



ECONOMIC DEVELOPMENT, POVERTY REDUCTION, ENVIRONMENT AND CLIMATE CHANGE:

ENVIRONMENTAL ECONOMICS FOR POLICY MAKERS

United Nations Development Programme (UNDP), United Nations Environment Programme (UNEP),
Economy and Environment Program for South East Asia (EEPSEA) and
Asian Development Bank's (ADB) Greater Mekong Subregion Environment Operations Centre
(GMS-EOC)

Workshop for Senior South East Asian Government Decisions Makers from Ministries of Finance, Planning, Environment and Key Line Agencies

**17-19 September 2008, Bangkok, Thailand
Minutes**

Summary

This workshop for South East Asian policy makers was attended by over 40 people including Ministries of Finance, Planning and Environment and other key agency staff of nine countries; Cambodia, Indonesia, Lao PDR, Malaysia, Papua New Guinea, Philippines, Thailand, Timor-Leste and Viet Nam. The workshop was organized by UNDP, UNEP, ADB and the Economy and Environment Program for South East Asia (EEPSEA). The key tools of environment economics were reviewed and applied to pro-poor growth, environment and climate issues, and lessons were shared across the nine countries. Participants reviewed market, policy and institutional failures and how these could be addressed with regard to water, land and marine resources and responding to climate change. For water, many countries were introducing water pricing, river basin management authorities and an overall water law. For climate, many countries were setting up climate coordination mechanisms, an overall climate policy or strategy and reducing fossil fuel subsidies and instead introduce renewable energy subsidies. For land and marine resources, countries were working to address multiple market, policy and institutional failures but success was limited by lack of peoples' participation, access to information and capacity for enforcement. There is a need to continue dialogue and cooperation between Ministries of Finance, Planning and Environment for example on environmental fiscal reforms. Political processes must be understood and influenced to ensure that reforms take place. Economics can be a powerful tool to present evidence on the need for more pro-poor environmental management. Country presentations on environmental economics related reforms included environmental fiscal reforms and environmental taxation and stronger coordination mechanisms.

Background

1. South East Asia is making impressive progress in reducing poverty and achieving the Millennium Development Goals (MDGs). However, there are still many significant areas of poverty remaining. Many of these poor people depend on natural resources and the environment for their health and livelihoods, and are affected by growing climate vulnerability. In addition, rapid growth in South East Asia has put significant pressures on the environment. To understand these challenges, policy makers can use the tools of environment economics. These tools can provide an understanding of the conceptual as well as practical linkages between economic growth, poverty and environment; identify policy reforms and investments that could result in potential win-win solutions; and demonstrate how to value and cost out these investments.

Workshop Objectives

2. The objectives of the workshop were to:
 - Assist senior economic policy makers to take environment issues more seriously and environment policy makers to take economics more seriously;
 - Improve dialogue between environment and economic policy makers;
 - Inform participants how environment economics analysis can support pro-poor growth and environment interventions to achieve the MDGs;
 - Facilitate government staff to identify in their country, areas of environmental economics analysis and policy reforms to achieve pro-poor environment outcomes;
 - Promote regional lesson learning and south-south exchange on shared environment issues in the region.

Participants and Organizers

3. The workshop was jointly organized by the United Nations Development Programme (UNDP), United Nations Environment Programme (UNEP), Economy and Environment Program for South East Asia (EEPSEA) and Asian Development Bank's (ADB) Greater Mekong Subregion Environment Operations Centre (GMS-EOC).
4. Key senior South East Asian government decision makers from the Ministries of Finance, Planning and the Environment in Cambodia, Indonesia, Lao PDR, Malaysia, Papua New Guinea, Philippines, Thailand Timor-Leste and Viet Nam attended the workshop. Participants from various donor and partner organizations, including Sweden, Finland, Netherlands and Stockholm Environment Institute - Asia (SEI), also attended the workshop.

