"Our world has enough for each person's need, but not for his greed.



You must be the change you wish to see in the world."

Mahatma Gandhi (1869-1948)

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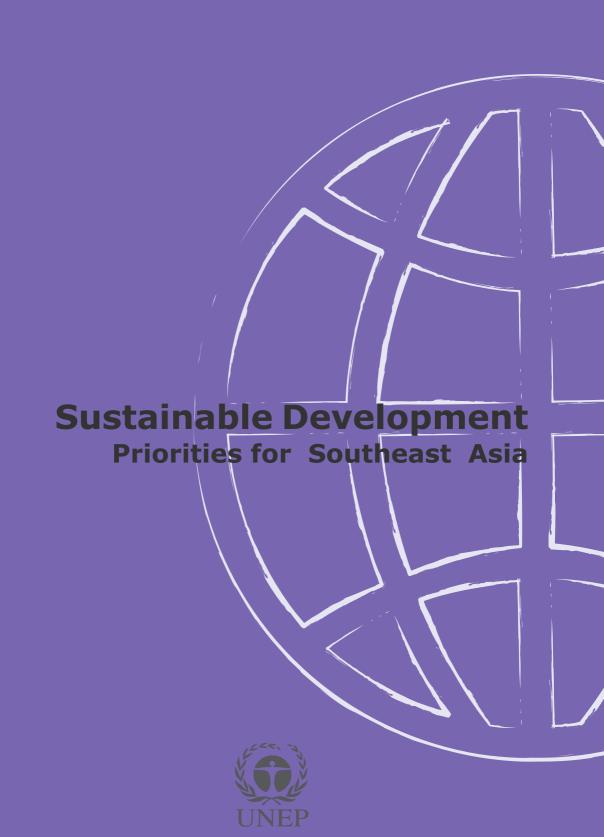


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**Sustainable** Development Priorities for Southeast Asia



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#### **FOREWORD**

The Sustainable Development Priorities for Southeast Asia is published by UNEP to present the sustainable development challenges and priorities for the Southeast Asian region over the next decade. The report aims to focus on the various strategies, the existing set of policy initiatives, and implementation to overcome these challenges.

Chapter 1 reviews the key sustainable development challenges faced in Southeast Asia and some of their major achievements. The challenges include: social and economic challenges; the pressure on natural resources; the pressure on air quality degradation and global warming; unsustainable industrial practices; and soil erosion. Some achievements are: the integration of national development plans in Malaysia, Singapore, Indonesia, Myanmar, Thailand, and the Philippines; the existence of participatory mechanism and processes; the strong subregional cooperation; and the involvement in global agreements.

The negative and positive aspects Southeast Asia will potentially be faced with if they followed the global and regional trends of pursuing sustainable development are consisted in chapter 2. Examples of negative aspects impacted from globalization are growing trade in illegal drugs, human trafficking, and growing urbanization. The positive aspects are the widening awareness and concern for sustainable development, strengthening of global civil society, and multi-stakeholder partnerships.

ASEAN Vision 2020, defined and translated into concrete sustainable goals, targets, and activities has been described in chapter 3. Chapter 4 provides Elements of Subregional Sustainable Development Strategy and Subregional Action Plans. Finally, chapter 5 emphasizes on the necessity of a strong collaboration, cooperation and counterpartnership among the government, civil society, business and international institutions to accomplish sustainable development.

UNEP hopes that the Sustainable Development Priorities for Southeast Asia would be useful for the government, non-government, private, regional and international organizations in the pursuit of developing policies, strategies, and action plans. UNEP gratefully acknowledge the contribution of organizations, institutes and, individuals in the preparation of the report.





General and

Executive Director, United Nations
Environment Programme

#### **ACKNOWLEDGEMENTS**

UNEP would like to thank many individuals and institutions who have contributed to the preparation of Sustainable Development Priorities for Southeast Asia 2004. They included individuals from Government Departments, intergovernmental organizations, academic institutions, and Civil Society Organizations. A full list of contributors, reviewers and participants are included in the Annex 5 and 6. Special thanks are extended to:

- Dr. Cielito, F. Habito, Professor of Economics and Director, Ateneo Center for Economic Research and Development Ateneo de Manila University, for preparing the report;
- Senior Officials of ASEAN Meeting for reviewing the report; and
- Division of Policy Development and Law, for providing the funding support to the report.

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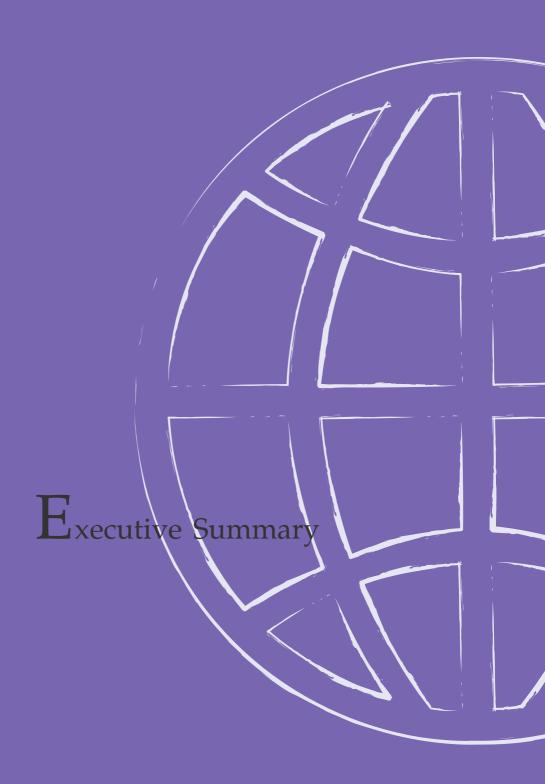
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# Executive Summary

Given diverse geographic, economic and cultural attributes, countries in Southeast Asia face very different sustainable development challenges, but at the same time confront common challenges typical of industrializing and urbanizing economies. Since the Rio Earth Summit in 1992, subregion-wide cooperation in sustainable development is being strengthened with the realization that environmental, economic and social problems could be better addressed by collaborative efforts through the knowledge sharing and pooling of resources.

Globalization and its negative consequences, uneven access to rapid technological advances that have led to a widening "digital divide," growing urbanization, climate change, and the rise of international terrorism are among the negative trends impinging on the subregion. On the positive side is widening awareness and concern for sustainable development, along with the strengthening of global civil society and multi-stakeholder partnerships.

