

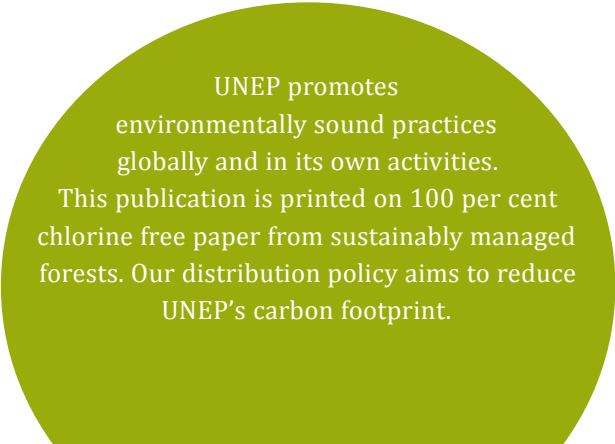
# Regional Workshop on “Mainstreaming Ecosystem Services Approaches into Development: Application of Economic Valuation for Designing Innovative Response Policies”

The Renaissance Bangkok Ratchaprasong  
Hotel, Bangkok, Thailand

6 – 9 February, 2012



Printing: Publishing Services Section, UNON, Nairobi-Kenya, ISO 14001:2004 certified



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Ecosystem Services Economics Unit  
Division of Environmental Policy Implementation  
United Nations Environment Programme (UNEP)  
Nairobi, Kenya

This workshop is supported by the European Commission and the British Foreign and Commonwealth Office



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# 1. Messages from Organizers

## Message from UNEP

Economic valuation of ecosystem services has strong potential to clear the haziness of impacts of decisions undertaken for management of ecosystem services across time and space. Invariably, the response policies designed and implemented to manage ecosystems like forests, wetlands, marine and coasts entail conflict of interests amongst stakeholders in society. Capturing benefits and costs of those management options in terms of impacts on ecosystem services brings the elements of objectivity and credibility in the entire management strategy. Most of the times, the economic valuation of ecosystems and biodiversity is done in the context of project or for specific arrangement like payment for ecosystems (PES) and cost effectiveness of adaptation to climate change. Economic valuation can also play a greater role for evaluating scenarios analysis (costs of action vs. costs of inaction) and estimating the impacts of policy reforms in different sectors (for example, investment needed for a green economy). Typically, the need for such analysis is far greater in growing and transition economies where sectoral reforms are inevitable challenges for the managers of the economies.

In this context, the week-long regional workshop on “Mainstreaming Ecosystem Services Approaches into Development: Application of Economic Valuation for Designing Innovative Response Policies”, for the senior level decision-makers from the regions of South and Southeast Asia organized by the United Nations Environment Programme (UNEP) in close cooperation with the ASEAN Centre for Biodiversity (ACB), is timely and promises to cater the demand of the countries in the region. This workshop, with the help of carefully chosen international experts of the theme who combine sound theoretical knowledge with application of the tool for real life problems, would provide the right forum for exploring the valuation in the larger context of development policies of the countries. I am sure that this workshop would not only link up the valuation exercise with the macroeconomic policies of the countries but would greatly create the much needed capacity amongst the policy-makers in the region.

**Ibrahim Thiaw**  
**Director, Division of Environmental Policy Implementation**  
**United Nations Environment Programme**

## Message from ACB

In 2010, the global community received a somber report of not meeting the 2010 Biodiversity Targets, particularly in reducing the rate of biodiversity loss. Faced with this daunting challenge and the urgency to protect and sustainably manage what remains of our natural resources, countries were requested at the 10th meeting of the Conference of Parties to the Convention on Biological Diversity held in Nagoya in October 2011, to renew their commitment to reducing the rate of biodiversity loss by formulating new targets known as the 2020 Aichi Targets.

The new targets call for more vigor and commitment from human societies to sustainably manage the well-being of life. For instance, Target 2 calls for the integration of biodiversity values into national and local development and poverty reduction strategies and planning processes. Target 15 covers climate change and resilience. Target 16 aims for the full enforcement of the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization, consistent with national legislation. Target 17 calls for each Party to develop, adopt as a policy instrument, and commence implementing an effective, participatory and updated national biodiversity strategy and action plan.

This Regional Workshop on Mainstreaming Ecosystem Services Approaches into Development: Application of Economic Valuation for Designing Innovative Response Policies is a step toward enabling the ASEAN Member States to achieve these targets.

We are all aware that ecosystems productivity largely depends on biodiversity. Despite the multifarious benefits that humans acquire from nature, the value and importance of biodiversity is still being overlooked, if not ignored, by many. The repercussions of environmentally destructive human activities face us squarely – from the degradation of species habitat to continuous biodiversity loss; from the proliferation of denuded forests to climate change; among many others.

The imperatives for us to act before the problems become irreversible is compelling, and the economic and social policy and decision makers are at the heart of this process. Our development processes no longer function in a linear and sectoral pattern. Societal well-being is not just defined by the wealth that we have accumulated, but also now includes access and equity, and whether future generations will also be given the benefit to enjoy the fruits of development. In this context, the state of our environment, the health of our biodiversity resources, is equally as important to economic progress and social growth. This outlook underscores collaboration, integration of actions and cross-sectoral linkages.

The world community failed to meet the 2010 Biodiversity Targets because of the limited success in mainstreaming ecosystem services approaches into development planning processes at national level, and ensuring effective on-the-ground management practices that ensure the delivery of ecosystem services. There were also limited tools and methodologies that take into account the strong links between poverty alleviation and ecosystem management approaches.

It is for these reasons why we are bringing together experts and policy-makers involved in economics, science, and finance and policy development. We hope that this dialogue will provide the participating ASEAN Member States with an opportunity to identify practical actions to address unsustainable consumption of natural resources, including formulating effective approaches in disseminating the findings of The Economics of Ecosystems and Biodiversity (TEEB) study, and promoting sustainable financing mechanisms such as payments for ecosystem services schemes and other innovative response policies and initiatives.

The ASEAN Centre for Biodiversity thanks the United Nations Environment Programme, the British Foreign and Commonwealth Office, and the European Commission, for co-organizing this workshop; and the Government of Thailand for hosting this event.

I wish you all a fruitful event.

**Rodrigo U. Fuentes**  
**Executive Director**  
**ASEAN Centre for Biodiversity**

## 2. Introduction

There has been significant enhancement in recent years in the knowledge-base on ecosystem services and its importance for human well-being and development processes, as exemplified by some key global initiatives such as the Millennium Ecosystem Assessment in 2005, the Green Economy Initiative and the Economics of Ecosystems and Biodiversity (TEEB) in 2010 to name a few. The ongoing process on the establishment of an intergovernmental science-policy platform on biodiversity and ecosystem services (IPBES) is another example of efforts made to strengthen the knowledge base on ecosystem services and their contribution to policy-making processes.

On the other hand, limited success has been achieved so far in mainstreaming ecosystem services approaches into development planning processes at national level, and ensuring effective on the ground management practices that ensure the delivery of ecosystem services. Furthermore, there is a growing recognition of the need to develop and apply tools and methodologies that take into account the strong links between poverty alleviation and ecosystem management approaches.

There is compelling need to further bring together experts and policy-makers involved in economics, science, finance and policy development to identify and implement practical actions to address unsustainable consumption of natural resources. More attention is needed to concentrate efforts at the highest policy and decision-making level and address capacities at technical level to ensure a more effective approach in disseminating TEEB findings and experiences relating to other key initiatives, and promoting sustainable financing mechanisms such as payments for ecosystem services (PES) schemes and other innovative response policies and initiatives.

It is within this context that the United Nations Environment Programme (UNEP) and the ASEAN Centre for Biodiversity (ACB), in collaboration with the British Foreign and Commonwealth Office and with funding support from the European Commission, are co-organizing the “Regional Workshop on Mainstreaming Ecosystem Services Approaches into Development: Application of Economic Valuation for Designing Innovative Response Policies”. The workshop will be held on 6-9 February 2012 in Bangkok, Thailand.