Agenda

5. The workshop consisted of ten sessions as listed below:
 - Session 1: Economy, Environment and Poverty Overview: Macro and Micro Linkages

- Session 2: Causes and Solutions for Environment and Natural Resource Problems – Market, Policy and Institutional Incentives
- Session 3: Pro-poor Growth, Macro-economic Indicators, Natural Resources and the Environment
- Session 4: Break-out Groups on Thematic Issues (Land-based Natural Resources, Marine Natural Resources, Climate Issues, Water and Environment Health, and Urban and Industrial Issues)
- Session 5: Valuing Environmental Changes and Associated Issues,
- Session 6: Poverty, Health and the Environment
- Session 7: Poverty, Livelihoods, Land and Marine Ecosystems (Case Studies of Community-based Natural Resource Management, Payment for Environmental Services)
- Session 8: Political Economy and Implementing Economic Environment Reforms: Winners and Losers
- Session 9: Climate Change: Impacts and Adaptation Options
- Session 10: Climate Change and Potential Cost Effective Mitigation Options

Workshop proceedings

Session 1: Economy, Environment, & Poverty Overview: Macro and Micro Linkages

6. Wilfredo Cruz, EEPSEA consultant, opened the workshop presentations with an overview of economic, environment and poverty linkages. Environmental degradation and resource overexploitation often follows rapid economic growth because development depends primarily on natural resources and frequently means underinvestment in pollution control and local environmental institutions. Environmental degradation can in turn result in decreased productivity. The worst effects of this are often borne by poor households, in terms of pollution, livelihood sources and vulnerability. Environmental degradation and vulnerability among poor households are exacerbated by climate change and form a feedback cycle leading to increased economic pressures at the national level. The costs of compensating for pollution therefore become higher than the estimated costs of preventing pollution in the initial stages of development. Due diligence and ensuring the implementation of environmental and social assessments in development projects are important. But these must be complemented by macro and inter-sectoral approaches. For instance, the planning of projects implemented under the traditionally separate poverty alleviation and environmental management sectors must be integrated in order to expand the potential scope for ‘win-win’ poverty-environment initiatives.

Session 2: Causes and Solutions for Environment and Natural Resource Problems – Market, Policy and Institutional Incentives

7. Wilfredo Cruz presented Session Two on the causes and solutions for environment and natural resource problems. The three main economic causes of environmental problems are market failure, policy failure and institutional failure (i.e. inappropriate institutions). The environment is exploited due to market failure because the use of many natural resources

and environmental services (for example, the assimilation of pollution) has imperfect or no markets and are therefore undervalued and overused. Environmental managers and economists must therefore determine methods for valuing environmental goods and services. Regulation, taxation and the creation of standards or tradable permits are ways to reduce market failure. Secondly, policy failure or inappropriate policies can also cause negative impacts on the environment. For example, the promotion of chemicals and fertilizers under a policy aimed at increasing agricultural output. Inter-sectoral coordination, for instance, between the Ministries of the environment, health and finance, during the development policy process is necessary to avoid similar scenarios. Thirdly, there are inappropriate institutions that overexploit resources or undermine effective management. Coordinated environment-development policy reform programs are needed to identify environmental problems and go beyond the proximate to the underlying causes of those problems. Environment-Development Interactions (EDI) policy reform matrices can be used to assist with examining environmental problems, looking for indicators of overexploitation and valuation, then finding the underlying market, policy, institutional causes.

Session 3: Pro-poor Growth, Macro-economic Indicators, Natural Resources and the Environment