ASEAN Vision 2020 provides the long-term sustainable development framework for the sub-region. The Hanoi Plan of Action initially translated this into concrete goals, targets and activities for 1999-2004. The vision influenced and is broadly consistent with the Millenium Development Goals (MDGs). The sustainable development dimension of the vision was further defined during the sub-regional preparations for the Johannesburg World Summit for Sustainable Development (WSSD) spearheaded by the

Task Force composed of ADB, ESCAP, UNDP and UNEP in consultation with the ASEAN Secretariat and civil society groups.

Specific goals defined for the subregion fall under nine headings describing specific Subregional Action Plans (SRAPs), namely: (1) Sustainable Urban Planning and Infrastructure Development; (2) Sustainable Land Management and Biodiversity Protection; (3) Sustainable Coastal Zone Management; (4) Air Quality Management and Protection; (5) Sustainable Water Resource Management; (6) Science and Technology for Sustainable Development; (7) Southeast Asian Sustainable Development Information Network; (8) Policy Reform for Sustainable Development; and (9) Governance Reform for Sustainable Development

Important prerequisites to the pursuit of the subregion's sustainable development goals are:

- Multi-stakeholder and participatory governance mechanisms at the national level, e.g. through establishment of national councils for sustainable development (NCSDs);
- Formulation or updating of national sustainable development strategies (NSDS);
- Development of processes and mechanisms to mainstream civil society participation in ASEAN deliberations;
- Co-ordination and integration at the Southeast Asian subregional level of

- economic, social, and environmental initiatives and policies;
- Implementation of carefully designed sustainable development demonstration projects across the Southeast Asian subregion.
- Strengthening government accountability (e.g. anti-corruption policies and programs)
- Strengthening social responsibility and accountability in the private sector, international organizations, and civil society
- Intimate involvement of the relevant multilateral agencies (e.g., ADB, ASEAN, ESCAP, MRC, UNDP, UNEP)
- Upholding a rights-based approach to sustainable development and the principle of free prior informed consent in the implementation of development projects.

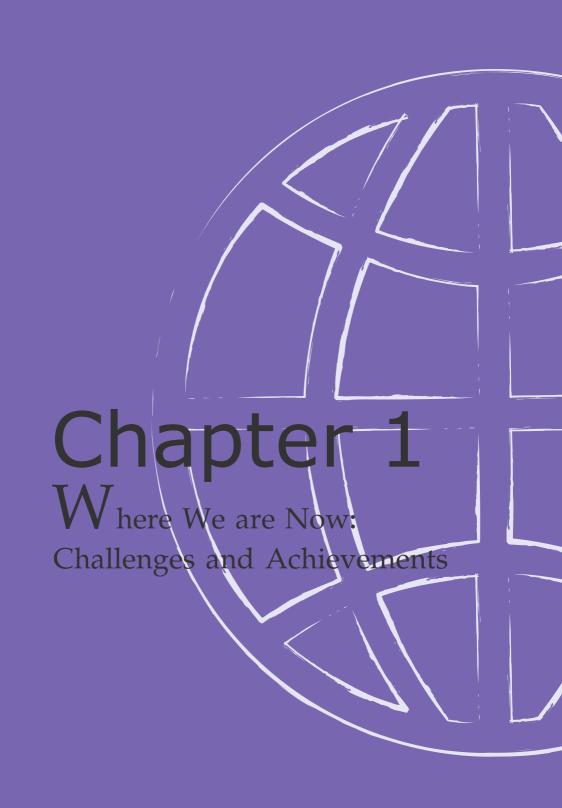
The Strategic Plan of Action for the Environment (SPAE), 1999-2004, includes 15 specific, time-bound ASEAN initiatives related to environmental protection and the promotion of sustainable development.

Important emerging issues that affect Southeast Asia include those related to globalization and trade, biotechnology and information technology. In addressing challenges arising from these emerging issues, the following are recommended:

- Undertake a subregional assessment of the impacts of globalization;
- Respect the autonomy of legitimate environmental policies;
- Make trade policy more transparent and participatory;
- Develop clear policy guidelines in promoting clean industries and technologies;
- Develop a code of conduct, or best practices for multinational enterprises (MNEs);
- Promote the use of e-commerce in trading of agricultural products;
- Strengthen consumer organizations in the

- countries of the subregion;
- Strengthen small producer networks on major crops;
- Formulate and disseminate government policies on biotechnology;
- A five-year moratorium on the field-testing of GMO products;
- Ensure that policies and practices relating to Intellectual Property Rights (IPRs) and the conservation of biodiversity are mutually supportive.

The collective and individual work agenda facing the Southeast Asian countries in the years ahead is a heavy one, necessitating collaboration, cooperation and counterparting among governments, civil society, business and the international development institutions. Southeast Asia has made strong headway in fostering and effectively harnessing such partnerships for sustainable development. Still, the scope for further widening and deepening such partnerships in Southeast Asia remains large. ASEAN can lead the way by effecting stronger and more systematic participation by both by civil society and the private business sector in its development processes.



# Chapter

Where We are Now: Challenges and Achievements

#### 1.1 The Challenges Before Us

Still not quite fully recovered from the Asian financial crisis of 1997/98, the countries of Southeast Asia are facing a wide array of challenges spanning their economic, social and environmental concerns. The crisis reversed improvements in the poverty situation achieved over years of dynamic economic growth, as severe currency depreciation and government fiscal imbalances also forced dramatic adjustments within the subregion's economies. The natural environment, already put under heavy pressure by rapid growth of economic activities especially in the more dynamic economies of the subregion, was put under even more severe pressure from troubled manufacturers and displaced workers, both of whom intensified exploitation of natural resources in the face of crisis. Furthermore, pollution control measures have been among the first to be set aside by manufacturers in the effort to reduce costs. On the other hand, governments have been unable to respond to these intensified environmental pressures due to reduced budgetary resources caused by the economic slowdown.

Given the subregion's geographic, economic and cultural diversity, the countries of Southeast Asia face very different sustainable development challenges, but at the same time confront common challenges typical of industrializing and urbanizing economies. These common challenges include disparities in social and economic welfare among

regions at the subnational level, especially between the urban centers and the rural countryside; social and environmental pressures from industrialization and rapid urbanization; and general degradation of the environment.

Below are discussed some of the key sustainable development challenges facing the subregion.

# A. The social and economic challenges Southeast Asia faces are daunting

 Southeast Asia accounted for 8.6 percent of the world's population in 2000, with an aggregate population of 522 million in the ten ASEAN member countries. Three of the world's megacities (i.e. with populations exceeding 10 million), are situated in the subregion, namely, Bangkok, Metro Manila and Jakarta.



