal articles	Carlsson F; O Johansson-Stenman; and Pham KN . 2015. Funding a new bridge in rural Vietnam: a field experiment on social influence and default contributions. Oxford Economic Papers. 67(4):987-1014. http://oep.oxfordjournals.org/content/67/4/987.abstract
	Chhinh N ; H Cheb; and N Heng. 2014. Drought risk in Cambodia: Assessing costs and a potential solution. Asian Journal of Agriculture and Development (2014), 11(2):1-16. http://searca.org/ajad/index.php/read-articles/13-view-article?aid=460
	Gao, L. ; HW Kinnucan; Y Zhang; and G Qiao. 2016. The effects of a subsidy for grassland protection on livestock numbers, grazing intensity, and herders' income in inner Mongolia. Land Use Policy. 54:302-312. http://www.sciencedirect.com/science/article/pii/S0264837716000399
	Jin J ; Gao Y; and Wang X. 2015. Gender differences in farmers' responses to climate change adaptation in Yongqiao District, China. Science of the Total Environment 538:942-948. http://www.sciencedirect.com/science/article/pii/S0048969715303582
	Jin J ; Gao Y; Wang X; and Pham KN. 2015. Farmers' risk preferences and their climate change adaptation strategies in the Yongqiao District, China. Land Use Policy 47:365-372. http://www.sciencedirect.com/science/article/pii/S0264837715001386
	Launio, CC ; CA Asis, Jr.; RG Manalili; EF Javier; AF Belizario. 2014. What factors influence choice of waste management practice? Evidence from rice straw management in the Philippines. Waste Management Research. 32(2):140-148. http://www.ncbi.nlm.nih.gov/pubmed/24519228
	Launio, CC ; CA Asis, Jr; RG Manalili; and EF Javier. 2014. What factors influence choice of waste management practice? Evidence from rice straw management in the Philippines. Waste Management Research. 32(2):140-148. http://www.ncbi.nlm.nih.gov/pubmed/24519228
	Mendoza, MET; Bui DT; Heng N; VG Ballaran, Jr.; and JKB Arias . 2014. Assessing vulnerability to climate change impacts in Cambodia, the Philippines and Vietnam: An analysis at the commune and household level. Journal of Environmental Science and Management. 17(2):78-91. http://journals.uplb.edu.ph/index.php/JESAM/article/viewFile/1276/pdf_22
	Nguyen KAT ; CM Jolly; TTH Le; and CNPT Bui. (in process). Aquaculture development and poverty alleviation: The case of Ben Tre Province, Vietnam. Aquaculture Economics and Management Journal.
	Nguyen KAT ; CM Jolly; TTH Le; and CNPT Bui. (in process). Climate change, rural household food consumption and vulnerability: The case of Ben Tre Province in Vietnam. Agricultural Economics Review.
	Nguyen KAT ; CM Jolly; TTH Le; and CNPT Bui. (in process). Perception, awareness and knowledge of climate change triggered events on aquaculture in Ben Tre Province, Vietnam. Aquaculture Environment Interactions Journal.
	Nguyen KAT ; CM Jolly; TTH Le; and CNPT Bui. 2015. Climate change awareness, coping mechanism and adaptation in poor rural coastal communities, Ben Tre Province, Vietnam. International Journal of Global Warming. 8(3):416-435. http://www.inderscienceonline.com/doi/abs/10.1504/IJGW.2015.072658

Nguyen TC and J Robinson. 2015. Analysing motives behind willingness to pay for improving early warning services for tropical cyclones in Vietnam. *Meteorological Applications*. 22(2): 187-197. <http://onlinelibrary.wiley.com/doi/10.1002/met.1441/abstract>

Nguyen TC; J Robinson; JA Whitty; S Kaneko; NT Chinh. 2015. Attribute non-attendance in discrete choice experiments: A case study in a developing country. *Economic Analysis and Policy*. 47:22-33. <http://www.sciencedirect.com/science/article/pii/S0313592615000223>

Nguyen TC; J Robinson; S Kaneko; and NT Chinh. 2015. Examining ordering effects in discrete choice experiments: A case study in Vietnam. *Economics Analysis and Policy*. 45:39-57. <http://www.sciencedirect.com/science/article/pii/S0313592615000053>

Nguyen TC; J Robinson; S Kaneko; and S Komatsu. 2013. Estimating the value of economic benefits associated with adaptation to climate change in a developing country: A case study of improvements in tropical cyclone warning services. *Ecological Economics* 86:117-128. <http://www.sciencedirect.com/science/article/pii/S0921800912004508>

Wang C. 2013. Differential output growth across regions and carbon dioxide emissions: Evidence from U.S. and China. *Energy*. 53:230–236. <http://www.sciencedirect.com/science/article/pii/S0360544213001588>.

Yi F; F Jiang; F Zhong; X Zhou; A Ding. 2016. The impacts of surface ozone pollution on winter wheat productivity in China - An econometric approach. *Environmental Pollution*. 208(B):326-335. <http://www.ncbi.nlm.nih.gov/pubmed/26552518>

Appendix D. University units with courses/programs that teach environmental economics concepts through the Program's influence

Country	University	Department/ Faculty	Program/s	Course/s
Cambodia	Royal University of Phnom Penh	Faculty of Development Studies	BA in Economic Development MA in Development Studies	Cost and Benefit Analysis (MA) Environmental and Resource Economics (MA) Environmental Economics (BA & MA)
China	Nanjing Agricultural University	College of Economics and Management	Master in Agricultural Economics and Management	Environmental Economics
	University of International Business and Economics	School of International Trade and Economics	Master in Economics BS in Economics	Environmental and Natural Resource Economics
Indonesia	University of Mataram	Faculty of Economics and Business	BS and MS Economics	Introduction to Natural Resource and Environmental Economics (BS) Natural Resource and Environmental Economics (BS & MS)
	Universitas Indonesia	Department of Economics	BS Economics	Intro to Environmental and Resource Economics Environmental Economics
	Universitas Padjadjaran	Department of Economic Development	Bachelor in Economics	Special Topics on Resources and Environmental Economics
		Department of Social Sciences & Agricultural Economics	Bachelor in Agricultural Economics	Environmental and Natural Resource Economics
	University of Lambung Mangkurat	Faculty of Agriculture	-	Resource Economics and Environment (undergraduate) Resource Economics (postgraduate)
	Bogor Agricultural University	Faculty of Economics and Management	BS in Economics	Environmental Economics Valuation Economics for Natural Resources
	Universitas Negeri Malang	Department of Economics	Bachelor & Master in Economics	Environment Economics Quantitative Methodology