8. Paul Steele, Environment Advisor UNDP-Regional Centre in Bangkok, began Session Three with a presentation on macroeconomic indicators and sustaining pro-poor growth. Developing countries often have a wealthy natural resource base and it is their challenge to manage the trade off of between how to manage this base for economic growth which is pro-poor and sustains the natural resource base for the future. Labor intensive traditional subsistence use of resources in developing countries is currently being replaced by large agricultural, mining or hydropower developments that are often capital intensive and bring in large amounts of foreign investment to exploit national resources for exportation. Countries going through such industrialization should develop sectors to reduce the export of their raw natural resources and tax profits so that extraction is not overcapitalized. In addition, policy options for sustaining natural resource bases must be devised. These options include investing in natural resource protection; diversifying away from natural resource dependence; bringing in incentives for sustaining natural resource bases; and implementing regulations and controls, for example marine sanctuaries for fisheries. .
9. Patricia Alexander, Gender Regional Coordinator UNDP-Regional Centre in Colombo, gave the next presentation on gender issues and highlighted the similar mainstreaming change of both environment and gender issues. As with the environment, a major bias in mainstream economics lies in its assumptions about free female labour (for example women and subsistence laborers being unvalued or regarded as being unemployed) and therefore seen as freely available. The daily unvalued work of women, for instance in water or firewood collection, takes up a large amount of time and is increased with climate change. Women are therefore at the frontlines of climate change adaptation and their work must be valued and accommodated in poverty-environment solutions.

10. Linda Ghanime, Senior Environmental Policy Advisor for UNDP, gave Session Three's final presentation on Strategic Environmental Assessments (SEAs). SEAs are a tool to move from evaluating projects to assessing policies and programmes. They assist in making development choices by integrating environment and social considerations. SEAs aim to reinforce the linkages between environment, social and economic dimensions; and look at opportunities for social and environmental benefits that could come out of development policies and programmes. They allow the integration of top-level financial and economic analyses to be included and promote an understanding of the environmental and economic benefits of prevention. SEAs should not be prescriptive and are tailored to issues that the SEA is trying to address by focusing on specific government and institutions involved. The website www.sea.net can be accessed as a resource for further information.

Session 4: Break-out Groups on Thematic Issues: Report back from breakout-out groups

11. The workshop participants gathered into three groups focusing on climate change; land and marine natural resources; and water, environmental health and urban/industrial issues. Each group gave a presentation covering individual country examples of market failure, institutional failure and inappropriate policy relating to their chosen subject matter. Summaries of these presentations are as follows:

Climate change group

12. The climate change group stated that each of the represented countries should have a national climate change coordinating committee and overarching policy or strategy. The group further expressed interest in addressing climate change through the creation of policies on reducing subsidies for fossil fuels, promoting renewable energy and forest protection. Carbon taxation, carbon trading and the Voluntary Carbon Offset Scheme were also recognized by the group. The specific country responses to climate change are:
 - a. Indonesia has a National Action Plan Addressing Climate Change. This Plan is used to design national mitigation and adaptation strategies covering energy, water resources, agriculture, health, seas, fisheries, infrastructure and biodiversity. Indonesia is also pushing each government sector and local government to have additional climate change action plans. These will be supported by the Ministry of Finance. Indonesia established a Committee on Climate Change in August 2008 (Chaired by the President) to look at mitigation, adaptation, technology transfer, financial mechanisms and land use, land use change and forestry (LULUCF). Indonesia is currently preparing to replace fossil fuel subsidies with taxes for fossil fuels and subsidies for renewable energy.
 - b. Laos PDR has a National Steering Committee on Climate Change (chaired by the Deputy Prime Minister) and is currently devising a National Policy on Climate Change.
 - c. Malaysia has a National Steering Committee on Climate Change (chaired by the Prime Minister) and a Cabinet Committee for Climate Change. Malaysia has tax exemptions for renewable energy and energy efficient equipment/items, (e.g. hybrid

cars). Malaysia also has incentives for High Technology Companies, a Small Renewable Energy Program (SREP) and a voluntary carbon offset scheme. Malaysia is currently considering subsidizing renewable energy and energy efficiency. Malaysia is drafting a plan for climate change and an energy master plan.