- There is wide diversity in the level of economic development within the subregion, with per capita incomes ranging from US\$260 to US\$30,200. Cambodia, Lao People's Democratic Republic, Myanmar and Vietnam are at the lower end while Brunei Darussalam and Singapore occupy the higher end of the income spectrum.
- The average ranking on the UNDP's Human Development Index (HDI) of the ASEAN countries had moved up from 96th in 1993 to 87th in 1999, out of a field of 174 countries. But this varied widely between Singapore's rank of 43rd and Lao PDR's 141st. People earning less than US\$1 per day had gone down from 24 percent of the subregion's population in 1987 to 11 percent in 1998. Those earning less than US\$2 per day declined from 63 percent to 45 percent in the same period, still a rather high number.
- Literacy rates vary widely across the subregion, with illiteracy among men ranging from 3 to 43 percent in 1998, and 6 to 80 percent in women.Relatively lower access to education has led to exploitation of women, especially from poorer nations, in the sex and employment trades. Most ASEAN nations have inadequate enforcement capabilities to curb trafficking of women and children. Even where their employment has been voluntary, women from poorer nations who are seen as cheap sources of labor especially as domestic help in other parts of the world have become vulnerable to rape, abusive practices and sometimes forced prostitution.
- While notable progress has been made in add ressing overall health concerns of peoples in the sub region, the absolute numbers of people without access to safe water and sanitation remain staggering. The spread of HIV and AIDS resulting from rampant sex exploitation has become a growing public health problem in the subregion. Drug trafficking and drug abuse

- including in schools at the secondary level and up have likewise become significant public health concerns.
- In much of the subregion, deep-rooted social attitudes towards women and their position in the home and society have relegated women to a disadvantaged position in education, enterprise and public office. Many women in Southeast Asia lack knowledge and literacy in politics and are ignorant of their political rights. There is also a perception of women's political role as merely being supportive; at the same time, there is lack of women's initiative to work towards overcoming the system that prevents the recruitment, nomination and promotion of women to positions of decision-making. This is reinforced by the reluctance within established political organizations to recognize women members with leadership potentials. Finally, there is in general lack of interest in politics and public affairs among women in much of Southeast Asia.
- One-third of all indigenous peoples in the world are in Asia. Indigenous groups in Southeast Asia usually have low-impact life styles and sustainability has been a necessity for survival. They are often the most vulnerable members of society to development impacts and environmental change. Although Agenda 21 recognizes the role of indigenous groups, there has been little progress over the past decade in mainstreaming the concerns of the subregion's indigenous groups into development decision-making.

# B. Pressures on water resources

 Water abstraction from rivers, lakes, storage reservoirs and underground aquifers is creating a growing imbalance between supply and demand for numerous competing water users in Southeast Asia. Water scarcity, which is most critical at the end of the dry season, is accompanied by water quality degradation and pathogenic bacterial pollution from human waste. Seasonal flooding is a serious hazard in numerous SE Asian watersheds, including a number of transboundary rivers. Conflicts between competing water users are increasing, and can involve local, provincial, national, as well as transboundary users and interest groups.

Many rivers in the subregion run through more than one country. For example, Kapuas River in the island of Borneo runs from Kalimantan in Indonesia to Sarawak in Malaysia; the Mekong River runs through China, Myanmar, Laos, Thailand, Camb odia, and Vietnam. Countries through which these rivers run obtain enormous benefits, which are affected by each country's respective actions affecting the common resource. Thus, special mechanisms for the joint management of the water resource are called for. The Lower Mekong River presents what is arguably the most challenging Southeast Asian water management issue from a subregional perspective. The Mekong River Commission (MRC) was established specifically to respond to this, with a mandate "to promote and co-ordinate sustainable management and development of water and related resources for the countries' mutual benefit and the people's well-being, by implementing strategic programs and activities and providing scientific information and policy advice".

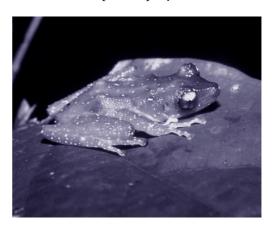
#### C. Pressure on Biodiversity

 Southeast Asia is one of the earth's most biodiverse areas, with three out of the world's 17 megadiversity countries being in the subregion, namely Indonesia, Malaysia and the Philippines. The subregion supports about half of the world's terrestrial and marine biodiversity, contains four biodiversity "hotspots" and 36 out of a global total of 221 Endemic Bird Areas, as well as a number of other endemic plant and animal species which require special protective measures. Indonesia is ranked as one of the top five countries in the world for biological richness and contains more than 15% of all vertebrate species.

• However, the rich biodiversity of the subregion is under serious threat from human activities that result in habitat loss and degradation, as well as over-exploitation of biological resources. Illegal trade in endangered species of the subregion's species and wildlife and their products also threatens Southeast Asia's biodiversity. The importation of exotic and alien species presents still another threat. Laws and regulations to control trade in such species are generally inadequate, and weakly enforced.

# D. Pressure on forestry resources

Between 1990 and 2000, the subregion lost an average of 23,260 square kilometers of forests per year, with Indonesia, the Philippines, Thailand, Myanmar and Malaysia having the highest loss rates due to logging, shifting cultivation, conversion to plantations and forest fires. The rate of deforestation of 1.04 percent per year is more than



four times faster than the global average of 0.23 percent per year.

Forest fires occur in most countries in Southeast Asia, particularly in Indonesia where extensive fires in the late 1990s caused havoc for the neighboring countries in the subregion. About one million hectares of Indonesia's natural forests were destroyed by forest fires in 1997. Causes include agricultural land clearing, hunting, non-timber and forest product collection. Forest fires have, in turn, contributed a great deal to the reduction of forest cover and wildlife. The Indonesian forest fires in 1997-98 and the associated haze resulted to an estimated cost of US\$9 billion, damaging 9 million hectares and adversely affecting 70 million people. The damage transcends national boundaries, with Singapore and Malaysia bearing a significant external cost due to atmospheric pollution.

# E. Pressure on marine and coastal resources

Two of the largest archipelagic states in the world (i.e. Indonesia and the Philippines) and thousands of other islands are located in the region. The human population in Southeast Asian coastal cities and towns doubled between 1980 and 2000, placing additional



stress on coastal ecosystems. Coastal and marine resources in Southeast Asia are subject to overexploitation, pollution and conflicting uses. Coral reefs within the region have been badly degraded and are also vulnerable to coral bleaching which is expected to intensify with further sea surface temperature increases caused by global warming.