Country	University	Department/ Faculty	Program/s	Course/s
Malaysia	Open University Malaysia	School of Business	Bachelor of Economics	Project Planning and Evaluation
	The University of Nottingham Malaysia Campus	Business School	PhD in Economics	International Firms Business Economics
	Universiti Putra Malaysia	Faculty of Environmental Studies	PhD in Environmental Economics	Environmental Management Environmental Economics
		Faculty of Forestry	BS Forestry MS & PhD in Forest Management	Forestry Economics Forest Resource Valuation and Accounting Econometrics
Philippines	Visayas State University	Department of Economics	BS Economics BS Environmental Management	Natural Resource Economics Benefit Cost Analysis Welfare Economics
	University of the Philippines Los Banos	Institute of Renewable Natural Resources	BS Forestry	Forestry Economics Forest Finance
			MS/PhD in Forestry	Special Topic on Economics and Financing of Ecosystems Services and Biodiversity Economic Valuation of Forest for Climate Change Adaptation and Mitigation
		Department of Economics	BS Economics and MS Economics	Intro. to Factor Market Analysis, Gen. Equilibrium & Welfare Economics (Econ 104) Introduction to Natural Resource Economics (Econ 171) Economic Analysis of Pollution Control Policies (Econ 172) Benefit Cost Analysis (Econ 175)
	University of the Philippines Visayas	College of Arts and Sciences	BS & MS Economics	Economic Valuation of Marine and Aquatic Resources (MS) Dynamics of Social-Ecological Systems (MS) Environment and Natural Resource Economics (BS) Economic Valuation of Environmental and Natural Systems (BS)

Country	University	Department/ Faculty	Program	Course/s
Philippines	Saint Louis University	School of Accountancy and Business Management	BS in Business Administration	Business Economics
	Ateneo de Manila University	Department of Economics	BA Economics	Microeconomics Special Topics Research/Thesis
	Jose Rizal Memorial State University	College of Business and Accountancy	BS in Entrepreneurial Management BS Business Administration	Microeconomics Managerial Economics Strategic Marketing Management
Thailand	Mahidol University	Faculty of Environment and Resource Studies	BS and MS Environmental Science	Environmental Economics
	Sukhothai Thammathirat Open University	School of Economics	Master of Economics	Agricultural Economics Agricultural Resource Management
	Prince of Songkla University	Faculty of Economics	BS Economics	Environmental Economics Natural Resource Economics Environmental and Natural Resource Economics: A Case Study of Songkhla Lake Coastal Resource Economics
	Chiang Mai University	School of Economics	Master in Economics	Special Topic in Microeconomics
Vietnam	Can Tho University	School of Economics	BS & MS Environmental and Natural Resource Economics BS & MS Agricultural Economics	Behavioral Economics Public Economics Renewable Resource Economics Economics of Climate Change
	Hue University	College of Economics	BS Environment and Resource Economics MS & PhD Agricultural Economics	Environmental Economics (BS & MS) Natural Resource Economics (BS) Environmental Managements (BS) Environmental Valuation (BS)
	University of Economics Ho Chi Minh City	Faculty of Development Economics	Master in Development Economics	Cost Benefit Analysis (BS) Introduction to Environmental Economics (BS) Environmental Economics (MS)

Country	University	Department/ Faculty	Program/s	Course/s
Vietnam	Nha Trang University	Faculty of Economics	Bachelor & Master in Development Economics	Resource and Environmental Economics
	Hanoi National Economics University	Faculty of Environmental, Natural Resource and Urban Economics and Management	Bachelor & Master in Environmental Economics and Management	-
	Vietnam National University of Agriculture	Faculty of Economics and Rural Development	Bachelor & Master in Agricultural Economics	Environmental and Resource Economics

Appendix E. Conferences and other knowledge events attended by EEPSEA researchers

Event	Date & venue	EEPSEA researcher	Paper presented
1 st International Energy Conference	23-24 Jul 2015, Alabang, Philippines	Zanxin Wang	Producing Biodiesel from <i>Jatropha curcas</i> L. in Yunnan, China: Lifecycle Environmental, Economic and Energy Performance How Sustainable is Solar Energy? An Estimation of the External Cost of Silicon Production in Nuijiang, China
		Arief Anshory Yusuf	Energy Efficiency Priority for Indonesia: A General Equilibrium Analysis
		Loan Thanh Le	Impacts of Biofuel Incentive Policy on Welfare: An Applied General Equilibrium Model for Vietnam
Sustainable Management of Coastal and Land Resources in Southeast Asia	2-6 Nov 2015, Bangkok, Thailand	Pham Thi Thanh Thuy	Benefits of Marine and Coastal Resources to Vietnam's Tourism Sector
		Alice Joan Ferrer	Philippine Fisheries Sector: Assessment of Fisheries Management Options for the Visayan Sea, Philippines
		Rodel Subade	Natural Resource Damage Assessment: The Case of Oil Spill in the Philippines
Society for Benefit-Cost Analysis Annual Meeting and Conference	19-20 Mar 2015, Washington, D.C., USA	Phumsith Mahasuweerachai	WTP or WTA: Determining the Appropriate Measure when Preferences are Reference Dependent
73 rd Annual Midwest Political Science Association Conference	16-19 Apr 2015, Chicago, USA	Junxiu Sun	The Environmental Effects of Green-watch Program on Polluting Firms in China
2 nd Biennial European Climate Change Adaptation Conference	12-14 May 2015, Copenhagen, Denmark	Orapan Nabangchang	Thailand's 2011 Flood: Household Damages, Compensation and Natural Catastrophe Insurance
21 st Annual Conference of the European Association of Environmental and Resource Economists (EAERE)	24-27 Jun 2015, Helsinki, Finland	Rawadee Jarungrattanapong	Analysis of Policy Options to Convert Human-Elephant Conflict into Human-Elephant Harmony
		Mya Lwin Lwin Aung	Assessment of Public's Willingness to Pay for Solid Waste Management in Yangon, Myanmar
		Ernah*	Cost-benefit Analysis of Introduction of ISPO standard: A Case Study from Jambi Province, Sumatra, Indonesia
Forum on Agricultural Economic and Green Transformation Development of "Maritime Silk Road" Countries	3-4 Aug 2015, Guiyang, China	Awang Noor Ghani*	Innovative Sustainable Financing Mechanism through Payment for Ecosystem Services toward Achieving Sustainable Forest Management