- d. Papua New Guinea has a new Climate Change Office under the Prime Minister. It has export driven policies and levies on timber. Papua New Guinea intends to formulate a National Policy on Climate Change, raise public awareness of climate change and involve all sectors in addressing climate change (including non-government organizations and the private sector).
- e. Cambodia has a National Action Plan on Climate Change, a National Adaptation Program for Climate Change and a National Steering Committee on Climate Change (chaired by Ministry of Environment). However despite this, Cambodia lacks public awareness on climate change and has not instigated any climate adaptation programs.
- f. Philippines has a National Action Plan on Climate Change, a Protected Area Committee and a Committee on Climate Change (chaired by the Department of Environment and Natural Resources with other government and non-government organizations.)

Land and marine natural resources group

13. The land and marine resources group discussed the various market failures existing in the countries represented. There are no clear measurable values of present or future land and marine resources; no value addition; no incentives for protection or compensation for lack of protection; and a failure to value less tangible goods and services, like habitats for endangered species or sequestration of carbon. Environmental models for valuing environmental goods and services, incentives and compensation for environmental protection and environmental fiscal reforms were suggested to overcome these market failures. Policy failures were additionally identified in the countries represented. There is an absence of policy governing land development planning, resources ownership, land ownership, land boundaries and land/resource usage rights. There is also a lack of sectoral policies and coordination mechanisms, structural economic policy, and fees and charges for resource use. Specifically, Papua New Guinea proposed the need for medium and long term development strategies including environment and inter-agency consultation; Timor-Leste is interested in alternative energy and the subsidization of domestic energy; Indonesia plans to look at policy failures in agriculture and forestry. The countries also identified that there is a lack of peoples' participation, access to information, human resources, statistical data and capacity for regulatory enforcement, monitoring and evaluation in those institutions governing land and marine natural resources. These institutional failures need to be addressed.

Water, environmental health and urban/industrial issues group

14. The water, environmental health and urban/industrial issues group focused their presentation on water. The group stated that access to water was highly subsidized in each of the represented countries and provided a management problem because water is seen as a public resource with unlimited access. The institutions governing water management are fragmented in each of the countries, with unclear policies, insufficient rules and regulations, a lack of leadership, no clear coordination of roles or responsibilities and an absence of water regulation enforcement. Common recommendations were the need to consider water pricing, river basin management authorities and an overall water law. The countries are looking at addressing the management of water as follows:
- a. Indonesia is looking to implement an incentives and disincentives mechanism, fixed and volumetric water charges, and water discharge permit charges. It is also moving onto full cost recovery for municipal water supply. Indonesia has a National Water Resources Commission and a River Basin Management body. It is revising the Water Resources Law and Environment Law.
 - b. Lao PDR is looking to implement an incentives and disincentives mechanism, fixed and volumetric water charges, and water discharge permit charges. It is interested in establishing National, Provincial and River Basin Water Committees and set up Environment Law and Water Law.
 - c. Papua New Guinea is looking to implement an incentives and disincentives mechanism, fixed and volumetric water charges, and water discharge permit charges. Philippines also aims to increase the capacity of the National Water Policy Framework and the Environmental Protection Authority.
 - d. The Philippines is looking to implement an incentives and disincentives mechanism, fixed and volumetric water charges, and water discharge permit charges. Philippines wants to decentralize the National Water Resources Board to river basin organizations and prepare guidelines for the Clean Water Act.
 - e. Timor-Leste is looking to implement pro-poor pricing and subsidies, regulating environmental law and establishing the National Commission on Water Management.
 - f. Viet Nam is looking to implement pro-poor pricing and subsidies, monitor policy and have greater coordination between the National Resources and Environment Ministry, Ministry of Agriculture and Rural Development and other government departments.

Session 5: Valuing Environmental Changes and Associated Issues

15. Herminia Franciso, Director of EEPSEA, presented Session Five on valuing environmental change. Economic valuation of environmental changes considers the direct use, indirect use and non-use values of the environment. Direct-use values include recreational activities in ecosystems and the direct consumption of natural resource products. Indirect use values refer to the indirect support and protection provided by the natural resource to economic activity and property. Non-use values include option values (relating to future uses of the environment); bequest values (resulting from high values being placed on the conservation

of ecosystems for use by future generations); and existence values, which is the desire for natural resources to exist for the benefit of mankind. Market values of directly related goods and services can easily be used to assess productivity changes, loss of earnings and opportunity cost from environmental changes. Marketed goods can also be used as environmental surrogates in valuation. Likewise, there are also property value, wage differential and travel cost approaches to environmental valuation that can be drawn on. There are also survey based methods to environmental change valuation, which includes choice modeling based on the applications of environmental goods and services. This was illustrated with a case study on marine turtle conservation in Asia.