The workshop aims to enhance capacity of policy-makers and technical experts in applying methodologies that can assist them in mainstreaming ecosystem management approaches into poverty alleviation and development policies, with specific focus on the following four main topics:

1. Policy context of economic valuation ecosystem services;
2. Methodologies, data needs and applicability of economic valuation of ecosystem services;
3. Successful cases of economic valuation of ecosystem services from Asia, particularly South Asia and Southeast Asia; and
4. Use of economic value in innovative response policies and tools for management of ecosystem services (e.g. payments for ecosystem services, wetland banking and biodiversity offsets).

### Objectives

The specific objectives of the workshop are:

1. To enhance knowledge and skills on the application of economic valuation and innovative response policies and tools by using the information on economic values of ecosystem services;
2. To allow networking among experts, policy-makers and practitioners who participate in the workshop to share their experiences and promote their partnership development.

### Participants and resource persons

In order to fulfill the above objectives, experts who have been involved in some of the key ongoing initiatives being implemented in the region, such as the sub-global assessments (SGAs) follow-up programme, UNDP-UNEP Poverty-Environment Initiative (PEI), GEF-funded project for ecosystem services (ProEcoServ) and the TEEB follow-up initiative have been invited to attend the workshop.



### 3. Programme

(As of 31 January 2012)

Training Workshop on "Mainstreaming Ecosystem Services Approaches into Development: Application of Economic Valuation for Designing Innovative Response Policies"

Date/Time	Topics	Presenter/Facilitator
<b>DAY 1: MONDAY, 6 FEBRUARY 2012</b>		
<i>MC (9:00-10:00): Rolly A. Inciong, Head, Communication and Public Affairs, ASEAN Centre for Biodiversity (ACB)</i>		
9:00-9:10	Opening remarks	Senior official from Thai Government
9:10-9:20	Welcome remarks	Dechen Tsering, Deputy Regional Director, United Nations Environment Programme/Regional Office for Asia Pacific (UNEP/ROAP)
9:20-9:30	Welcome remarks	Rodrigo U. Fuentes, Executive Director, ACB
9:30-9:45	Introduction: Overall themes and objectives of the workshop	Pushpam Kumar, Chief, Ecosystem Services Economics (ESE) Unit, UNEP Division of Environmental Policy Implementation (UNEP/DEPI)
9:45-10:00	Brief self introduction by participants	
<b>10:00-10:30</b>	<b>Coffee break</b>	
<b>Methodologies, data needs and applicability of economic valuation of ecosystem services</b>		
<i>Chair (10:30-12:00): Pushpam Kumar, Chief, ESE Unit, UNEP/DEPI</i>		
10:30-11:15	Use of economic valuation and design of policy instruments (30 min. presentation followed by 15 min. Q&A)	Mike Christie, Institute of Biological, Environmental and Rural Sciences, Aberystwyth University
11:15-12:00	Application of economic valuation of ecosystem services in future projection on cost of action vs inaction (30 min. presentation followed by 15 min. Q&A)	Salman Hussain, Scottish Agricultural College (SAC), Edinburgh
<b>12:00-13:00</b>	<b>Lunch</b>	
<i>Chair (13:00-16:30): Enamul Haque, United International University, Bangladesh</i>		
13:00-13:45	Case study: Valuation of ecosystem services for poverty reduction (30 min. presentation followed by 15 min. Q&A)	Bruce Dunn, Environment Specialist and ADB-GEF Facilitator, Asian Development Bank (to be confirmed)
13:45-14:30	Case study: Valuation of wetlands (30 min. presentation followed by 15 min. Q&A)	Paulo A.L.D. Nunes, CIESM Programme in Marine Economics, Mediterranean Science Commission, Monaco
<b>14:30-15:00</b>	<b>Coffee break</b>	
15:00-15:45	Case study: Valuation of coastal ecosystem services (30 min. presentation followed by 15 min. Q&A)	Lalit Kumar, Delhi University, India
15:45-16:30	Case study: Valuation of wetland ecosystem services (30 min. presentation followed by 15 min. Q&A)	Ali Dehlavi, World Wide Fund for Nature (WWF) Pakistan
17:30-19:30	UNEP-hosted reception – venue to be confirmed	
<b>DAY 2: TUESDAY, 7 FEBRUARY 2012</b>		
<b>Case study on economic valuation of ecosystem services</b>		
9:00-16:30	Case study/group work/simulation	<i>Facilitator/Trainer: Mike Christie, Institute of Biological, Environmental and Rural Sciences, Aberystwyth University</i>
9:00-9:15	Introduction	
9:15-10:30	Valuation methods: theory and practice	
<b>10:30-11:00</b>	<b>Coffee break</b>	
11:00-12:30	Sharing experiences of valuation in Asia	
<b>12:00-14:00</b>	<b>Lunch</b>	
14:00-15:15	National and Global ecosystem assessments – theory and practice	

<b>15:15-15:30</b>	<b>Coffee break</b>	
15:30-16:00	Group activity: Ecosystem assessments of Asian biomes	
16:00-16:30	Sharing experiences of ecosystem assessments	
16:30	Close	
<b>DAY 3: WEDNESDAY, 8 FEBRUARY 2012</b>		
<b>Use of economic value in innovative response policies and tools for management of ecosystem services</b>		
<i>Chair (9:00-11:45): Paulo A.L.D. Nunes, CIESM Programme in Marine Economics, Mediterranean Science Commission, Monaco</i>		
9:00-9:30	Updates on sub-global assessments (SGA) network (20 min. presentation followed by 10 min. Q&A)	Makiko Yashiro, ESE Unit, UNEP/DEPI
9:30-9:45	Valuation of marine ecosystems (15 min. presentation and Q&A)	Salman Hussain, Scottish Agricultural College (SAC), Edinburgh
9:45-10:30	Economic valuation and livelihoods: experiences in Asia (30 min. presentation followed by 15 min. Q&A)	Priya Syamsundar, SANDEE, Bangkok
<b>10:30-11:00</b>	<b>Coffee break</b>	
11:00-11:45	PES: Challenges and limitations (30 min. presentation followed by 15 min. Q&A)	Roldan Muradian, Centre for International Development Studies Nijmegen, Radboud University, Netherlands
<b>11:45-13:00</b>	<b>Lunch</b>	
<i>Facilitator (13:00-15:15): Dechen Tsering, Deputy Regional Director, UNEP/ROAP</i>		
13:00-15:15	Presentations on the use of economic value in innovative response policies and tools in the region (each country presentation includes 30 min. presentation followed by 15 min. Q&A)	<ol style="list-style-type: none"> <li>1. Golam Rasul, International Centre for Integrated Mountain Development (ICIMOD), Nepal</li> <li>2. Enamul Haque, United International University, Dhaka, Bangladesh</li> <li>3. Surender Kumar, Delhi University</li> </ol>
<b>15:15-15:30</b>	<b>Coffee break</b>	
<i>Facilitator (15:30-16:30): Pushpam Kumar, Chief, ESE Unit, UNEP/DEPI</i>		
15:30-16:30	Panel discussion: Lessons learned and next steps on innovative policy responses	<ol style="list-style-type: none"> <li>1. Roldan Muradian, Centre for International Development Studies Nijmegen, Radboud University, Netherlands</li> <li>2. Mike Christie, Institute of Biological, Environmental and Rural Sciences, Aberystwyth University</li> <li>3. Jianchu Xu, International Center for Research in Agroforestry (ICRAF), Beijing</li> <li>4. Luke Brander, Division of Environment, Hong Kong University of Science and Technology</li> <li>5. Salman Hussain, SAC, Edinburgh</li> </ol>
16:30-17:00	Conclusion and closing of the workshop	Conclusion: Haruko Okusu, UNEP, Clarissa C Arida, ACB Closing remarks: Dechen Tsering, Deputy Regional Director, UNEP/ROAP
<b>Regional Policy Dialogue on the Economics of Ecosystem Services and Biodiversity: Transforming Policies into Actions</b>		
18:30-21:00	Reception	British Embassy in Thailand
<b>DAY 4: THURSDAY, 9 FEBRUARY 2012</b>		
<b>Use of economic value in innovative response policies and tools for management of ecosystem services</b>		
<i>Chair (8:30-10:15): Rolly A. Inciong, Head, Communication and Public Affairs, ASEAN Centre for Biodiversity (ACB)</i>		
8:30-9:30	Opening	
	Welcome messages	<ol style="list-style-type: none"> <li>1. Rodrigo Fuentes, Executive Director, ACB</li> <li>2. Young-Woo Park, Regional Director, UNEP/ROAP</li> <li>3. Office of Natural Resources and Environmental Policy and Planning, Ministry of Natural Resources and Environment, Thailand</li> </ol>
	Special remark	Daniel Pruce, Deputy Head of Mission, British Embassy in Thailand