- Overfishing, encroachment by foreign fishing vessels, territorial disputes on critical marine and coastal ecosystems such as the case of the Spratly Islands, oil spills and land based pollutants (garbage, mining waste, soil erosion from reclamation, sand mining) are persistent issues in the subregion. Not only are the fish stocks declining at alarming rates; the number and impact of commercial trawling operations also have a devastating impact on the environment and the livelihood of traditional fishing communities. The encroachment of commercial fishing boats into sovereign national waters results in numerous conflicts among nations and in some instances, apprehensions have resulted in fatalities.
- Commercial fishing operations also encroach into the shoreline zones that are traditionally utilized for artisanal or smallscale fishing practices. The encroachments have rapidly diminished fish populations and led to severe degradation of the marine environment from bottom trawling and other detrimental techniques. A critical concern is the marginalization of traditional and small-scale fishers who depend on coastal resources to support their families and communities. In addition to the loss of income from depleted fish stocks, fishing communities also can suffer from malnutrition.
- In the live food fish and tropical aquarium fish trades, collectors apply destructive practices that destroy coral reef ecosystems and deplete fisheries resources to supply fish for restaurants and aquariums world-

wide. There is also an imbalance in the planning and allocation of finances and technical resources of governments that tend to cater to the demands of rich consumers (e.g. Hong Kong, Japan, Europe, US) over the needs of national consumers.

# F. Pressure on air quality and global warming

- Urban air quality in the subregion has already reached levels hazardous to health, with total suspended particulates ranging from 95-270 micrograms per cubic meter (μ/cu.m.), whereas the World Health Organization (WHO) guideline is 100 μ/ cu.m. Air pollution has come primarily from vehicle emissions and industrial pollution, with urban centers having the worst levels of air quality.
- Many countries in the Region are dependent on imported fuel, mainly petroleum, which costs the governments billions of dollars a year. For example, in 1995, 14.6 billion metric tons of the Philippines energy supply went to electricity production. The importation of cheap motorbikes from China by Vietnam, Laos, Cambodia and Thailand further raises the demand for petroleum. The burning of petroleum produces prodigious amounts of heat and gases that are not only hazardous to human health but are greenhouse substances that exacerbate global warming. With increased population, industrialization and electrification, SE Asia's contribution to global warming will also grow.
- Future global warming and climate change associated with greenhouse gas emissions is anticipated to be one of the most serious environmental impacts of the 21st century in Southeast Asia. Coastal areas are highly vulnerable to the effects of sea level rise. Coastal and lowland flooding, already a serious problem in SE Asia, is

expected to intensify. Poor people and those who occupy marginal coastal lands are most vulnerable to present and future flooding impacts.

### G. Pressure along with problems posed by soil degradation

• Soil erosion from surface water runoff is a problem in Southeast Asia that contributes to the loss of topsoil. Problems are most acute in the flood-prone countries like the Philippines, Thailand, Vietnam, Malaysia, Indonesia, Cambodia and Lao PDR. In these countries, water erosion impacts an average of 20% of the total land areas. Resulting declines in soil fertility affect certain countries in Southeast Asia, and cover 56 million hectares, of which 26 million hectares are in Thailand (representing 50% of the surface area of the country).

# H. Pressure on transboundary pollution

There are two major concerns in the region in regard to the increase of toxic chemicals and transboundary pollution. The first relates to the movement and dumping of hazardous waste materials into less developed nations in Southeast Asia. Among the chemicals of primary concern are those that have been banned in other countries because of their associated environmental problems. These include chemicals such as DDT, a pesticide that has been banned for decades but has resurfaced in Southeast Asia. Other Persistent Organic Pollutants (POPs) that are harmful to the environment and people, such as endocrine disruptors, are found throughout the region and need to be phased out of use. These include the Agent Orange at military bases from the Vietnam war period dumped in Southern Thailand and long-term consequences in Vietnam from herbicide spraying, as well as toxic wastes left over by the US Army Forces in former military bases in the Philippines (Subic, Clark and others).

Another aspect of transboundary pollution is the problem of operational discharges and oil and chemical spills from tankers and other ships plying the waterways of the region. Operational discharges from vessels may involve the release of sludge and oily wastes, sewage and garbage, flashings from the cleaning of oil and chemical tanks, and ballast water discharges. On this latter point, ballast water discharges are the principal route for the introduction of alien species to local ecosystems, resulting in the proliferation of foreign flora and fauna at the expense of native species and local livelihoods. Shipping accidents can be catastrophic in terms of the resulting impacts on ecosystems and human lives. With millions of tons of crude oil, petroleum products and noxious and hazardous chemicals being transported through the region's sea lanes on a daily basis, and projections that shipping will triple in the next 25 years, the threat of accidents is increasing from the busy Straits of Malacca to the vast South China Sea.

# I. Pressure on unsustainable industrial practices

• The environmental performance of industry in Southeast Asia has been compromised by inadequate land use planning and zoning of industrial activities, poor use of environmental management tools, lack of transparency, and weak adoption of environmentally sound technologies. In many Southeast Asian countries there are conflicting interests between the industry and environment ministries, often leading to inconsistent and even contradictory policies.

Frequently, there is inadequate enforcement of environmental policies and regulations, allowing the persistence of illegal industrial activities.

These and other similar concerns make the pursuit of sustainable development in Southeast Asia particularly challenging. And given the wide diversity in the Southeast Asian countries' circumstances, subregion-wide collective actions need to be complemented with intra-regional and individual national initiatives.

# 1.2 What We Have Achieved

Most of the countries in Southeast Asia were represented at the UNCED in Rio in 1992, and almost all countries have acceded to or ratified the relevant international conventions and treaties for sustainable development (see Appendix 1). While there has been notable progress in implementing these goals, the achievement across the region varies markedly from country to country, with each country taking a different thrust towards the realization of their national development objectives. These include economic incentives, new legislations, and social reform agenda, among others.

# A. Sustainable development is being integrated into national plans.

A number of countries have made significant steps towards translating the ideals of Agenda 21 into their national development strategies or plans. Brunei, through its 6th and 7th National Development Plans, has progressively built up its policies towards pursuit of sustainable development. Malaysia has likewise integrated critical action programs of Agenda 21 into its five-year development plans, starting with the 7th Malaysia Plan (1996-2000) and through the subsequent plans. It has also plotted its longer term directions in

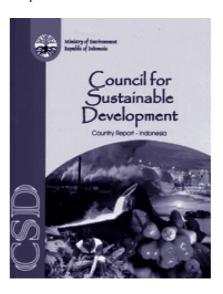
its Vision 2020. Singapore has a Green Plan with corresponding action programs, which comprise the national environmental master plan towards improving the living environment and raising public health standards.

- Indonesia, Myanmar and the Philippines have prepared their national Agenda 21. In addition, Indonesia formulated sectoral plans for human settlements, tourism, mining, energy, and forestry, and some local governments in both the Philippines and Indonesia are also working on their local Agenda 21. In Thailand, the Sustainable Development Action Plan forms the blueprint for the country's sustainable development.
- Still, even with the excellent strategies and plans that have been prepared, most tend to be weakly linked to the main economic development plans, are not adequately financed and to date have had little political support.