Session 6: Poverty, Health and the Environment

16. Wilfrido Cruz, EEPSEA, presented Session Six on the complex interactions between poverty, health and the environment. Mr Cruz offered several examples of these interactions relating to water supply and sanitation; indoor and urban air pollution; industrial and municipal waste; malaria; and institutional development. There is a need for more targeted micro-level health programs focused by source and by impact group to overcome some of the negative poverty-environmental health interactions. At the community wide or sectoral level, it is necessary to mitigate the unwanted effects of some growth policies; introduce pro-health policies; and draw on community action with regards to having policies for public hearings and pollution information disclosure to provide support for community leaders and factory owners negotiating pollution prevention initiatives. Poverty reduction strategies must focus on increasing livelihood security, decreasing health risks, reducing vulnerability and pro-poor economic growth.

Session 7: Poverty, Livelihoods, Land and Marine Ecosystems

17. Orapan Nabangchang, EEPSEA, presented Session Seven on poverty, livelihoods and land and marine ecosystems. There are numerous direct and indirect environmental services provided various ecosystems including watersheds, forests, wetlands, mangroves, sea grasses and coral reefs. There are also existence benefits from ecosystems, for example the cultural, aesthetic, spiritual and educational services that they provide to current and future generations. Ms Nabangchang gave two case studies in her presentation. The first was payment for environmental services (PES) in Viet Nam. For successful PES initiatives, consideration must be given to how to motivate the community to cooperate with PES; how PES affects labor resources in households; the total costs of PES; and the challenges in finding a baseline for PES. Ms Nabangchang's second case study was in community-based natural resource management of tropical fisheries in the Philippines. In this case study, there was successful community cooperation that lead to the establishment of a Protected Area Management Board and implementation of protected areas from fishing to see if marine reserve contributed to the improvement of the ecological conditions. Early studies have shown improved fish stocks and diversity and increased coral cover in and around the protected area. However. there is concern that these positive outcomes may be reversed because the institutional setting may not receive ongoing funding.

Session 8: Political Economy and Implementing Economic Environment Reforms: Winners and Losers

18. Paul Steele, UNDP-RCB, presented Session Eight on the political economy and implementing economic environment reforms. Environmental Fiscal Reforms (EFRs) help resolve market and policy failures while furthering environmental goals. Examples of EFRs include pricing natural resources; taxation and pricing measures that raise fiscal revenue while furthering environmental goals; reforming product subsidies and taxes; pollution charges; and service user charges. It is time to begin considering how to implement these EFRs considering the type of the environmental problems that are being addressed and the underlying social and political contexts. It is also necessary to investigate why some EFRs are successful and others are not; and to analyze the potential impacts of EFRs on prices, access to goods and services, employment and asset values. Once these issues have been considered then policy makers can anticipate those stakeholders who will be for or against the EFRs. Thorough planning during each stage of the EFR, policy process is needed, with special attention to be given to designing the right level of tax and how the collection of revenue will be carried out.

Session 9: Climate Change: Impacts and Adaptation Options

19. Gernot Laganda, Regional Technical Advisor, UNDP-RCB, presented Session Nine on climate change. There is clear evidence for the global trend in rising temperature levels, widespread melting of snow and ice, and the rising of the global mean sea level. The effects of these changes on the environment and human and economic development are major and strategies to deal with these additional risks are a must. The main strategies covered consist of mitigation (those steps designed to keep climate change below a dangerous level) and adaptation (furthering human and economic development with a future vision of risks).