	Thematic remark	Pushpam Kumar, Chief, ESE Unit, UNEP/DEPI
	Introduction of participants	Rolly A. Inciong, Head, Communication and Public Affairs, ACB
Group photo		
<b>9:30-10:15</b>	<b>Coffee break</b> Media interviews	Rodrigo U. Fuentes, ACB; Pushpam Kumar, Chief, ESE Unit, UNEP/DEPI, Daniel Pruce, British Embassy in Thailand
<i>Chair (10:15-11:45): Pushpam Kumar, Chief, ESE Unit, UNEP</i>		
10:15-10:45	Biodiversity Conservation in ASEAN: Regional Initiatives and Linkages to Climate Change Strategies	Rodrigo U. Fuentes, Executive Director, ACB
10:45-11:15	UK National Ecosystem Assessment and ecosystem services approaches	John Pearson, Head, Southeast Asia Climate Change Network, British High Commission in Singapore
11:15-11:45	Scaling up ecosystem service values for national level assessments	Luke Brander, Division of Environment, Hong Kong University of Science and Technology
<i>Facilitator (11:45-12:30): Salman Hussain, SAC, Edinburgh</i>		
11:45-12:30	Panel discussion: Experiences from the region on 'Mainstreaming'	1. Vullop Phringphong, Government of Thailand (PEI country) 2. Kim Thi Thuy Ngoc Viet Nam (country implementing the GEF-funded project for ecosystem services: ProEcoServ) 3. Souphith Darachanthara, Government Lao PDR (PEI country)
<b>12:30-13:30</b>	<b>Lunch</b>	
<i>Chair (13:30-15:00): Young-Woo Park, UNEPIROAP</i>		
13:30-13:50	Investing in Natural Capital: Promoting Green Growth and Green Economy	Hitomi Rankine, Environmental Affairs Officer, UNESCAP
13:50-14:10	Integrating ecosystem services into development: rationale and evidences	Berthold Seibert, Project Director, Biodiversity and Climate Change Project, GIZ
14:10-14:30	Investing in Natural Capital in the Greater Mekong Subregion	Peter Cutter, World Wide Fund for Nature
14:30-15:00	Pathways to integrate Ecosystem services into development sector: Tools and methodology	Enamul Haque, United International University, Dhaka, Bangladesh
<i>Facilitator (15:00-16:00): Jian Liu, Director, IEMP, UNEP, Beijing</i>		
15:00-16:00	Panel discussion: Mainstreaming Biodiversity and Climate Change: Identifying and Implementing Policy Options	1. Bruce Dunn, Asian Development Bank 2. Ali Dehalvi, World Wide Fund for Nature (WWF), Pakistan 3. Luke Brander, Division of Environment, Hong Kong University of Science and Technology 4. Louis Lebel, Chiangmai University
<b>16:00-16:15</b>	<b>Coffee break</b>	
<i>Facilitator (16:15-17:15): Mike Christie, Aberystwyth University</i>		
16:15-17:15	Plenary discussion: How to make the economics of ecosystem services credible and more useful	1. Ben S. Malayang III, Philippines 2. Paulo A.L.D. Nunes, CIESM Programme in Marine Economics, Mediterranean Science Commission, Monaco 3. Salman Hussain, Scottish Agricultural College (SAC), Edinburgh
17:15-17:45	Synthesis of the meeting	ACB
17:45-18:30	Closing	1. Rodrigo U. Fuentes, Executive Director, ACB 2. John Pearson, British High Commission in Singapore 3. Pushpam Kumar, Chief, ESE Unit, UNEP/DEPI

## 4. Abstracts for Presentations

### Training Workshop on “Mainstreaming Ecosystem Services Approaches into Development: Application of Economic Valuation for Designing Innovative Response Policies”

#### Component 1: Methodologies, data needs and applicability of economic valuation of ecosystem services

##### DAY 1: MONDAY, 6 FEBRUARY 2012

<b>Title of presentation:</b>	<b>Presented by:</b>
Use of economic valuation and design of policy instruments	Mike Christie, Institute of Biological, Environmental and Rural Sciences, Aberystwyth University
<b>Abstract:</b>	
<p>In recent years there has been a growing policy interest in the use economic valuation tools for the measurement of the ecosystem service benefits associated with changes to environmental and natural resource goods. This paper will outline the development of valuation methods, before providing an overview of the various approaches available: market prices, revealed preference, stated preference, cost-based approaches, and value transfer, as well as the ecosystems approach to valuation. The paper will then explore opportunities for incorporating valuation estimates into policy instruments. Examples will include: ecosystem service assessments such as TEEB and the UK NEA; Payments of Ecosystem Services (PES) schemes; and Green Accounting methods. The paper will conclude by highlighting some of the limitations and knowledge gaps associated with the valuation of ecosystem services.</p>	
<b>Title of presentation:</b>	<b>Presented by:</b>
Application of economic valuation of ecosystem services in future projection on cost of action vs inaction	Salman Hussain, Scottish Agricultural College (SAC), Edinburgh
<b>Abstract:</b>	
<p>This presentation focuses on the valuation of marine ecosystems. Some studies estimate that this biome contributes more in terms of ecosystem services than the totality of all terrestrial ecosystems, and yet (1) the research efforts focused on marine ecosystems is extremely limited, and (2) there is evidence that cumulative anthropogenic impacts are reducing ecosystem service delivery. The extant valuation evidence base is presented. The economic estimates developed for the proposed UK network of marine protected areas are used to outline an assessment framework, based on the benefits of policy action versus policy inaction. These estimates contributed to the MPA policy being implemented in the UK. The wider ramifications of this type of analysis are drawn out, with discussion as to how the Ecosystem Approach (as applied in this case) might be applied in other policy contexts.</p>	
<b>Title of presentation:</b>	<b>Presented by:</b>
Case study: Valuation of wetlands	Paulo A.L.D. Nunes, CIESM Programme in Marine Economics, Mediterranean Science Commission, Monaco
<b>Abstract:</b>	
<p>Coastal wetlands are some of the most productive ecosystems in the world, support a variety of natural functions, and provide important services to human societies. Since traditionally they have been regarded as low economic value areas or even sources of disamenity, however, they are under pressure worldwide, particularly from land use changes. The outcome of the resulting habitat loss or alteration is reflected in high social costs due to the alteration in the natural flow of benefits (i.e., ecosystem services) and calls for the development of appropriate strategies for their sustainable management. Ecosystem services provided by coastal wetland include habitat, food, flood protection, carbon sequestration, water purification, amenities and recreational opportunities, among others. At the state of the art, in large parts of the world there is a lack of inventories to locate these environments, and methodologies to define and value their services and inform conservation strategies. Spatial analysis using remote sensing and Geographic Information Systems (GIS) tools offers an appealing method to integrate biological, physical and social information relevant to sustainability, at several temporal and spatial scales. Remote sensing and GIS are used here to detect and classify wetlands in southern Sinaloa, Mexico, and to spatially characterize the distribution of ecosystem services and values, as estimated with the value transfer method. Since southern Sinaloa wetlands are currently endangered by tourist development plans, the findings from this research will provide information to identify scenarios of land use and cover changes, characterize the effect of those changes on wetlands, and assess their possible economic impact.</p> <p><i>Keywords:</i> meta-analysis, value transfer, coastal wetlands, ecosystem services, economic valuation, Geographic Information Systems (GIS)</p>	