### B. Participatory mechanisms and processes are being provided.

National councils for sustainable development (NCSDs) or their equivalent have been created as focal points for dialogue among stakeholders in planning and implementing sustainable development objectives. NCSDs have tended to undertake four tasks: (1) facilitating the participation of civil society in government decisionmaking, (2) promoting an integrated approach to economic, social and environmental issues, (3) localizing global agreements and (4) assisting civil society in United Nations processes and deliberations. NCSDs have served as a venue for balancing competing priorities of the government and major groups in attempting to forge consensus among competing interests.

- The Philippines and Thailand have established their respective NCSDs, and Indonesia is expected to create an apex body for sustainable development soon. Still in other countries, the environment ministry or the economic planning departments have been tasked to undertake the overall coordination for meeting the objectives of sustainable development. Whatever the existing institutional mechanisms for sustainable development are, an important element of these bodies is the provision for multi-stakeholder participation. Appendix 2 shows the sustainable development mechanisms in the countries of Southeast Asia.
- In general, public awareness of sustainable development issues has increased significantly in the subregion during the last decade. In most countries, members of civil society have joined in the discussion and the pursuit of sustainable development goals. In some instances, civil society organizations (CSO) and business organizations are active members of the national council for sustainable development, which has shown that a partnership between different stakeholders can result in better coordination and consolidation of positions.



# C. Subregion-wide cooperation is being strengthened.

The countries of Southeast Asia have a long history of cooperation in cultural, economic, and environmental concerns. Among several existing forums for subregional cooperation, the Association of Southeast Asian Nations (ASEAN), which includes all the countries in the subregion except East Timor, has the longest history and the most extensive areas of coverage. The achievements of the Southeast Asian subregion in pursuit of sustainable development are manifested in the initiatives undertaken by the ASEAN.

- ASEAN's earliest initiative on environmental cooperation was the ASEAN Subregional Environment Programme of 1977. The link between environment and sustainable development gained explicit recognition in 1992 in Singapore. Through the Singapore Declaration, ASEAN pledged "to play an active part in protecting the environment by continuing to cooperate by promoting the principle of sustainable development and integrating it into all aspects of development."
- This commitment to sustainable development was reaffirmed in the Resolution on Environment and Development (Bandar Seri Begawan 1994) to promote the principles of the Rio Declaration on Environment and Development, and to implement Agenda 21; to implement the ASEAN Strategic Plan of Action on the Environment; to adopt a set of harmonized environmental quality standards for ambient air and river water quality, and to attain these standards by 2010.
- Likewise, the Jakarta Declaration on Environment and Development (1997) aimed, among others, to control transboundary pollution, conserve and manage natural resources and the environ-

- ment, establish an ASEAN Regional Center for Biodiversity Conservation, to urge developed countries to fulfill their commitments made at UNCED. The ASEAN Vision 2020 sets the goals for sustainable development in the subregion until 2020 and the Hanoi Plan of Action details its implementation strategies.
- The first ASEAN Strategic Plan of Action on the Environment (SPAE 1994-1998) achieved its objectives, including the adoption of the Cooperation Plan on Transboundary Pollution in 1995, addressing atmospheric pollution, movement of hazardous wastes, and transboundary shipborne pollution (in line with GATT principles). The plan also facilitated the development of a Regional Haze Action Plan, following the 1997 forest fires. ADB, ESCAP, the World Meteorological Organization and UNEP supported national and subregional endeavors within their capacity and resources.
- The second ASEAN Strategic Plan of Action on the Environment consists of the key activities to be implemented over the next 5 years, including in the areas of coastal and marine environment, nature conservation and biodiversity, multilateral environmental agreements, management of land and forest fires and haze, and other environmental activities. The current plan for the period 1999-2004 includes the ratification of the ASEAN Agreement on Transboundary Haze Pollution. Programs relating to the protection of biodiversity are also being pursued, including the protection of heritage parks and reserves, and the adoption and implementation of the ASEAN Protocol on Access to Genetic Resources, and Sustainable Management of Water Resources. Publication of the State of the Environment in Southeast Asia is now also being regularly undertaken, with two having been produced so far. (Appendix 3 presents the various existing

subregional cooperation mechanisms and their contributions towards the goals of sustainable development in the region.)

# D. Even as Global agreements are being adhered to.

- Finally, the Southeast Asian countries have ratified or signed many of the multilateral environmental agreements (MEAs), creating new obligations and opportunities for these countries. These include agreements and conventions on: combating desertification; nuclear safety; non-navigation uses of international watercourses; conservation and management of fish stocks; safety of spent fuel management and safety of radioactive management; prior informed consent procedures for certain hazardous chemicals and pesticides in international trade; protocol on liability and compensation for damage resulting from transboundary movements of hazardous waste and their disposal according to the Basel Convention; biosafety; and persistent organic pollutants.
- Several mechanisms have been created, or have special roles with respect to international environmental agreements, including the Global Environment Fund, Kyoto Protocol, Basel Convention, Ramsar Convention, Convention on Biodiversity, Convention on Desertification, Persistent Organic Pollutants Convention. These agreements and funding mechanisms are often provided as "additional to" official development assistance and represent an integral part of environmental sector in Southeast Asia.
- In general these agreements: (1) require capacity building and institutional strengthening to ensure effective implementation, (2) provide for direct funding of projects that meet the goals of the international

agreement, and (3) increase the need for environmental assessment, planning, and management of the programs and projects that arise out of these agreements.

#### 1.3 What We Have Learned

The ongoing cooperation in Southeast Asia has come from the realization that environmental, economic and social problems, especially those that require long-term and difficult solutions, could be better addressed by collaborative efforts through the sharing of knowledge and the pooling of resources. The region's understanding on international sustainable development issues of common interest have also allowed the subregion to effectively articulate their concerns in international forums. Furthermore, regional cooperation provides economies of scale, reduces transaction costs, speeds up development through improved sharing of knowledge, and increases opportunities, particularly those that partners on their own cannot capture (such as improved resource mobilization, private sector development, and gains from trade).