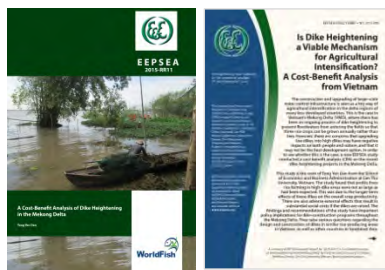
Event	Date & venue	EEPSEA researcher	Paper presented
Singapore Economic Review Conference	5-7 Aug 2015	Chiam Chooi Chea	Ecosystem Functions and Services Provided by Mangrove Ecosystems in Malaysia
5th Congress of the East Asian Association of Environmental and Resource Economics	5-7 Aug 2015, Taipei, Taiwan	Alin Halimatussadiah*	The Role of Trust and Leadership to Promote Community-based Recycling Activity
29th International Conference of Agricultural Economists	29 Aug 2015, Milan, Italy	Fujin Yi*	Impacts of Surface Ozone Pollution on Crop Productivity: Evidence from Winter Wheat in China
Symposium on Business and Economics 2015: <i>Frontier of Behavioral Economics: Application for Policy Maker, Marketer, and Beyond</i>	13-17 Nov 2015, Khon Kaen, Thailand	Jin Jianjun Nguyen Tuan Kiet	NA
2nd International Environmental Educators Conference	25-26 Nov 2015, Pasay, Philippines	Jannette Icao*	Coastal Events Timelines of Barangays in Zamboanga del Norte
21st International Congress on Modelling and Simulation	29 Nov to 4 Dec 2015, Queensland, Australia	Thuc Phan*	An Imbalance Assessment of Coastal Water Supply and Demand in a Highly Populated Area: A System Dynamics Approach
2015 Symposium on Economic Experiments in Developing Countries	10-11 Dec 2015, Prague, Czech Republic	Suparee Boonmanunt*	The Effects of Groups on Individual Time Preferences: Evidence from a Thai Coastal Village

*EEPSEA researchers whose conference presentations were not supported by an EEPSEA travel grant.

Appendix F. Research reports and policy briefs published

2015-RR11

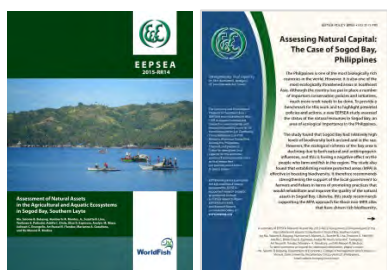
A Cost-Benefit Analysis of Dike Heightening in the Mekong Delta by Tong Yen Dan



Investing in dike heightening in the Vietnamese Mekong Delta (VMD) has remained a contentious issue. Aside from the changes in the connectivity of the floodplain brought by dike heightening, the increase in rice cropping intensity enabled by the high dikes has broader adverse environmental consequences. This study conducted a cost-benefit analysis (CBA) of dike heightening in VMD. Results showed that the decrease in the three-crop farmers' profit from the first and second crops was the main cost of dike heightening. It concludes that dike heightening is not a viable option for VMD.

2015-RR12

Assessment of Natural Assets in the Agricultural and Aquatic Ecosystems in Sogod Bay, Southern Leyte by Ma. Salome B. Bulayog, Humberto R. Montes, Jr., Suzette B. Lina, Teofanes A. Patindol, Adelfa C. Diola, Eliza D. Espinosa, Analyn M. Mazo, Julissah C. Evangelio, Art Russel R. Flandez, Marianne A. Gesultura, and Ris Menoel R. Modina

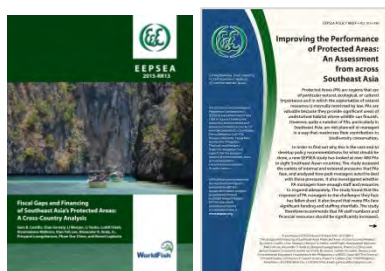


This study assessed the existing natural resources in Sogod Bay, Southern Leyte, Philippines, and determined how their quality has been affected by the economic activities in the area. Results showed that the area's natural resources are no longer as productive as before due to their decreased quality. Valuation results indicate that the ecosystems' provisioning services are higher in sites with marine protected areas and in farms with adequate nutrients and proper cultivation. The study recommends establishing marine sanctuaries and improving land productivity to restore the marine and terrestrial ecosystems in Sogod Bay.

2015-RR13

Fiscal Gaps and Financing of Southeast Asia's Protected Areas: A Cross-Country Analysis

by Gem B. Castillo, Somaly Chan, Li Wenjun, Li Yanbo, H. Luthfi Fatah, Sivannakone Malivarn, Kian Foh Lee, Alexander D. Anda, Jr., Prinyarat Laengcharoen, Pham Duc Chien, and Benoit Laplante

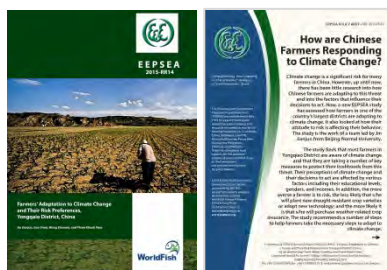


The study examined how park managers and decision makers responded in the face of pressures on protected areas (PAs), and assessed the level of resource gaps based on a number of indicators. A sample of 402 PAs from Cambodia, China, Indonesia, Lao PDR, Malaysia, Philippines, Thailand, and Vietnam were surveyed. Pressure indicators were no. of inhabitants/1,000 ha; population adjacent to the PA/1,000 ha; no. of visitors/1,000 ha; length of trails/1,000 ha; and length of roads/1,000 ha. Response indicators were full-time staff/1,000 ha; no. of enforcement staff/1,000 ha; expenditure for operations/ha; and patrol stations/1,000 ha.