<b>Title of presentation:</b>	<b>Presented by:</b>
Case study: Valuation of coastal ecosystem services	Lalit Kumar, Delhi University, India
<b>Abstract:</b>	
<p>In common with most developing nations, India faces many trade-offs in its attempt to reduce poverty and improve the living standards of its people. The paper attempts to value the benefits arising out of functioning of Coral Reefs in Gulf of Kachchh (GoK), Gujarat, India. In the total coral reef area of 5,790 km<sup>2</sup>, distributed between four major regions: the GoK, the Lakshadweep, Gulf of Mannar and Andaman &amp; Nicobar Islands. Among these, the GoK supports isolated, northern most fringing coral reefs. Threatened by drivers of change like, industrial pollution from adjoining areas; port developments; large scale fishing and climate change, coral reefs in GoK need special attention in coastal zone planning. The paper tries to provide the economic rationale by providing a quick estimate of the economic value. The paper has focused on five services of the Coral Reefs- the fisheries, recreation and tourism, protection of coastal aquifers (against salinity ingress), protection of coastal lands (against erosion) and biodiversity. Using different valuation method, each of the function has been estimated and the present values for 20 yrs and for annuity time horizons, at three different rates of discount have been obtained to facilitate the costs benefit analysis in the context of coastal zone management.</p>	

<b>Title of presentation:</b>	<b>Presented by:</b>
Case study: Valuation of wetland ecosystem services	Ali Dehlavi, World Wide Fund for Nature (WWF) Pakistan
<b>Abstract:</b>	
<p>The Global 200 scientifically ranks outstanding terrestrial and aquatic ecosystems in 238 ecoregions worldwide. Keenjhar Lake, Pakistan's largest freshwater lake and a Ramsar site, is located in the Lower Indus Basin of the Indus Ecoregion, and has a 40 ranking in the Global 200. This case study discusses micro-analysis issues, best practices, and policy uptake of a USD 3,436 per hectare estimate of the lake's recreational value intended for assessing returns on conservation investments. One best practice lesson relates to the prominence of the coefficient on cost in consumer surplus calculation, irrespective of functional form. The single-site truncated count data travel cost method used in the study illustrates the importance of accurate measurement of costs by applying a separate model to a subset of visitors using charter transportation (as is common across Asia) to analyze impacts on welfare measurement from varying assumptions on visitors' outset origins. Revision to data collection and processing strategies is proposed since the unrealistic simplifying assumption that this category of visitor does not incur travel and time costs before boarding charter transport results in an underestimate of consumer surplus values. Use of scenario analysis, national valuation guidelines, and institutional mechanisms are among policy mainstreaming lessons discussed.</p>	

## Component 2: Case study on economic valuation of ecosystem services

### DAY 2: TUESDAY, 7 FEBRUARY 2012

<b>Title of the session:</b>	<b>Facilitated by:</b>
Case study/group work/simulation	Mike Christie, Institute of Biological, Environmental and Rural Sciences, Aberystwyth University
<b>Abstract:</b>	
<p>1. Introduction</p> <p>2. Valuation methods: theory and practice <i>This session will provide a theoretical overview and case study examples of a range of empirical valuation methods including Market prices, Cost-based approaches, Revealed preference, and Stated preference. We will also explore and discuss how these methods might best be adapted for use in developing countries. The presentation will be followed by a Q&amp;A session.</i></p> <p>3. Sharing experiences of valuation in Asia <i>This session will begin with participants discussing their own experiences of undertaking valuation studies in Asia. The discussions will focus on highlighting issues and lessons learnt. Participants will then be split into groups where they will identify knowledge gaps and future research needs.</i></p> <p>4. National and Global ecosystem assessments – theory and practice. <i>This session will provide a theoretical overview and case study examples of national and global ecosystem assessments. Examples discussed will include the UK National Ecosystems Assessment (UK NEA) and The Economics of Ecosystems and Biodiversity (TEEB) study. Issues relating to value transfer and upscaling will also be discussed. The presentation will be followed by a Q&amp;A session.</i></p> <p>5. Group activity: Ecosystem assessments of Asian biomes. <i>In this session, participants will be split into groups and asked to consider the extent to which Asian Biomes delivered ecosystem services, and how the ecosystem service benefits vary spatially and temporally. Participants will also be asked to identify which valuation methods might be best used to value the ecosystem service benefits, as well as identify any knowledge gaps.</i></p> <p>6. Sharing experiences of ecosystem assessments. <i>In this final session, participants will be asked to discuss their own experiences of undertaking ecosystem assessments in Asia. The discussions will focus on highlighting issues, lessons learnt, knowledge gaps and future research needs</i></p>	

### Component 3: Use of economic value in innovative response policies and tools for management of ecosystem services

#### DAY 3: WEDNESDAY, 8 FEBRUARY 2012

<b>Title of presentation:</b>	<b>Presented by:</b>
Valuation of marine ecosystems	Salman Hussain, Scottish Agricultural College (SAC), Edinburgh
<b>Abstract:</b>	
<p>The Economics of Ecosystems and Biodiversity (TEEB) is a UNEP project aimed at mainstreaming environmental economic valuation and evaluation. Building upon the Millennium Ecosystem Assessment, TEEB argues that an absence of such evaluations leads to perverse outcomes that actually reduce societal well-being. In this presentation, Dr Hussain from the Scottish Agricultural College will outline new research for TEEB termed the Quantitative Assessment which considers global policy interventions such as reduced deforestation, extending protected areas etc. The research concludes that there are significant win-win outcomes arising from some of these policies.</p>	

<b>Title of presentation:</b>	<b>Presented by:</b>
Economic valuation and livelihoods: experiences in Asia	Priya Syamsundar, SANDEE, Bangkok
<b>Abstract:</b>	
<p>This presentation will draw lessons from, <i>Environmental Valuation in South Asia</i>, a new book based on a set of research studies supported by SANDEE. The book provides an overview of different environmental problems in South Asia and examines how economic valuation can be used to assess these problems. It offers robust evidence of the economic benefits of resource conservation and identifies costs associated with a decline in environmental quality. Drawing from these case studies, this presentation will focus on three topics: a) production externalities and their implications in agrarian settings; b) dilemmas in accounting for shared ecological and social systems; and c) pollution, health and productivity. The presentation will also discuss some data, methodological and policy challenges associated with environmental valuation.</p>	

<b>Title of presentation:</b>	<b>Presented by:</b>
PES: Challenges and limitations	Roldan Muradian, Centre for International Development Studies Nijmegen, Radboud University, Netherlands
<b>Abstract:</b>	
<p>This presentation has two parts. The first one is a review of alternative definitions of payments for ecosystem services. After revising the pro and cons of different conceptualizations, I plead for the adoption of a definition that takes into account the intrinsic characteristics of ecosystem services, and equity concerns. Basically, PES should be considered as incentives for collective action and the reconciliation of environmental protection and rural development. In the second part we will discuss the implications of such choice, both from a conceptual perspective and for practitioners. More specifically, we will draw analytical insights from the literature on collective action and economic incentives, and we will discuss in which domains of application PES are more appropriate as policy instruments.</p>	

<b>Title of panel discussion:</b>	<b>Presented by:</b>
Presentations on the use of economic value in innovative response policies and tools in the region (each country presentation includes 30 min. presentation followed by 15 min. Q&A)	<ol style="list-style-type: none"> <li>1. Golam Rasul, International Centre for Integrated Mountain Development (ICIMOD), Nepal</li> <li>2. Enamul Haque, United International University, Dhaka, Bangladesh</li> <li>3. Surender Kumar, Delhi University</li> </ol>
<b>Facilitated by:</b>	
Dechen Tsering, Deputy Regional Director, UNEP/ROAP	
<b>Discussion points:</b>	
<ul style="list-style-type: none"> <li>- Present experiences and examples of the cases where the results of economic valuation were used effectively in developing and implementing innovative response policies.</li> <li>- What are the key lessons learned?</li> </ul>	
<b>Abstract:</b> provided by Surender Kumar, Delhi University	
<p>We intend to present issues and challenges involved in the valuation of ecosystem services (ES) provided by forest biome with some case study examples. Forest biome provides provisioning, regulating and cultural ES. Provisioning services involve both timber and non-timber forest products; regulating services include benefits obtained from the regulation of ecosystem processes, such as air quality regulation, climate regulation, water regulation, erosion regulation, pollination and natural hazard regulation. Cultural services are the non-material benefits that people obtain from the ecosystem through aesthetic experience, reflection, recreation and spiritual enrichment. Several valuation methods can be applied to estimate the monetary value attached to each forest ES. By using the well-known notion of Total Economic Value (TEV), and depending on the nature of the good being valued, one can identify the best available valuation method to be employed for the monetary estimation of each ES of concern. Broadly speaking, market price data are used for the estimation of provisioning and regulating ESs while non-market (stated or revealed preference) valuation data is used to estimate cultural values.</p>	