Following are some particular lessons gained from experience of the past years:

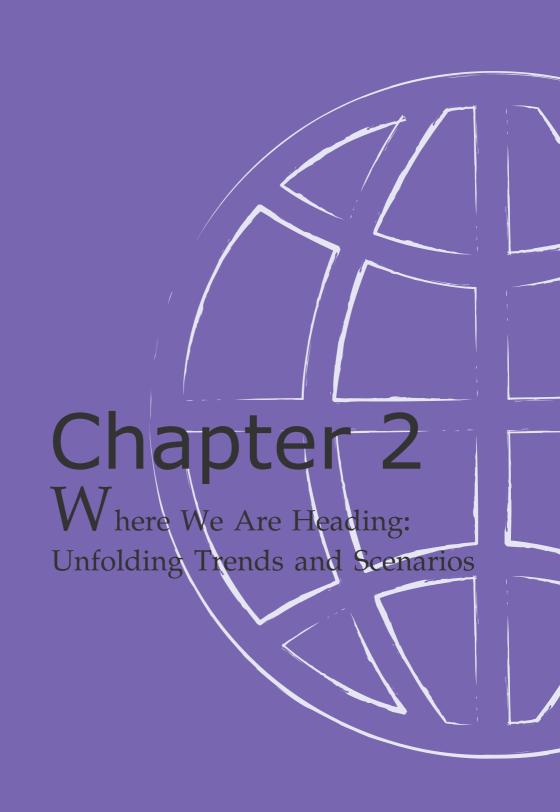
• Slow progress of implementation of Agenda 21 has been traced to limited resources, inadequate capacities, and policy gaps



along with unclear and overlapping roles among national government agencies. There remains a general tendency to consider environment as a separate issue from social and economic development. The sectoral approach to development taken by most countries has revealed its own shortcomings.

- In spite of a number of largely uncoordinated discussions and initiatives on the matter, a systematic monitoring of standardized social, economic, human development and environmental performance indicators remains to be an unfilled need. Such indicators need to be relevant to the national and local contexts in each country.
- The overall development plans of all countries in the region need to be reconsidered so that development activities are less dependent on fossil fuels. Government commitment is necessary to support initiatives to develop and/or sustain renewable energy technologies (e.g. by shifting subsidies away from traditional fuels). Apart from this, strict policies and consistent enforcement are required to control CO2 emissions from vehicles and industrial equipment.
- Key policies on energy, water, forests, coastal resources, and mineral resources have erred by keeping natural resource prices below their market value. Artificially low prices encourage over use of resources and encourage waste. Other policies have subsidized the use of dirty fuels, pesticides, and fertilizers. This has not only created inefficient and excessive use, it has also led to serious air pollution, contamination of soil and water by persistent organic pollutants, and eutrophication of lakes, rivers of streams. There are a number of options for economic intervention, including price deregulation, removal of subsi-

- dies, tax reform, encouraging investment in environmental friendly industries, and promotion of energy efficiency and waste minimization.
- Experience in Southeast Asia has revealed that relatively strict environmental standards have been adopted from other jurisdictions without much analysis of the compliance costs and enforcement regime required. The result has been lack of enforcement and outright non-compliance. To be effective, environmental standards must be achievable and be backed up by consistent monitoring and enforcement. The standards and the process of monitoring compliance should be designed to fit the local context, with due consideration for government's enforcement capability and financial capability of existing enterprises and local communities.
- Despite the well-crafted national strategies for implementation of Agenda 21 in most Southeast Asian countries, there is a general lack of information from the public point of view on progress, and where it is available, only government secinitiatives are being reported. Initiatives at the subregional (i.e. ASEAN) level are also largely unknown outside of the ASEAN intergovernmental circles. A key challenge therefore remains in improving access to relevant information, in order to open up more channels and forums for public participation, to improve transparency and accountability, and to counter corruption and weak governance. Specifically, participation of the major groups should be sought in all levels of the development process, from planning to implementation and monitoring. But effective participation requires informed participation.



# Chapter 2

Where We Are Heading: Unfolding Trends and Scenarios

The overall development outlook for Southeast Asia in the next decade is being shaped by worldwide and regional trends. Global trends provide an increasingly challenging environment within which the subregion and individual countries therein must pursue sustainable development and promotion of their peoples' well-being. These trends have both negative and positive implications.

#### On the negative side:

- Globalization, apart from spurring more active trade in primary resource-using commodities, has also facilitated the spread of transnational crime and communicable diseases (HIV/AIDS, SARS). Growing trade in illegal drugs and human trafficking are among the problems accompanying globalization. The distribution of benefits from an increasingly globalized trade and investment regime have been highly uneven, resulting in a widening income gap between rich and poor countries and between the rich and poor within countries.
- Rapid technological advance especially in information and communication technology (ICT) and emergence of the "New Economy" has brought about the "digital divide", where the gap between rich and poor within and among countries widens even further due to differential access to ICT. At the same time, cross-cultural influences, particularly the onslaught of Western culture, lifestyles and values

propagated by Western-dominated global mass media have compromised the more sustainable indigenous lifestyles characterizing the cultures of Asia. This has also led to concerns about a steady loss of cultural identity and heritage in the nations of the region. Meanwhile, spiritual values are also being replaced by material values, a trend that must be reversed if sustainable development is to be achieved.

• Growing urbanization is rapidly changing human demographics in SE Asia. In 1999, 38% of the Southeast Asian population lived in urban centers, with the proportion of total population residing in urban centers growing by 3% annually. This implies a two-fold increase in the level of urbanization in most countries by the year 2025. Environmental pressures from urbanization include deteriorating air and water quality, persistent noise pollution,



and the management of municipal, industrial and hazardous waste. These impose huge costs in terms of both public health and reduced productivity. For example, in both Bangkok and Jakarta, the annual costs of air quality deterioration from dust and lead pollution are estimated at US\$ 5 billion. In addition, there will be a need for massive future investments running into trillions of dollars in urban transport, sewage collection and treatment, and the collection and disposal of solid wastes in Southeast Asia over the next 25 years.

Climate change has become an unmistakable consequence of an increasingly energy-intensive economic growth in most parts of the globe, including in Southeast Asia. While the industrialized countries are largely responsible for most of the carbon dioxide in the atmosphere and the ASEAN region is omparatively a very minor contributor to the problem, it may have suffered more from the negative impacts of climate change. In a recent Asian Development Bank (ADB) study, the energy sector was found to account for 80% of the total 1990 greenhouse gas (GHG) emissions of the Asian countries participating in the study. Under baseline projections, overall GHG emissions will triple by 2020 compared to 1990, while the emissions from the energy sector will



quadruple. Thus the projections indicate that the energy sector will account for about 90% of total GHG emissions by 2020. Meanwhile, high rates of economic growth have been accompanied by rapid growth in sales of motor vehicles in the region, which in itself will spur even more rapid growth in GHG emissions and water demands (i.e. for washing), unless managed properly.