2015-RR14

Farmers' Adaptation to Climate Change and their Risk Preferences, Yongqiao District, China

by Jin Jianjun, Gao Yiwei, Wang Xiaomin, Pham Khanh Nam



This study set out to identify the major methods used by farmers in Yongqiao District, China to adapt to climate change, and determine which factors affect their choice of adaptation measures. It characterized the risk attitudes among Yongqiao farmers and determined how these risk attitudes are related to their adaptation decisions. Results indicate that farmers' risk aversion was negatively and significantly related to adaptation strategies regarding planting new crop varieties and adopting new technology; but it had a significantly positive effect on purchasing wheat drought weather index insurance.

2015-RR15

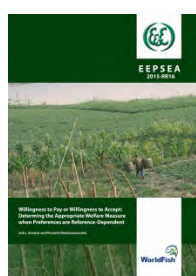
Cost-Benefit Analysis of the Introduction of the Indonesian Sustainable Palm Oil Standards: A Case Study in Jambi Province, Indonesia *by Ernah*



This study presents a cost-benefit analysis of the adoption of sustainability standards by small oil palm farmers in Jambi, Sumatra, Indonesia. A panel data set of 185 oil palm smallholders in the district of Merangin, Jambi was used to distinguish the adopters from the non-adopters. The author identified the per-hectare benefits of ISPO adoption by comparing the oil palm yield and production costs of the two groups. This study also developed a hypothetical project that introduces ISPO standards by means of two extension campaign strategies, namely, (1) a conventional extension campaign and (2) Farmer Field Schools (FFS). Another simulation model was developed to represent a scenario with full certification and additional price benefits.

2015-RR16

Willingness to Pay or Willingness to Accept: Determining the Appropriate Welfare Measure when Preferences are Reference-Dependent *by Jack L. Knetsch and Phumsith Mahasuweerachai*



Many recent experimental and field studies have provided strong evidence that people often value losses more substantially than gains. In addition, people also seem to value the changes in both gain and loss domains not as final states (as assumed in standard theory), but in terms of changes from their reference states. Therefore, positive changes may be either gains (measured by willingness to pay) or reductions of losses (measured by willingness to accept). Similarly, negative changes may be best measured by the minimum compensation that people require to accept losses, or their willingness to pay for avoiding them. The choice of measures is critically dependent on the reference states of people. This report describes how different values can be derived from using different reference states, and discusses the methodology of defining reference states by using data from a study on the risks of riverbank erosion conducted in the northeast region of Thailand.

2015-RR17

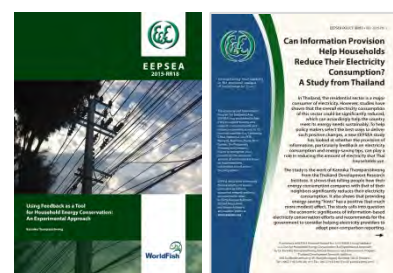
Environmental Satisfaction among Residents in Chinese Cities *by Wang Chunhua and Zhang Changdong*



This paper investigates the factors that influence and shape the satisfaction of urban residents with the local air and water quality in Chinese cities by using a unique dataset collected through an interview survey with about 25,000 participants. The study shows that a respondent's true rating could be systematically different from his stated choice in the survey; the latter may be affected by various reasons. Empirical results reveal that respondents have a well-marked tendency to underreport their level of satisfaction. Although the survey found that about 51% and 44% of the respondents are satisfied with local air and water quality, respectively, study results show that 57% and 58% of them are actually satisfied.

2015-RR18

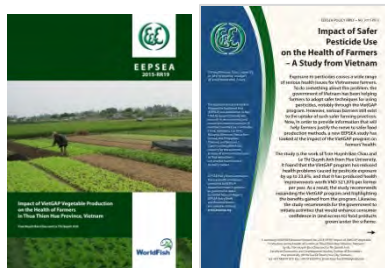
Using Feedback as a Tool for Household Energy Conservation: An Experimental Approach *by Kannika Thampanishvong*



This study used the field experiment approach to assess how effective information and feedback provision about electricity consumption is to influence households to conserve energy. This approach relied on statistical methods to establish whether households in the treatment groups were able to reduce their electricity consumption with respect to the control group. Three treatments were considered: self vs. neighbors' electricity consumption comparison; provision of general advice on electricity saving; and advice on electricity saving as well as self vs. neighbors' comparison. Results showed that households that had received both electricity-saving advice and peer-comparison feedback were able to significantly decrease their electricity consumption relative to the control group.

2015-RR19

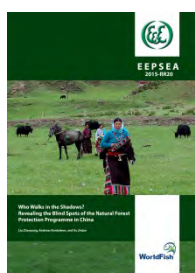
Impact of VietGAP Vegetable Production on the Health of Farmers in Thua Thien Hue Province, Vietnam by Tran Huynh Bao Chau, Le Thi Quynh Anh



This study estimated the health impact value of the VietGAP program on the health of farmers in Thua Thien Hue province. By employing the propensity score matching (PSM) method, findings show that the VietGAP program has a significant impact on farmers' health. In particular, the program reduces farmers' health problems due to pesticide exposure by 15.6%, 22.9%, 25.5%, and 23.6%, respectively, based on four types of matching. By applying the health cost derived from direct and indirect costs, the health impact value from the VietGAP program is VND 521,870.