**Abstract:** provided by Golam Rasul, ICIMOD, Nepal

The Himalayas is one of the most dynamic and complex mountain ranges in the world. It is the highest and largest mountain range in the world. The Greater Himalayan Region, also known as the 'Hindu Kush-Himalaya (HKH)' stretches across eight countries: Afghanistan, Bangladesh, Bhutan, China, Myanmar, Nepal, India, and Pakistan. The Himalayan ecosystems are unique with critical role in protecting the environment and providing livelihoods for a larger part of Asia and even to the rest of the world. The **Himalayan region is often called the "Third Pole,"** as it has most of the highly glaciated areas in the world outside of the two Polar Regions. It has huge stock of water in the form of snow and ice, with a total area of 35,110 sq km. The Himalayas, **the 'water tower' of Asia,** is the source of hundreds of rivers of Asia, which provide sustenance, livelihoods and prosperity to millions of people living in a vast area that stretches from the Indus Basin plains of Pakistan in the west to Bangladesh in the east. The Himalayas is also the storehouse of biological diversity.

Himalayan ecosystems are important for environmental protection, economic growth and human wellbeing of the entire HKH region and beyond. However, their services do not receive adequate recognition in national economic decision-making, including development planning and resource allocation. Himalayan ecosystem services are often taken for granted, and the role of mountain communities in generating them receives little or no attention. GDP does not account for depletion of natural capital, which is the fundamental basis for all economic activities. Since the value of mountain ecosystem services is not captured in GDP, their contribution to national economies and to people's livelihoods has remained invisible.

There is now a growing realization about the importance of the Himalayan ecosystems that are being reflected in the policy documents of several national governments such as India, Nepal, and Pakistan. The government of India, for instance, has recently declared "sustaining the Himalayan ecosystem" as one of the eight national missions under their National Action Plan on Climate Change. Similarly, there is such growing awareness in other countries of the HKH region about the role of the Himalayan ecosystem in economy and environment. China has introduced a number of policy instruments to conserve mountain ecosystem services. In this backdrop, this paper briefly examines the role of Himalayan ecosystems in environmental protection and economic prosperity of HKH region, the issues and options in mainstreaming ecosystem services into development planning, and analyzes the ongoing policy responses in conserving Himalayan ecosystems. Measures to mainstreaming Himalayan ecosystems services into development plan and programs are suggested.

<b>Title of panel discussion:</b>	<b>Presented by:</b>
Panel discussion: Lessons learned and next steps on innovative policy responses	<ol style="list-style-type: none"> <li>1. Roldan Muradian, Centre for International Development Studies Nijmegen, Radboud University, Netherlands</li> <li>2. Mike Christie, Institute of Biological, Environmental and Rural Sciences, Aberystwyth University</li> <li>3. Jianchu Xu, International Center for Research in Agroforestry (ICRAF), Beijing</li> <li>4. Luke Brander, Division of Environment, Hong Kong University of Science and Technology</li> <li>5. Salman Hussain, SAC, Edinburgh</li> </ol>
<b>Facilitated by:</b>	
Pushpam Kumar, Chief, ESE Unit, UNEP/DEPI	
<b>Discussion points:</b>	
<ul style="list-style-type: none"> <li>- Which policy is cost effective?</li> <li>- Which can work and deliver results when institutions are weak?</li> <li>- How to ensure the social acceptability of the outcome.</li> </ul>	
<b>Abstract:</b> provided by Jianchu Xu, ICRAF, Beijing	
A Pro-Growth Pathway for Reducing Net GHG Emissions in China World Agroforestry Centre, China and East Asia	
<p>Through a national program that sequesters carbon and reduces greenhouse gas (GHG) emissions in rural areas — a rural climate program — China could achieve significant net GHG emission reductions while meeting policy priorities for economic growth, rural development, and environmental sustainability. The program would be an important investment in China's medium- to longer-term future, and could be funded domestically at relatively low cost through a variety of mechanisms. This study examines the potential for a rural climate program in China. The study first provides a detailed description of GHG mitigation options in agriculture and rural energy and carbon sequestration potential in agricultural soils, forests, and rangelands. This study also discusses the scope, financing, and barriers to implementation of a rural climate program in China.</p>	

## Regional Policy Dialogue on the Economics of Ecosystem Services and Biodiversity: Transforming Policies into Actions

DAY 4: THURSDAY, 9 FEBRUARY 2012

<b>Title of presentation:</b>	<b>Presented by:</b>
Scaling up ecosystem service values for national level assessments	Luke Brander, Division of Environment, Hong Kong University of Science and Technology
<b>Abstract:</b>	
<p>There is a widely recognised need for national level estimates of the value of ecosystem services to inform policy making regarding environmental and resource management. Recognising this need, the Convention on Biodiversity "Aichi Target" 2 states that "By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes". Producing reliable estimates of the value of biodiversity and ecosystem services, however, is challenging, particularly for those services for which markets do not currently exist. This is generally the case for regulating services such as flood control, water supply and nutrient recycling. To address this challenge, methods have recently been developed to transfer and "scale up" available information on ecosystem service values that reflects the context specific characteristics of individual ecosystems. Importantly, transferred values are in part determined by the socio-economic context, which reflects demand for ecosystem services. This approach to transferring and scaling up values is illustrated in a case study of global wetland regulating service values.</p>	

<b>Title of panel discussion:</b>	<b>Presented by:</b>
Panel discussion: Experiences from the region on 'Mainstreaming'	<ol style="list-style-type: none"> <li>1. Vullop Phringphong, Government of Thailand (PEI country)</li> <li>2. Kim Thi Thuy Ngoc Viet Nam (country implementing the GEF-funded project for ecosystem services: ProEcoServ)</li> <li>3. Souphith Darachanthara, Government Lao PDR (PEI country)</li> </ol>
<b>Facilitated by:</b>	
Salman Hussain, SAC, Edinburgh	
<b>Discussion points:</b>	
<ul style="list-style-type: none"> <li>- Highlight key challenges encountered in efforts on mainstreaming in each country as well as lessons learned.</li> <li>- Present specific experiences in unique institutional set ups in each country, which might pose different types of challenges in mainstreaming efforts.</li> <li>- Each panelist will be provided with max. 10 min. to highlight these points, followed by any follow-up Q&amp;A/discussions.</li> </ul>	

<b>Title of panel discussion:</b>	<b>Presented by:</b>
Panel discussion: Mainstreaming Biodiversity and Climate Change: Identifying and Implementing Policy Options	<ol style="list-style-type: none"> <li>1. Bruce Dunn, Asian Development Bank</li> <li>2. Ali Dehalvi, World Wide Fund for Nature (WWF), Pakistan</li> <li>3. Luke Brander, Division of Environment, Hong Kong University of Science and Technology</li> <li>4. Louis Lebel, Chiangmai University</li> </ol>
<b>Facilitated by:</b>	
Jian Liu, Director, IEMP, UNEP, Beijing	
<b>Discussion points:</b>	
Highlight experiences gained so far and key remaining challenges faced in mainstreaming biodiversity and climate change issues into macro-economic policies and frameworks, based on the initiatives the panellist has been involved so far.	