Session 10: Climate Change and Potential Cost Effective Mitigation Options

20. Sanath Ranawana, UNEP, presented Session Ten on climate change and the potential costs of effective mitigation options. The IPCC states that about 10% of global greenhouse emissions can be reduced at no cost by 2030 due to the benefits of energy savings. Developing countries have greater potential than industrialized countries for low cost mitigation, particularly countries in Asia that are experiencing rapid growth. This is largely because: they have high populations that are still to be provided with basic services; of the lower cost of abatement associated with new growth versus reducing existing emissions; of the potential reducing emissions from deforestation; and because of the opportunities from integration of climate and development policies. Key areas for climate change mitigation are in energy supply (for example energy efficiency improvements), transport (hybrid vehicles, biofuels, non-motorized transport), buildings (solar integrated buildings, improved insulation), industry (upgrading), agriculture (improved practices), forestry (reforestation), and waste (waste to energy, composting, and recycling, waste

minimization). Many of these can be pro-poor if properly designed. Reduced emissions from deforestation and forest degradation (REDD) in developing countries is also a noteworthy mitigation area because deforestation and land degradation account for about 20% of greenhouse gas emissions. Pro-poor REDD can be achieved by ensuring financial flows benefit local communities, facilitating the participation of vulnerable stakeholders, recognizing local rights over forests and resources, creating incentives for integrative conservation and reducing perverse subsidies for land uses that emit carbon.

Sessions 11 and 12: Country Presentations on Proposals for Environment Economics Analysis and Possible Returns

21. Sessions eleven and twelve consisted of representatives from each country making presentations on environmental economics analysis and the possible returns to their country. Each presentation outlined the key poverty-environment issues and suggested potential market, policy and institutional reforms to overcome them. Common solutions included mainstreaming environment into economic and sectoral policies and plans working with Ministry of Finance and Planning, increasing investment for environment, implementing environmental fiscal reforms and polluter pays taxes, payment for environmental service and pro-poor subsidies. Summaries of the presentations are as follows:

Cambodia

22. Cambodia plans to implement the following reforms: impose a tax on gasoline; create an environmental security fund; introduce polluter pay principles in the areas of waste, water and industries; introduce carbon taxation; introduce charges for mining exploration. Cambodia proposes to create or reform policies on environmental management and control; environmental health; economic land concessions; sound chemical management; climate change; and pollution. Cambodia is also looking to encourage public participation and participatory management of natural resources; empower local authorities on environmental monitoring and inspection; redefine the roles and responsibilities for provincial environmental departments; improve coordination and partnership among stakeholders; involve the Ministry of Finance in environmental budgeting and fiscal reform; and get the Ministry of Planning involved in environment-poverty mainstreaming in national development plans. Cambodia seeks assistance with regards to environmental economic valuation; environmental fiscal reforms; strategic environmental assessment; institutional capacity development, climate change impact studies and carbon taxation.

Indonesia

23. Indonesia plans to implement the following reforms with regards to water, the priority issue: payment for environmental services and progressive taxes to foster pro-poor growth. Indonesia proposes to establish a water coordinating body with clear roles and responsibilities and invest in capacity building. Indonesia proposes to hold an annual tree planting day; impose green permits for building developments; have a single river basin management plan and system; involve the community in water and sanitation issues; instigate spatial planning reform; and mainstream the environment into development

planning. Indonesia seeks assistance with regards to water services valuation, strategic environmental assessment for a water resource plan and the implementation of a demonstration projects; capacity building at various levels and institutional reforms.

Lao PDR

24. Lao PDR plans to implement the following reforms: investigate Environmental Fiscal Reform with regards to revenue and expenditure; introduce pricing for water resources and/waste water discharges; introduce pollution permits and fees; look into micro-finance initiatives; introduce carbon taxation and credits; and establish a Community Development Fund for pro-poor budgeting. The country proposes to create or reform policies on water use; river basin management; and pollution permit trading. Lao PDR is also looking to increase an awareness of poverty-environment linkages amount sectoral decision makers and stakeholders; encourage public participation and participatory management of natural resources; and conduct strategic environmental assessments that make use of spatial planning. It proposes institutional reforms with regards to land zoning; land and forest allocation; river basin management. The country seeks assistance in strengthening the capacity for responsible sectors; raising awareness among stakeholders, analyzing the poverty-environment linkages; environmental valuation; spatial planning; and country exchanges.