2015-RR20

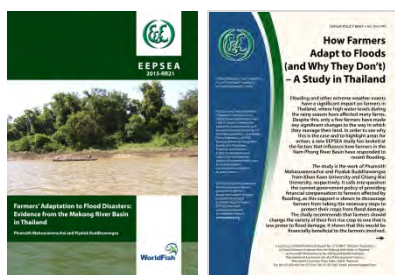
Who Walks in the Shadows? Revealing the Blind Spots of the Natural Forest Protection Programme in China by Liu Zhaoyang, Andreas Kontoleon, and Xu Jintao



It is often conjectured that conservation policies for state-owned forests not only influence the state employees managing these forests, but the indigenous residents living in state forest regions as well. This research explored this conjecture. A theoretical model was developed to describe the mechanism as to how Natural Forest Protection Programme (NFPP) in China impacts indigenous residents through influencing their labor allocation decisions. Both the theoretical predictions and empirical results found that NFPP negatively affects the total income of indigenous residents. Scrutiny into the variations of income components revealed that indigenous residents seem to be intensifying agricultural production activities, which implies that NFPP may have caused environmental leakage effects by shifting the environmental pressure from forests to cropland. These factors should be considered when designing prospective state forest reforms in the Western regions of China.

2015-RR21

Farmers' Adaptation to Flood Disasters: Evidence from the Mekong River Basin in Thailand by Phumsith Mahasuweerachai and Piyaluk Buddhawongsa



This study accessed the impact of government aid on farmers' adaptation to climate change in Nam Phong River Basin, Thailand. After the floods, the government generally provides financial compensation to affected farmers of about 70%– 80% of the cropping costs. The study found that farmers who believe that the government will step in whenever they suffer losses from floods are more likely to stay with their current crop pattern that carries the highest risk of flooding. Government aid was also found to undermine the crop insurance market that the government has been trying to develop.

2015-SRG1

Estimating the Economic Impacts of Climate Change on Crop Production in the Coastal Provinces of the Mekong Delta, Vietnam by Le Thi Diem Phuc, Vo Duc Hoang Vu, Huynh Thi Dan Xuan

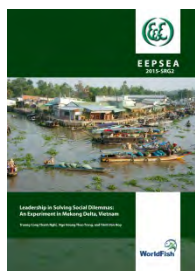


This study used the Ricardian approach to examine the economic impacts of climate change on crop production in the coastal provinces of the Vietnam Mekong Delta. A regression analysis of the net farm revenue against climate, soil, inundation, irrigation, and other socioeconomic variables was conducted in order to examine their effects on the variability of net farm revenues. Results showed that an increase in temperature has a negative effect on net farm revenues, while an increase in precipitation has a positive effect. Net crop revenue per hectare would fall by approximately VND 180,000–VND 200,000 in 2050; and by VND 300,000–VND 1,600,000 by 2100. The results of the model indicate that level of education, gender, age, household size, minority, participating in organization, information on climate change and temperature during the rainy season influence farmers' adaptation choices.

2015-SRG2

Leadership in Solving Social Dilemmas: An Experiment in Mekong Delta, Vietnam

by Truong Cong Thanh Nghi, Ngo Hoang Thao Trang, Trinh Van Hop



This study brought a lab experiment to the field by using an experimental method that tested the role of leadership in solving social dilemmas in the rural areas of Vietnam. The experiment design of Velez, Stranlund, and Murphy (2009) and Rivas and Sutter (2009) were adopted to examine the effects of leading-by-example. Specifically, this study compared two different types of leadership: exogenous leadership (i.e., imposed leaders) and endogenous leadership (i.e., voluntary leaders). The results of the study can help policy and decision makers in Vietnam to understand the role of leaders in fostering communities' cooperation.

2016-RR1

Attitudes toward Flooding Risks in Vietnam: Implications for Insurance *by Truong Cong Thanh Nghi*



This study used the experimental method to elicit abstract risk attitudes on and preferences for uncertainties based on the context of flooding in the Vietnam Mekong Delta. In contrast to the common assumption that farmers are risk averse, study results showed that farmers are, on the average, risk neutral. Moreover, although farmers are ambiguity averse toward Ellsberg-type uncertainty, they are not averse to flooding uncertainty. It was also found that farmers systematically underestimate the probability of flooding. The results of the study provide possible explanations for the low take-up of insurance.

2016-RR2

Impacts of and Adaptation to Extreme Weather Events: An Intra-household Perspective

by Jaimie Kim B. Arias, Jefferson A. Arapoc, Hanny John P. Mediodia



This study documented and analyzed the experiences of households and their individual members during two extreme weather events in the Philippines in 2013: heavy monsoon rains and subsequent widespread flooding in August 2013 in Bacoor, Cavite, and typhoon Haiyan as experienced in Ajuy, Iloilo. The losses in Bacoor were about a third of household income. The welfare losses from typhoon Yolanda were estimated to be six times that of the household income in Ajuy; households in Ajuy with mangrove cover experienced less damages to their property by as much as PHP 7,641.

2016-RR3

The Economic Value of the June 2013 Haze Impacts on Peninsular Malaysia *by Mohd Shahwahid H. O.*



This study investigated the impacts of the 2013 haze on the people and economy of Peninsular Malaysia. The economic cost of the June 2013 haze was estimated to be MYR 1.49 billion (0.48% of the GDP); total cost of illnesses due to haze effects was MYR 78.03/household; cost of medical treatment and hospitalization, MYR 22.59/household; cost of medical-related leaves taken, MYR 38.54/household; reduced activity days, MYR 13.17/household; purchasing air pollution masks as protection, MYR 3.73/household; and loss of income opportunities, MYR 182.05/household (64.11% of the total economic cost). Willingness to participate in the insurance scheme to avoid a decline in quality of life due to haze was supported by only 37.5% of those surveyed. Average willingness to pay was only MYR 23.90/household (8.42% of the total economic cost of the haze).

2016-RR4

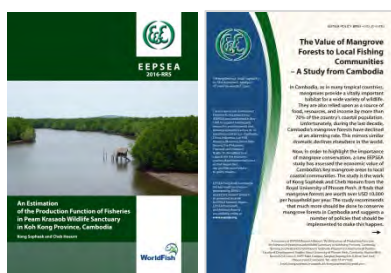
Self-protection against flood in Cambodia by Chou Phanith



This research investigated (1) the change in Cambodian's preference for self-protection against natural disasters, (2) how groups can influence communities toward self-protection, (3) the collective community investments to reduce the expected losses associated with natural disasters, and (4) the existing social institutions in Cambodian communities that improved their voluntary contribution to the protection against disasters' interdependent risk. Based on results, the respondents were knowledgeable about flood characteristics, which prompted them to adopt various mitigation strategies.