<b>Title of panel discussion:</b>	<b>Presented by:</b>
Plenary discussion: How to make the economics of ecosystem services credible and more useful	<ol style="list-style-type: none"> <li>1. Ben S. Malayang III, Philippines</li> <li>2. Paulo A.L.D. Nunes, CIESM Programme in Marine Economics, Mediterranean Science Commission, Monaco</li> <li>3. Salman Hussain, Scottish Agricultural College (SAC), Edinburgh</li> </ol>
<b>Facilitated by:</b>	
Mike Christie, Aberystwyth University	
<b>Discussion points:</b>	
<ul style="list-style-type: none"> <li>- What are the key ingredients to make an estimate credible?</li> <li>- What could be the data needs which are not very costly and time consuming but reliable at the same time?</li> </ul>	



## 5. Profiles of Resource Persons

Name	Organization/E-mail	Profile
<b>Luke Brander</b>	Division of Environment, Hong Kong University of Science and Technology  E-mail: lukebrander@gmail.com	Dr Luke Brander has a background in environmental economics. He obtained his Masters degree in Environmental and Resource Economics at University College London (1997-98). From April 2000 to September 2010 he worked as a researcher at the Institute for Environmental Studies (VU University Amsterdam). His main research interests are in the design of economic instruments to control environmental problems and the valuation of natural resources and environmental impacts. He has worked on the valuation of wetlands, forests, grasslands, mangroves and coral reefs through meta-analyses of the ecosystem valuation literature. He is currently working as a freelance environmental economist affiliated to the Division of Environment, Hong Kong University of Science and Technology.
<b>Mike Christie</b>	Institute of Biological, Environmental and Rural Sciences, Aberystwyth University  E-mail: mec@aber.ac.uk	Dr Mike Christie (Aberystwyth University) is an environmental and natural resource economist, specialising in the economic and social value of biodiversity and natural resources. He has published widely on the value of biodiversity, as well as other environmental goods. Recently much of the focus of his research has been the use of an ecosystem services approach to valuation, which includes research for Defra, as well as contributing towards TEEB and the UK National Ecosystem Assessment. He also has relevant experience of research in developing countries in terms of economic valuation and welfare/vulnerability assessments in Africa, Caribbean, and the Solomon Islands.
<b>Souphith Darachanthara</b>	National Economic Research Institute (NERI), Lao PDR  E-mail: souphith@yahoo.com	Mr. Souphith Darachanthara is the Deputy Director General of the National Economic Research Institute (NERI), which is the research arm of the Ministry of Planning and Investment (MPI) in Lao PDR. NERI is designed to provide high quality research, information and advice to MPI to support national social and economic development. Mr. Darachanthara has a Master of Science in Statistics from the Moscow Economic Statistic Institute, former USSR (1990) and a Master of Business Administration (MBA) from National Institute for Development Administration (NIDA) in Thailand (1993). Mr. Darachanthara has worked extensive on poverty reduction and rural development financial mechanisms such as microfinance, village development funds and developing socio and economic strategies at provincial levels. Some examples of his research related to environment, land and agriculture issues include studies on contract farming systems in maize plantations; analysis of cross-border trade and value chain for non-timber forest products (NTFPs); and an economic valuation study of environmental services in four different land uses (implemented under the UNDP-UNEP Poverty Environment Initiative).
<b>Ali Dehlavi</b>	World Wide Fund for Nature (WWF) Pakistan  E-mail: adehlavi@wwf.org.pk	Ali Dehlavi is an environmental and resource economist. Before joining the World Wide Fund for Nature - Pakistan (WWF-P), he has served with the United Nations Conference for Trade and Development (UNCTAD), the International Centre for Trade and Sustainable Development (ICTSD), and the United Nations Environment Programme (UNEP) in Geneva and the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the Organization for Economic Cooperation and Development (OECD) in Paris. In Pakistan, he worked with the Sustainable Development Policy Institute (SDPI), with GlaxoSmithKline (GSK), and served as Director of the Pakistan Centre for Trade and Sustainable Development (PCTSD), and as Vice President and Economist, Credit Policy Group, Habib Bank Limited (HBL), Pakistan's largest commercial bank. A SANDEE grant holder, Ali has an MSc in Environmental and Resource Economics from University College London (UCL) and a mid-career Diploma in Environmental Economics and Policy Analysis (Analytical Methods Track) from Harvard University.
<b>Enamul Haque</b>	United International University, Dhaka, Bangladesh  E-mail: akehaque@gmail.com	---

<p><b>Salman Hussain</b></p>	<p>Scottish Agricultural College (SAC), Edinburgh</p> <p>E-mail: Salman.Hussain@sac.ac.uk</p>	<p>Salman is a resource and environmental economist working at the Scottish Agricultural College in Edinburgh, UK with close to two decades experience in the field of conservation economics. He is the overall study coordinator of UNEP TEEB Quantitative Assessment Report which is to be launched in Spring 2011. This report looks at the costs and benefits of global policy interventions such as REDD and the extension of Protected Areas. His research focus within the field of conservation economics is on marine biomes, and he currently leads a substantive economics work package within an EC-sponsored project entitled Options for Delivering Ecosystem-based Marine Management. Salman also is Programme Director for the Masters in Ecological Economics at the University of Edinburgh.</p>
<p><b>Lalit Kumar</b></p>	<p>Delhi University, India</p> <p>E-mail: lkumar1503@yahoo.co.in</p>	<p>Lalit Kumar, Assistant Professor, has been teaching in the Department of Business Economics, Bhim Rao Ambedkar College, Delhi University. His area of interest includes Mathematics of Economics, Industrial Economics, Statistics, Environmental Economics and Economic Policy Development. He has completed his graduation in Economics, post graduation in Business Economics and M.Phil from Delhi university, He is currently pushing his Ph.D on the issue related to Climate change and its impact on Primary sectors of India from Delhi University. He is researching in Environmental Economics and his interest includes Valuation, and Accounting for Environment, loss of Biodiversity and effects of Climate Change. He has been actively associated with Green Indian States Trust (GIST), a prominent NG created to promote sustainable development in India and well know for its path breaking work in building a framework of environmentally adjusted national accounts. GIST has replaced "GDP Growth" with a holistic alternative, Environmentally Adjusted GDP, by accounting for all major externalities. He has been associated with the global TEEB project and is now actively working for India TEEB project launched by Government of India in February 2011 to account for economic value of biodiversity loss.</p>
<p><b>Surender Kumar</b></p>	<p>Delhi University, India</p> <p>E-mail: surender672@gmail.com</p>	<p>Dr Surender Kumar is presently working as <i>Professor</i> of Economics at the Department of Business Economics, University of Delhi, New Delhi. He is also a visiting Professor of Environmental Economics at the Centre for Economic Studies and Planning, Jawaharlal Nehru University, New Delhi. His previous stint involved the position of <i>Professor</i> of Economics at the Department of Policy Studies, TERI University, New Delhi and Fellow at NIPFP, New Delhi. He had been a <i>Visiting Fellow</i> at the University of Illinois at Urbana-Champaign (USA) and JSPS Fellow at the Yokohama National University Yokohama (Japan). Prof Kumar has worked with a concentrated focus on environmental and resource economics. He also extends his ambit of research to productivity and efficiency measurement. Dr Kumar authored four books: <i>Environmental and Economic Accounting for Industry</i> (Oxford University Press, New Delhi), and <i>Economics of Sustainable Development: the Case of India</i> (Springer, New York), <i>Energy Prices and Induced Innovations</i> (VDM Publishers), and <i>Economics of Air Pollution</i> (VDM Publishers). Dr Kumar published about three-dozen papers during the last five years in cherished journals like <i>Ecological Economics</i>, <i>Economic Modelling</i>, <i>Environmental and Resource Economics</i>, <i>Environment and Development Economics</i>, <i>Resource and Energy Economics</i>, <i>Journal of Environmental Management</i>, <i>Water Policy</i>, <i>Journal of Energy and Development</i> etc. Dr Kumar's is one of the lead authors for IPCC AR5. His work has a social face with policy implications. His work in the area of environmental economics has not been confined only to showing that the use of economic instrument is cost effective policy for environmental compliance, but extends to providing a theoretical rationale for a practicable tax-standard framework. Dr Kumar was the lead author of the commissioned study of Ministry of Finance 'Central Government Subsidies in India' which formed the basis of the Discussion Paper that was presented by the Ministry of Finance to the Parliament on December 23, 2004. At University of Delhi and JNU, he teaches courses in <i>Environmental Economics</i>, <i>Climate Change Economics</i>, <i>Economic Analysis of Public Policy</i>, and <i>Advanced Econometrics</i></p>