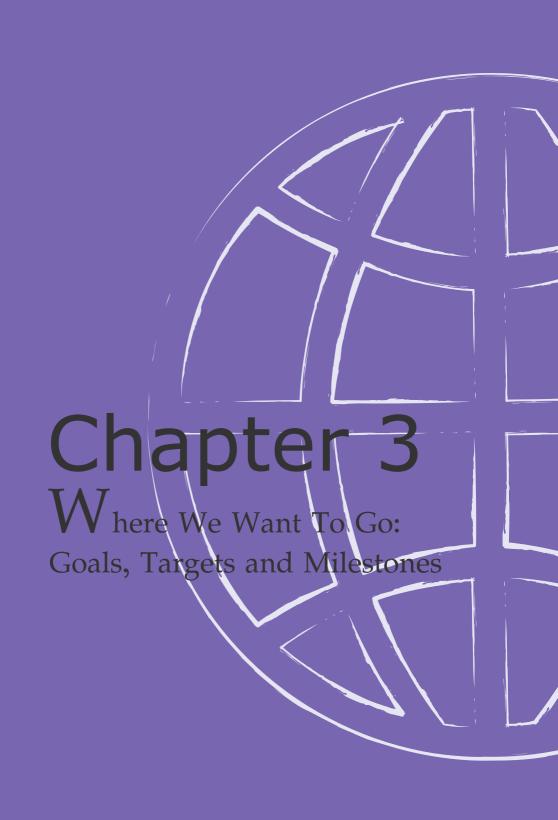
 The rise of international terrorism, especially in the wake of the World Trade Center and Bali attacks, has changed the entire complexion of global security, and its negative impacts on world economic, social and political order have only begun to unfold.

#### On the positive side:

- Widening awareness and concern for sustainable development has been a positive trend since the 1992 Rio Earth Summit led countries to consciously pursue more responsible development under the guidance of Agenda 21. Nonetheless, sustainable development challenges arising from environmental degradation and urbanization, among other things, have intensified and put greater pressure on the welfare of future generations of Southeast Asians.
- Strengthening of global civil society and multi-stakeholder partnerships, another positive trend, is facilitated by the ICT revolution and the increased openness of governments and international bodies to non-government participation. Initiatives and resources from civil society and the private business sector have increasingly taken on a stronger role in the pursuit of sustainable human development. In some countries of the subregion, both NGOs and the business sector have become valuable partners in concrete initiatives for sustainable development.

Against this backdrop, Southeast Asia entered the 21st century hopeful of a sustained rebound from the economic slowdown stemming from the Asian financial crisis that affected all countries in the subregion. Signs point to such a rebound already taking place, with Thailand, Malaysia and Vietnam returning to economic growth rates exceeding 5 percent in 2003, while the other economies in the subregion are likewise showing improving growth prospects. Nonetheless, the continuing threat of international terrorism and the possibility of a resurgence of the SARS epidemic still cloud the medium-term economic outlook.

Within countries in the subregion, continuing industrialization, urbanization and rising per capita incomes are putting everincreasing pressures on the environment and natural resources. Historically, per capita energy and water consumption rise rapidly with per capita income, particularly for countries undergoing economic restructuring. Solid waste generation likewise grows disproportionately with rising incomes and heightened consumerism. As the subregion further emerges out of the difficulties of the Asian financial crisis, these trends will increasingly bring about problems associated with high energy and water consumption, including increased air and water pollution, growing demands for effective solid waste management, and loss of indigenous sustainable lifestyles.



# Chapter 3

Where We Want To Go: Goals, Targets and Milestones

The long-term sustainable development framework for the sub-region has been fully in place since the 1997 ASEAN Summit that reaffirmed the aims of the association and spelled out its vision for the sub-region by year 2020. Since then, ASEAN Vision 2020 has been defined and translated into concrete goals, targets and activities mainly through the first medium-term action plan for 1999-2004 known as the Hanoi Plan of Action. The sustainable development dimension of the vision was further defined during the sub-regional preparations for the Johannesburg World Summit for Sustainable Development (WSSD) that reviewed the situation and refined the plan of action as reflected in the Southeast Asia Regional Report to the WSSD.



ASEAN Vision 2020 envisions an ASEAN that is:

"...a concert of Southeast Asian nations, outward looking, living in peace, stability and prosperity, bonded together in partnership in dynamic development and in a community of caring societies."

"...socially cohesive and caring ASEAN where hunger, malnutrition, deprivation and poverty are no longer basic problems, where strong families as the basic units of society tend to their members particularly the children, youth, women and elderly; and where the civil society is empowered and gives special attention to the disadvantaged, disabled and marginalized and where social justice and the rule of law reign."

"... clean and green ASEAN with fully established mechanisms for sustainable development to ensure the protection of the region's environment, the sustainability of its natural resources, and the high quality of life of its peoples."

Among others, the corresponding goals set forth include:

- Equitable economic development and reduced poverty and socio-economic disparities;
- Adequate levels of food within ASEAN and food accessibility during instances of food shortage;
- Energy security and sustainability of energy supply, efficient utilization of natu-

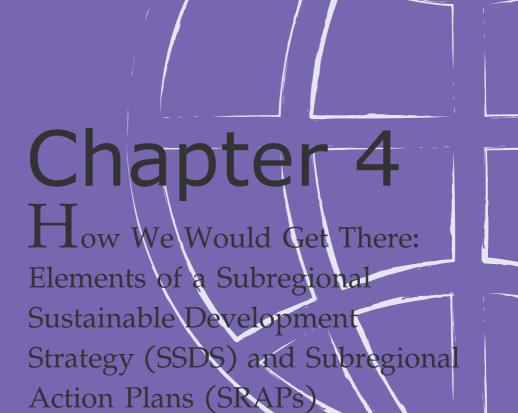
ral energy resources in the region and the rational management of energy demand, with due consideration to the environment;

- Measures taken to protect the most vulnerable sectors of our societies;
- Framework for ensuring the survival, protection and development of children;
- Promotion and protection of human rights and fundamental freedoms;
- Equal access to basic, general and higher education;
- A regional water conservation program;
- Protection of the marine environment from land-based and sea-based activities;
- Improved ambient air and river water quality; and
- Enhanced regional efforts in addressing climate change.

ASEAN Vision 2020 contributed to the formulation of the Millennium Development Goals (MDG) while guiding the national development goals of its member countries. The two statements of visions and goals complement each other well in the subregion. ASEAN Vision 2020 has a longer time frame and is more focused on economic cooperation as means to attain sub-regional sustainability. The MDGs are geared towards eradication of poverty and has a shorter time frame given the urgency of the situation. The MDG consists of eight goals, each one with specific targets. Even if the sub-region includes two of the highest income countries, the goals and targets, which are directed at eradicating poverty, still generally apply (Table 1).