2016-RR5

An Estimation of the Production Function of Fisheries in Peam Krasaob Wildlife Sanctuary in Koh Kong Province, Cambodia by Kong Sopheak, Cheb Hoeurn



This report presents an economic analysis of the different uses and the indirect use value of mangroves in terms of their support as nurseries and breeding grounds for commercially important finfish in Koh Kong, Kep, Kampot, and Preah Sihanouk, which are four coastal provinces in Cambodia. The results of the study showed that both the direct and indirect values derived from mangrove forests are very high. Thus, failing to find and implement appropriate management strategies and policies on mangroves conservation would lead not only to serious or irreversible ecological degradation, but also to substantial economic losses.

2016-RR6

Cost-Benefit Analysis of Climate Resilient Housing in Central Vietnam by Tran Tuan Anh, Tran Huu Tuan, Tran Van Giai Phong



This study examined the costs and benefits of using storm-resilient construction technique to improve the housing stock in Thua Thien Hue province, Vietnam. It finds that investment in storm-resilient housing is economically desirable. It recommends that appropriate legal frameworks and support programmes should be put in place to improve local construction methods and to build safer and more resilient communities. In addition, it recommends that storm insurance policies should be developed to help people cope with the damage that storms bring and that more investment should be made in public storm shelters and early warning systems.

Appendix G. Previously published research reports translated into Vietnamese

Year published	Title and author
2015	Leadership in Solving Social Dilemmas: An Experiment in Mekong Delta, Vietnam <i>by Truong Cong Thanh Nghi, Ngo Hoang Thao Trang, Trinh Van Hop</i>
2015	Assessment of Natural Assets in the Agricultural and Aquatic Ecosystems in Sogod Bay, Southern Leyte <i>by Ma. Salome B. Bulayog, Humberto R. Montes, Jr., Suzette B. Lina, Teofanes A. Patindol, Adelfa C. Diola, Eliza D. Espinosa, Analyn M. Mazo, Julissah C. Evangelio, Art Russel R. Flandez, Marianne A. Gesultura, and Ris Menoel R. Modina</i>
2015	Quantitative Analysis of Household Vulnerability to Climate Change in Kampong Speu Province, Cambodia <i>by Chhinh Nyda, Cheb Hoeurn, Poch Bunnak</i>
2015	Farmers' Adaptation to Climate Change and Their Risk Preferences, Yongqiao District, China <i>by Jin Jianjun, Gao Yiwei, Wang Xiaomin, Pham Khanh Nam</i>
2015	A Cost-Benefit Analysis of Dike Heightening in the Mekong Delta <i>by Tong Yen Dan</i>
2015	Estimating the Impact of Weather Shocks on Agricultural Production and Migration in China <i>by Gong Yazhen</i>
2014	Adaptation and Coping Strategies to Extreme Climate Conditions: Impact of Typhoon Frank in Selected Sites in Iloilo, Philippines <i>by Rodelio F. Subade, Jee Grace B. Suyo, Jorge S. Ebay, Emeliza C. Lozada, Jessica A. Dator-Bercilla, Andres C. Tionko, Farisal U. Bagsit, and Josefa T. Basco</i>
2011	Adaptation To Sea Level Rise In The Vietnamese Mekong River Delta: Should A Sea Dike Be Built? <i>by Vo Thanh Danh</i>
2011	Social Capital, Livelihood Diversification and Household Resilience to Annual Flood Events in the Vietnamese Mekong River Delta <i>by Nguyen Van Kien</i>
2010	Policy Options for Sustainable River Sand Mining in Sri Lanka <i>by L.H.P. Gunaratne</i>
2008	Household Switching Behavior in the Use of Groundwater in the Mekong Delta <i>by Vo Thanh Danh</i>
2013	Linking Climate Change, Rice Yield and Migration: The Philippine Experience <i>by Flordeliza H. Bordey, Cheryl C. Launio, Eduardo Jimmy P. Quilang, Charis Mae A. Tolentino, and Nimfa B. Ogena</i>

Appendix H. Statistics on online dissemination efforts

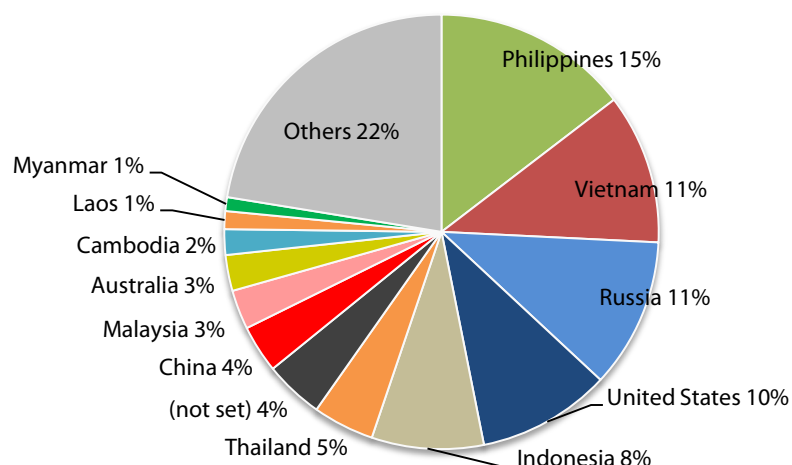


Figure F1. Percent distribution of unique website visits to the EEPSEA website per country