<b>Louis Lebel</b>	Chiang Mai University  E-mail: louis@sea-user.org	Louis Lebel is the current and founding director of the Unit for Social and Environmental Research (USER) at the Faculty of Social Sciences, Chiang Mai University, Thailand. He has been at Chiang Mai University since 1999 and began working in Thailand since 1991. He has research interests in ecology, public health, development studies and environmental governance. He has co-authored more than a 100 peer-reviewed journal articles and book chapters as well as edited four books. He is active in the global environmental change science programs, serves on the editorial board of five peer-reviewed journals and has been on several international scientific steering committees and assessment panels. Please visit <a href="http://www.sea-user.org">www.sea-user.org</a> for further information on publications and research activities.
<b>Roldan Muradian</b>	Centre for International Development Studies Nijmegen, Radboud University, Netherland  E-mail: R.Muradian@maw.ru.nl	Dr Roldan Muradian is Senior Researcher at the Center for International Development Issues (CIDIN), Radboud University Nijmegen (The Netherlands). CIDIN is an interdisciplinary academic institute addressing issues related to inequality, poverty, development and the environment. Dr Muradian has broad research interests, covering a variety of themes along environmental, social and economic dimensions in the field of rural development. His current main research subjects are payments for ecosystem services, collective action and value chain integration of small-scale farmers and global socio-environmental transformations induced by the emergence of China.
<b>Paulo A.L.D. Nunes</b>	CIESM Programme in Marine Economics, Mediterranean Science Commission, Monaco  E-mail: pnunes@ciesm.org	Paulo A.L.D. Nunes has been working in the field of economics of biodiversity and valuation of ecosystem services since the mid 90's. He graduated from the Katholieke Universitat Leuven with a Ph.D. on Economics. Today, Paulo A.L.D. Nunes is the coordinator of the Marine Economics Programme at the Mediterranean Science Commission – CIESM (Monaco) and invited professor at the Department of Agricultural & Resource Economics, University of Padova (Italy). Nunes is author or coauthor of 60+ scientific publications in a variety of international journals. In the recent years, Nunes has contributed with his technical expertise to a wide set of international initiatives, including, 'The Economics of Ecosystems and Biodiversity - TEEB', initiative coordinated by UNEP; 'Scaling-up Ecosystem Service's Values', initiative coordinated by the European Environmental Agency; the development of an operative framework for business and corporate sector so as to value ecosystem services, initiative coordinated by the WBCSD; and, more recently, the Wealth Accounting and the Valuation of Ecosystem Services (WAVES), initiative coordinated by the World Bank.
<b>Golam Rasul</b>	International Centre for Integrated Mountain Development (ICIMOD), Nepal  E-mail: grasul@icimod.org	Dr Golam Rasul, Head, Economic Analysis Division, is a development economist. He is a national of Bangladesh. Prior to his appointment as Head of the Economic Analysis Division in August 2009, he served as a policy development specialist at ICIMOD for approximately five years. Dr Rasul holds a PhD in regional and rural development planning from the Asian Institute of Technology (AIT), Thailand. He worked for more than a decade in the Bangladesh Civil Service in different ministries and in field administration in different capacities where he was involved in the formulation and implementation of development planning and programming. Along with development work, he has been actively involved in research in areas that include agriculture, natural resource management, poverty alleviation, and sustainable development in Bangladesh and the South Asian region. His research findings have been published in many international journals including World Development, Environmental Management, Journal of Environmental Management, Environmental Conservation, Sustainability: Science, Practice & Policy, Society and Natural Resources, Regional Development Studies, Development in Practice. His five papers have appeared as 'most read papers' in their respective journals in Science Direct. Dr Rasul provides intellectual leadership to mainstream economic concepts, tools, and approaches in ICIMOD's three Strategic Programmes with a view to contributing to the achievement of the strategic objectives of the Centre. He is currently working on green economy, sustainable mountain development, food security and regional cooperation.

<b>Priya Shyamsundar</b>	<p>The South Asian Network for Development and Environmental Economics (SANDEE)</p> <p>E-mail: priya_sandee@yahoo.com</p>	<p>Priya Shyamsundar is Program Director of the South Asian Network for Development and Environmental Economics (SANDEE) and oversees SANDEE supported research and training in the area of natural resource management, valuation of non-market goods, common property resource use and the economics of pollution management. Priya has also served as a consultant for the World Bank, working on issues related to poverty and environment and, more recently, climate change. Prior to her work with SANDEE and the Bank, Priya served as Senior Program Officer for the John D. and Catherine T. MacArthur Foundation and as Research Associate at the Institute of Social Studies Trust. Priya's research interests range over a number of topics within environment and development economics. She has a Ph.D. in Environmental Economics from Duke University and a Masters in Economics from Delhi University.</p>
<b>Kim Thi Thuy Ngoc</b>	<p>Institute of Strategy on Natural Resources and Environment (ISPONRE), Ministry of Natural Resources and Environment (MONRE), Viet Nam</p> <p>E-mail: ktngoc@isponre.gov.vn</p>	<p>Ms. Kim Thi Thuy Ngoc is working at the Institute of Strategy on Natural Resources and Environment (ISPONRE), Ministry of Natural Resources and Environment (MONRE). Born in Ha Noi, Viet Nam in 1973. Graduated at Ha Noi National University in 1994 with major subject on biodiversity. Graduated the Master of Science at Asian Institute of Technology (AIT), Bangkok, Thailand. Worked at Environmental and Office for Environment and Community Development, Viet Nam Productivity Centre from 1999 – 2005. Jointed Ministry of Natural Resources and Environment from 2005 – 2008. Worked at Institute of Strategy on Natural Resources and Environment (ISPONRE) since 2008.</p>
<b>Jianchu Xu</b>	<p>International Center for Research in Agroforestry (ICRAF), China</p> <p>E-mail: j.c.xu@cgiar.org</p>	<p>Dr. Jianchu Xu is a senior scientist of World Agroforestry Centre as well as professor of Kunming Institute of Botany, Chinese Academy of Science. Prior to his current position, he was Head of Water and Hazards at the International Centre for Integrated Mountain Development in Kathmandu. He created and led the Center for Biodiversity and Indigenous Knowledge, a NGO based in Southwest China for working with indigenous people for cultural survival, intercultural dialogues, forest management, land use transition, ecosystem and human health, community-based biodiversity conservation, sustainable livelihood, hydrology and watershed governance. Xu is also a filed traveler with great interest in the Himalayan-Tibetan Plateau and Mekong region. He has expressed the indigenous people's voices of climate change impacts and local adaptations to global change through his interdisciplinary research and photography. He is an ecologist with an impressive reference list.</p>
<b>Rodrigo U. Fuentes</b>	<p>ASEAN Centre for Biodiversity</p> <p>E-mail: rufuentes@aseanbiodiversity.org</p>	<p>Rod has been working for 27 years in the field of environment and natural resources as a consultant and/or technical advisor to different intergovernmental and multi-lateral organizations such as the ASEAN, Asian Development Bank, United Nations agencies and the World Bank where his work brought him to countries such as China, Germany, India, Indonesia, Iran, Israel, Pakistan, Syria, Switzerland and Thailand. A sustainable development and urban and regional planning expert, Rod also specializes in environmental program design and project development, policy and institutional assessment, environmental monitoring and assessment, and capacity development in environmental management and sustainable development. Rod Fuentes holds a Forestry degree and a masteral degree in Urban and Regional Planning, both from the University of the Philippines.</p>