Malaysia

25. Malaysia plans to implement the following reforms: increase the severity of environmental penalties and fines; introduce energy efficient equipment labeling; and channel funds from electricity and water usage into environmental conservation. It is looking to enhance ecotourism and the consideration of long terms gains instead of short term unsustainable profiteering; better enforce existing environmental policies; include environmental issues in the education system. Malaysia proposes institutional reforms with regards to the delineating the roles, responsibilities and jurisdictions of different authorities; and including public participation and participatory management of natural resources, particularly by indigenous peoples. The country seeks assistance with regards to the collaboration and organization of workshops; the targeting and education of other sectors on poverty-environment mainstreaming; and in capacity building and technical training.

Papua New Guinea

26. Papua New Guinea plans to review existing fees and charges on water management and emissions into the environment; establish a National Water Policy and create an Environment Protection Authority. The country seeks assistance with regards to capacity building and research and development.

Philippines

27. Philippines presented on a proposed pilot study on the economic valuation of the effects of mining activities along Taganito Bay, Surigao Del Norte. Since the Philippine Mining Act was passed, the country is now experiencing unprecedented influx of mining activities. In the Surigao Del Norte area, there are seven existing large scale mining and a number of small scale mining establishments. With regards to the pilot study, Philippines seeks assistance with regards to strategic environmental assessments, capacity building and

training; exchanges with other countries; and financial assistance for the conduct of the study and stakeholder consultations.

Timor-Leste

28. Timor-Leste plans to implement the following reforms: use of oil and gas revenue to subsidize renewable energy use; and establish a market for waste management industries, for example the promotion of a biomass power. It proposes to create or reform policies on water pollution; reserved or protected land zones; livestock management; energy and waste management. The country is also looking to establish a National Renewable Energy Authority, decrease the dependency on fossil fuels and increase the role of renewable sources in power production. Timor-Leste seeks assistance with drafting an energy and environment policy; and environmental fiscal reform to encourage a market for renewable energy resources.

Viet Nam

Viet Nam plans to implement the following reforms: implement payment for environmental services in river catchments; apply polluter pays principles, particularly with regards to air pollution by industry; apply taxation on the use of natural resources; introduce a bidding scheme for the use of natural resources in order to ensure environmental protection and recovery. The country also proposes to integrate pro-poor principles into Biodiversity Law and establish a National Steering Committee on Climate Change. Viet Nam seeks assistance with regards to environmental valuation; country exchanges; raising awareness amongst decision makers; financial support for environment protection and poverty reduction.

Session 13: Next Steps

29. The organizers agreed to consider support and follow up actions through their existing programmes: the UN's Poverty Environment Initiative (PEI), the ADB's Greater Mekong program and ADB country programme and EEPSEA's grant programme and research support. Workshop participants were encouraged to contact the organisers with specific proposals for technical or financial support.

Workshop organizers and participants agreed there are many common growth, poverty and environment issues among the nine countries represented – and common market, policy and institutional-based solutions. Solutions include appropriate pricing, raising revenues for the environment and institutional reforms to improve coordination for environmental issues that fall across different agencies. Communication between countries is vital for exchanging success stories and lessons learned. Strategies aimed at adapting to and mitigating climate change will particularly benefit from international cooperation. However, it is critical that countries do not let only climate change dominate their attention and ignore other poverty-environment linkages and issues. There is a need to continue the dialogue and cooperation between Ministries of Finance, Planning and Environment for example on environmental fiscal reforms. Political processes must be understood and influenced to ensure that reforms take place. Economics can be a powerful tool to present evidence on the need for more pro-poor environmental management.