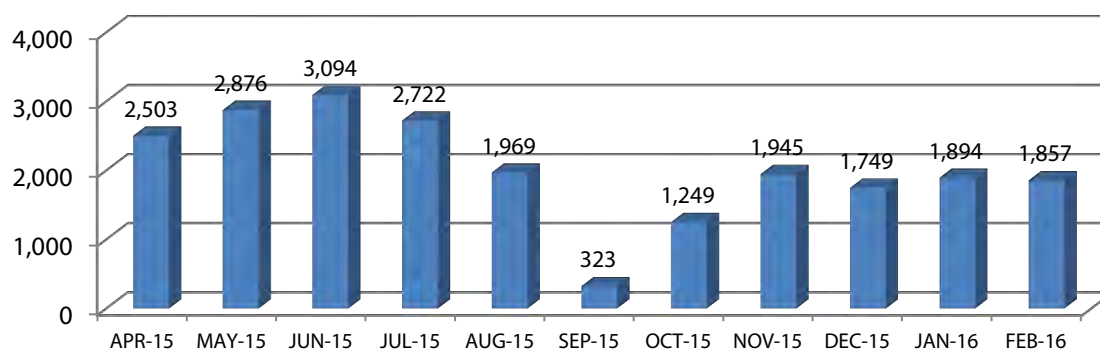


Figure F2. Number of visits to the EEPSEA website per month

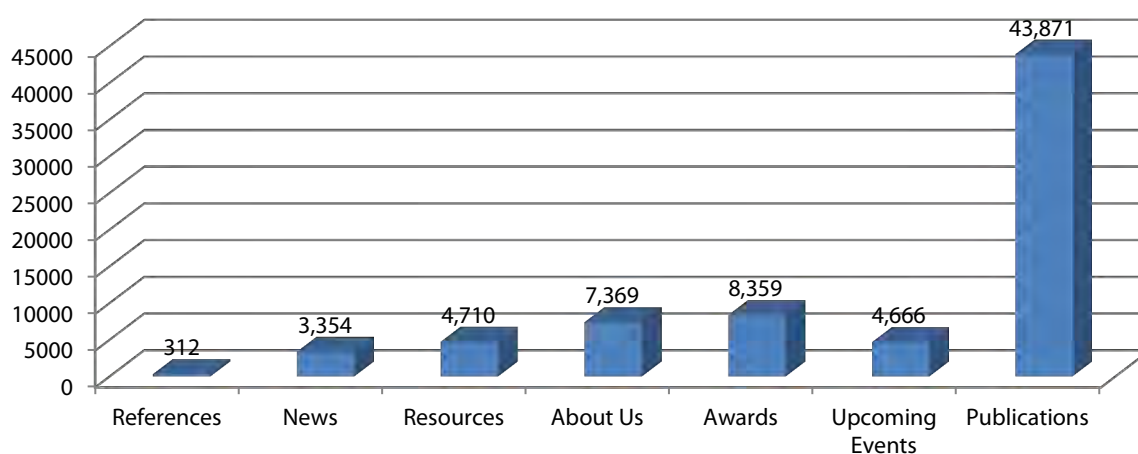


Figure F3. Number of visits to the EEPSEA website per webpage category

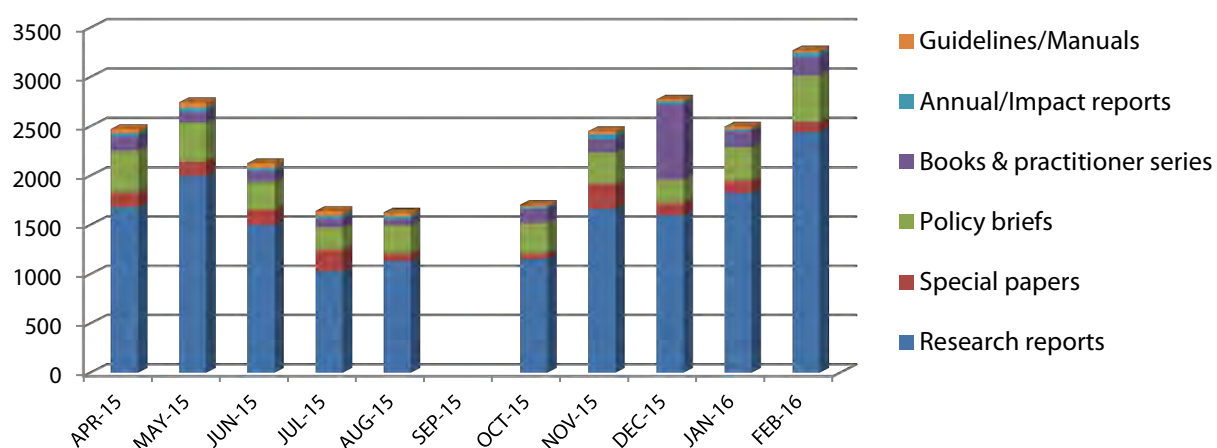


Figure F4. EEPSEA website downloads per month per type

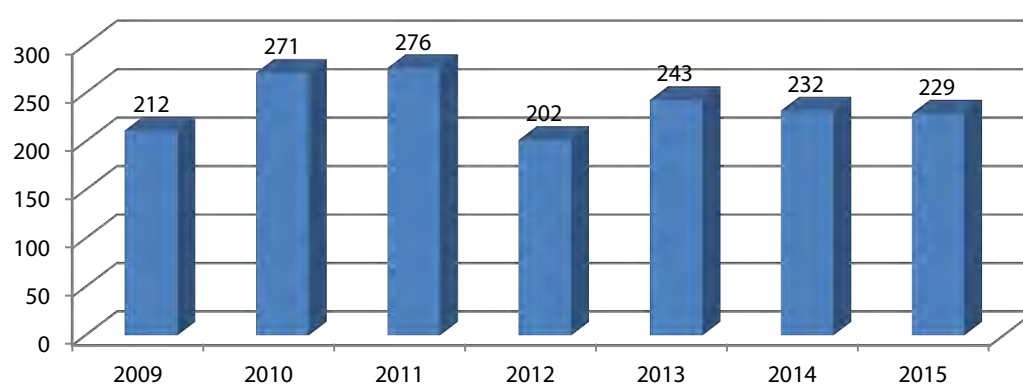


Figure F5. Average monthly download of EEPSEA publications in RePEC

Table F1. Citation analysis through Google Scholar for 2015

Type of publication	Total citation	
	2009- 2015	2015- Feb 2016
Book	339	189
Research Report	4399	588
Policy Brief	1249	209
Special and Technical Report	606	156
Total	6593	1142