<b>John Pearson</b>	Southeast Asia Climate Change Network, British High Commission in Singapore	John Pearson is Head of the British Government's network on climate change in South East Asia. Based at the British High Commission in Singapore, he has held the position since September 2008. John joined the Foreign and Commonwealth Office in 1990. He has held a variety of positions in London, including working in the FCO's Non-Proliferation Department, United Nations Department and Environment Policy Department. His first posting was to Madrid, from 1992-94. From 1996-2000 he worked at the British Embassy in Brasilia, where he covered human rights and environmental issues. From 2005-2008 he was Deputy Head of Mission at the British Embassy in Montevideo, Uruguay. Before arriving in Singapore he worked on climate change issues at the British Embassy in Jakarta. His first degree was a BS in Geography from the University of Nottingham, where he specialized in coastal environments and air pollutants. He also has an MA in International Peace and Security from King's College, London, where he wrote his dissertation on 'Climate Change and the Implications for International Peace and Security'.
<b>Hitomi Rankine</b>	United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP)	Ms. Hitomi Rankine is an Environmental Affairs Officer at the United Nations Economic and Social Commission for Asia and the Pacific, based in Bangkok. She has 16 years of experience in various aspects of environment and sustainable development, working in both Asia and the Pacific and in the Caribbean. She is a contributor to, or responsible for, several UN publications and projects on green growth. She holds an MSc. Degree in Environmental Management from Stirling University, Scotland, and a first degree in natural sciences.
<b>Berthold Seibert</b>	Biodiversity and Climate Change Project Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)	Dr. Seibert is a Forester and Biologist (PhD) graduated from the Universities of Munich and Zurich in 1978 and 1984, respectively. He has worked for over 30 years in development aid focusing on biodiversity conservation and natural resources management for German Development Aid (BMZ, KfW, GIZ), EU, ADB, IDB, World Bank, ITTO and UNESCO, in over 20 countries. The most recent assignments were in China (Resources Protection in Nature Reserves of Sichuan Province), Cape Verde (Protection of Natural Resources in Fogo Island) and Guatemala (Protection of Marine Resources in the Caribbean Reef Zones of Mexico, Belize, Guatemala and Honduras). Through his assignments, through attending workshops, giving trainings and assessing projects, he is familiar with international conventions (UNESCO Man and Biosphere, Convention on Biodiversity, Kyoto Protocol, FCCC, etc.). Since 2010, he is assigned as project manager/team leader to the GIZ-ACB project on Biodiversity and Climate Change based in Los Baños, Philippines.

## 6. List of Participants

(Confirmed as of 27 January 2012)

Name	Title	Organization	Contact
<b>UNEP-invitees</b>			
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John Pearson	Head, Southeast Asia Climate Change Network	British High Commission in Singapore	
Geoff Blate		WWF Greater Mekong Subregion	
Adam Tomasek	Leader	Heart of Bornei Global Initiative, WWF-Indonesia	
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## 7. Logistics Information

### 1. Meeting venue

The meeting will be held at the following venue:

**Hotel name:** The Renaissance Bangkok Ratchaprasong Hotel

**Address:** 518/8 Ploenchit Road, Bangkok 10330

**Telephone:** +66 (0) 2 125 5000

**Fax:** +66 (0) 2 125 5001

**E-mail:** varut.t@renaissancehotels.com

**Website:** www.renaissancebangkok.com

### 2. Hotel accommodation

The organizers have made reservations at The Renaissance Bangkok Ratchaprasong Hotel for all participants coming from outside of Bangkok, for the duration of the workshop when participants will attend.

Cost of accommodation of ACB and UNEP-funded participants will be shouldered by the organizers. However, participants will need to settle the cost of any personal expense (i.e. telephone bills, mini-bar, additional meals, laundry, etc.) directly with the hotel. Should participants wish to extend their stay in the hotel, expenses will be at their own cost.



### 3. Arrival at the airport

Participants are requested to arrange their own transportation from the airport to the hotel. From the Suvarnabhumi/Bangkok International Airport to the hotel, estimated taxi fare is 360.00 THB (one way).

### 4. Hotel check-in

Check-in time is 14:00 hrs and check-out time is 12:00 hrs. Participants arriving before 14:00 hrs can store their luggage with the hotel bellman until their rooms become available.

### 5. Welcome dinner

There will be two receptions hosted by organizers as follows:

1. A reception hosted by UNEP on Day 1, Monday, 6 February from 17:30 to 19:30 (venue to be confirmed)
2. A reception hosted by the British Embassy in Thailand on Day 3, Wednesday, 8 February from 18:30 to 21:00. It will be held at The Bytes Restaurant located at the 5th floor of the Renaissance Bangkok Ratchaprasong Hotel.

### 6. Registration and opening

1. Registration will take place on Day 1, Monday, 6 February 2012 from 8:00 to 9:00 just outside of the meeting room.
2. On Day 4, 9 February, the registration will take place from 7:30-8:30 at Studio Room 2 located at the 4th floor.

### 7. Working language of the meeting

Simultaneous interpretation in English and Thai will be provided for the meeting.

### 8. Documents

Some background material will be circulated to the participants prior to the meeting. In an effort to make the meeting as environmentally friendly as possible, the organizers will not make hard copies of presentations and background material available to participants. Soft copies of the speakers' presentations as well as other related workshop/meeting documentation shall be made available to participants in USB flash drives, which will be distributed by the organizers upon conclusion of the workshop/meeting.

### 9. Travel expenses

#### *For ACB-funded participants:*

Participants supported by ACB shall be reimbursed of travel expenses, which include air/boat/bus/train fares (most direct, economy class), terminal fees, and taxi fares from point of origin to the airport, and vice versa. Participants are requested to secure all relevant receipts for reimbursement purposes. The organizers will assist participants in accomplishing reimbursement forms during the meeting.

#### *For UNEP-funded participants:*

UNEP will provide the participants with a partial Daily Subsistence Allowance (DSA) to cover meals, transportation, internet charges, visa application fees and other costs, which would be incurred during the official stay in Bangkok. DSA will be paid to the participants at the workshop venue. To receive DSA, you are kindly requested to submit copies of the following documents:

1. Copy of the page of your passport with (a) picture and (b) entry stamp into Thailand
2. Your air ticket copy (copy of e-ticket)
3. Original Boarding pass/es

For those participants who purchased their own tickets for reimbursement, in addition to the above listed documentation, please complete: 1) a travel claim form; and 2) a funds transfer form, both of which will be sent to them prior to the meeting. Please note that reimbursement requires one to two months for processing.

## 10. Weather, time zone and dress code

Thailand has a warm, tropical climate affected by an annual monsoon, with a rainy season from June to October and a dry season for the rest of the year. Temperatures average 75 to 92 degrees Fahrenheit (24 to 33 degrees Celsius), with the highest temperatures from March to May and the lowest in December and January. For current weather conditions, participants may refer to: [www.worldweather.org/089/c00233.htm](http://www.worldweather.org/089/c00233.htm).

The standard time zone in Thailand is GMT +7 hours. Dress code for the meeting is formal.

## 11. Electricity

Thailand has an electrical current of 220 volts at 50 hertz and has electrical outlets for power plugs of the two-pin, flat and round types.

## 12. Foreign exchange

The currency in Thailand is the Thai Baht (THB). According to the exchange rate as of 23 January 2012, 1.00 US Dollar is equivalent to 31.02 Thai Baht. For the latest foreign exchange rates, participants may access: [www.oanda.com/currency/converter](http://www.oanda.com/currency/converter).

Currency exchange facilities are available at the Suvarnabhumi International Airport, the Renaissance Bangkok Ratchaprasong Hotel at the reception desk, or at local and international banks in Bangkok.

## 13. Contact persons

For clarifications and other related inquiries, please contact the following staff:

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## 14. Disclaimer

The organizers shall not be responsible for: medical, accident, and travel insurances; compensation for death or disability; loss of or damage to personal property; and any other loss that may be incurred during the period of travel or the actual meeting. In this context, it is strongly recommended that all participants secure, prior to departure, international travel and medical insurances for the period of travel and participation.

We look forward to meeting you all during the workshop.

[www.unep.org](http://www.unep.org)

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