Appendix I. Media citations

Article title/Media citation	EEPSEA study cited	Link
<i>Turning invasive water hyacinth into a potential source of renewable energy</i> (May 2014 in Philippine EnviroNews and in Philippine Network of Environmental Journalists, Inc. [PNEJ] websites)	An Economic Analysis of the Use of Water Hyacinth for Phytoremediation and Biogas Production in Dianchi Lake, China by Z. Wang and J. Wan	http://environews.ph/energy/turning-invasive-water-hyacinth-into-a-potential-source-of-renewable-energy/ http://pnej.org/?p=1358
<i>Water hyacinth project turns nuisance plant into potential source of biogas</i> (May 2014 in GMA News online)		http://www.gmanetwork.com/news/story/360715/scitech/science/water-hyacinth-project-turns-nuisance-plant-into-potential-source-of-biogas
<i>Empowering indigenous people to conserve the forests through forestry carbon project</i> (Oct 2014 in Philippine EnviroNews and in PNEJ websites)	Exploring the Forestry Carbon Finance Potential for an Indigenous Cultural Community in the Philippines by M. Calderon et al.	http://environews.ph/biodiversity/empowering-indigenous-people-to-conserve-the-forests-through-forestry-carbon-project/ http://pnej.org/?p=1366
<i>Climate change affects rice farming communities, too</i> (Dec 2014 in Philippine EnviroNews and in PNEJ websites)	Linking Climate Change, Rice Yield and Migration: The Philippine Experience by F. Bordey et al.	http://environews.ph/climate-change/climate-change-affects-rice-farming-communities-too/ http://pnej.org/?p=1377
<i>Study looks for alternatives to open burning of rice straws</i> (Nov 2014 in Philippine EnviroNews and in PNEJ websites)	Economic Analysis of Rice Straw Management Alternatives and Understanding Farmers' Choices by C. Launio et al.	http://environews.ph/food-agriculture/researchers-encourage-farmers-to-opt-out-open-burning-of-rice-straws/ http://pnej.org/?p=1371
<i>Using rice straw as organic fertilizer</i> (Jun 2014 in SunStar Davao)		http://archive.sunstar.com.ph/davao/business/2014/06/29/using-rice-straw-organic-fertilizer-350987
<i>Hay's not waste</i> (2014 Vol. 27 in PhilRice Magazine)		http://pinoyrkb.com/philricemagazine/volume-27-2014/ripples-of-change/rice-on-top/
<i>Controlling Greenhouse Gas from Rice production</i> (Mar 2014 in Afrim website)		http://afrim.org.ph/newafrim/tag/controlling-greenhouse-gas-from-rice-prodn
<i>Incentives policy for forest protection, a win-win solution for forests and communities</i> (Jan 2015 in Philippine EnviroNews and in PNEJ websites)	Evaluating the Pilot Implementation of Payment for Forest Environmental Services in Lam Dong, Vietnam by Nguyen Thi Y Ly	http://environews.ph/biodiversity/incentives-policy-to-protect-the-forests-a-win-win-solution-for-forests-and-for-communities/ http://pnej.org/?p=1394
<i>Low-tech gadget is key in saving lives in Southern Thailand, EEPSEA study</i> (Jan 2015 in Philippine EnviroNews and in PNEJ websites)	Determinants of Flash Flood Evacuation Choices and Assessment of Preferences for Flash Flood Warning Channels: The Case of Thailand by K. Thampanishvong	http://environews.ph/international/low-tech-gadget-is-key-in-saving-lives-in-southern-thailand-eeepsea-study/ http://pnej.org/?p=1355
<i>2 monographs on climate change in Philippines published</i> (Feb 2015 in The Philippine Star website)	Developing capacity to adapt to climate change in Southeast Asia by Jaimie Kim Bayani Arias et al.	http://www.philstar.com/science-and-environment/2015/02/26/1427520/2-monographs-climate-change-philippines-published

Article title/Media citation	EEPSEA study cited	Link
<i>Strategic delta planning: lessons from The Netherlands</i> (Jun 2015 in IUCN website)	A Cost-Benefit Analysis of Dike Heightening in the Mekong Delta <i>by Tong Yen Dan</i>	http://iucn.org/about/union/secretariat/offices/asia/asia_where_work/vietnam/?21451/Strategic-Delta-Planning-lessons-from-the-Netherlands
加高围堰是农业集约化的可靠机制吗? (in Chinese) (Nov 2015 in Wetlands International website)		http://www.wetwonder.org/news_show.asp?id=18436&cid=12&cidd=14
<i>Energy Conservation Begins at Home</i> (May 2015 in Bangkok Post)	Using Feedback as a Tool for Household Energy Conservation: An Experimental Approach <i>by K. Thampanishvong</i>	-
Saving electricity is easy, go to Thailand to reduce energy consumption (in Thai) (Jul 2015 in Bangkok BizNews)		-
<i>Cost of dirty air in Baguio due to traffic put at P77M</i> (Sep 2015 in Philippine Daily Inquirer)	The Cost of Illness of Exposure to Elevated Levels of PM ₁₀ and the Benefits and Costs of an Alternative Mode of Public Transportation System to Reduce Air Pollution in the Baguio City CBD, the Philippines <i>by A. Costales et al.</i>	http://newsinfo.inquirer.net/725133/cost-of-dirty-air-in-baguio-due-to-traffic-put-at-p77m
<i>Baguio-La Trinidad traffic solvers hope for e-trains</i> (Sep 2015 in Philippine Daily Inquirer)		http://newsinfo.inquirer.net/724090/baguio-la-trinidad-traffic-solvers-hope-for-e-trains#ixzz3mPdlhPPk
Interview with Dr. Achilles Costales featured at the <i>ABS-CBN TV Patrol Regional Program, ABS-CBN North Luzon channel</i>		-
Interview with Dr. Chunhua Wang on a live program at <i>China Radio International</i>	Regional Economic Development, Energy Consumption and Carbon Emissions in China <i>by C. Wang</i>	-
Total losses are estimated at RM67 million (in Malay) (Mar 2016 in KOSMO!)	Payment for Ecosystem Services in Malaysia <i>by Awang Noor Abd. Ghani</i>	-



EEPSEA is administered by WorldFish on behalf of its sponsors, Sida and IDRC.