In the preparations for the WSSD spearheaded by the Task Force composed of ADB, ESCAP, UNDP and UNEP in consultation with the ASEAN Secretariat and civil society groups, all these have been further translated into specific goals for the subregion. The specific goals fall under nine headings describing specific Subregional Action Plans (SRAPs) which resulted from the Southeast Asia Subregional Preparatory

Meeting for the WSSD held in Manila on October 17-19, 2001. These various goals are outlined in Table 2.



# Chapter 4

How We Would Get There: Elements of a Subregional Sustainable Development Strategy (SSDS) and Subregional Action Plans (SRAPs)

## 4.1 Setting the Institutional and Policy Framework

Sustainable development is at the outset a problem of governance (ADB et al, 2001). In accordance with Principle 10 and Chapters 37 and 38 of Agenda 21, ensuring active and meaningful multi-stakeholder participation in all sustainable development processes would be a prerequisite. The following would help bring this about:



- Establishment of national-level multi-stakeholder bodies that has representation from government, civil society and business, with a mandate to address sustainable development (e.g. a national council for sustainable development or NCSD). This would best be built on existing structures (e.g. national environment councils) wherever possible.
- Formulation (where one does not yet exist) or updating (where one is in place) of national sustainable development strategies (NSDS), ideally by multi-stakeholder bodies (such as described above), or at least through a multi-stakeholder process. This must be aligned with, if not taking the form of the main development strategy or plan guiding the country's overall policies, programs and projects for development.
- Development of processes and mechanisms to mainstream civil society participation in ASEAN deliberations, in the same way that business sector participation has long been institutionalized through the ASEAN Business Council. A similar regular civil society consultation, with the possible establishment of an ASEAN Civil Society Council or Forum, should be made part of the various ASEAN senior officials' and ministers' meetings. Some prior steps required include: (1) compilation of an inventory/ database on significant active civil society organizations in the subregion

(c/o ASEAN Secretariat in cooperation with ADB, ESCAP, UNEP and UNDP) to determine appropriate representation; (2) establishment of NCSDs in the member countries; and (3) greater transparency and proactive information dissemination (e.g. via the ASEAN website) on the various programs and initiatives of the ASEAN to enhance scope for civil society and private sector partnership counterpart support. The establishment of an ASEAN Civil Society Fund to finance these activities may be explored, with possible support from the ADB, governments and private funding sources (e.g. private foundations).

- Co-ordination and integration at the Southeast Asian subregional level of economic, social, and environmental activities along three different dimensions: between sectors, between the different levels of government (district, municipal, provincial, national), and between countries. This would include a mechanism for networking the NCSDs in the subregion.
- Implementation of carefully designed sustainable development demonstration projects across the Southeast Asian subregion. These demonstration projects would best be undertaken as partnerships with local governments and local communities which can participate actively in their design, financing, and implementation.
- Measures to strengthen government accountability (e.g. anti-corruption policies and programs), and to improve governance in the executive, legislative and judicial branches of government, including support from multilateral institutions for public sector reform towards improved quality and efficiency of public service delivery. This would include provision of capacity building for policymakers and

managers on public participation, and strengthening of education and public participation of local communities in SSRAP demonstration projects.

Table 1 Millennium Development Goals				
Goals	Targets	Time frame*		
Eradicate extreme poverty and hunger	Halve the proportion of people living on less than \$1 a day and those who suffer from hunger.	2015		
Achieve universal primary education	Ensure that all boys and girls complete primary school.	2015		
Promote gender equity and empower women	Eliminate gender disparities in primary & secondary education; at all levels	2005 2015		
Reduce child mortality	Reduce by two thirds the mortality rate among children under five	2015		
Improve maternal health	Reduce by three quarters the ratio of women dying in childbirth	2015		
Combat HIV/AIDS, malaria and other diseases	Halt & begin to reverse the spread of HIV/AIDS and the incidence of malaria and other major diseases.	2015		
Ensure environmental sustainability  Develop a global partnership for development	Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources.  Reduce by half the proportion of people without access to safe drinking water.  Achieve significant improvement in the lives of at least 100 million slum dwellers.  Develop further an open trading and financial system that includes a commitment to good	2015 2020		
	governance, development and poverty reduction - nationally and internationally  Address the least developed countries' special needs, and the special needs of landlocked and small island developing States			
	Deal comprehensively with developing countries' debt problems  Develop decent and productive work for youth			
	In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries			
	In cooperation with the private sector, make available the benefits of new technologies - especially information and communications technologies.			

Source: UN Website \*Base year is 1990

## Table 2 Subregional Goals for Sustainable Development

#### 1. Sustainable Urban Planning and Infrastructure Development

- Revitalization of urban slums and shantytowns in all SE Asian cities.
- Safe water supply and sanitation provided for all urban residents.
- Enact legislation to support the implementation of environmental management functions at the municipal level.
- Completion of human resource development for municipal officials in the adminis tration and operation of municipal services, as well as in managing public participa tion.
- Active involvement of local communities in municipal activities.
- Vibrant, healthy and safe communities in SE Asian urban areas.

#### 2. Sustainable Land Management and Biodiversity Protection

- Forest cover losses stabilized and maintained at levels of area coverage that exist within each country in 2005.
- Program of plantations for timber production to meet defined growth in demand.
- Establish and effectively manage SE Asia Protected Area Network.
- Biodiversity effectively monitored and biodiversity losses stabilized.
- Stabilization of land degradation.
- Good watershed management practices adopted.

#### 3. Sustainable Coastal Zone Management

- Integrated coastal management plans implemented effectively.
- Coral reefs, mangrove forests, and sea-grass beds protected from human impacts.
- Healthy and vibrant coastal communities.

#### 4. Air Quality Management and Protection

- Transboundary haze pollution hazard minimized and effectively managed.
- Air quality in Bangkok, Jakarta, Manila and all large cities (over 1 million people) to meet WHO guidelines by 2012
- Licensing and zoning in large cities revised to incorporate environmental objectives.
- Schemes to limit and control vehicle use within large urban centers adopted.

#### 5. Sustainable Water Resource Management

- Effective institutional arrangements for managing transboundary rivers.
- Water management plans developed and implemented.

#### 6. Science and Technology for Sustainable Development

- Well-established scientific capability for trans-disciplinary research on sustain able development in SE Asia.
- Well-established indicators for monitoring temporal changes in sustainable develop ment in SE Asia.

## Table 2 (Continued) Subregional Goals for Sustainable Development

#### 7. Southeast Asian Sustainable Development Information Network

• SE Asian Sustainable Development Information Network established and operating effectively with high utilization by the public in the different countries of SE Asia and working closely with NGO's active in the field of sustainable development and knowledge management.

#### 8. Policy Reform for Sustainable Development

- · Establishment of fair market prices for energy, water, timber, and mineral resources
- Completion of the rationalization, based on economics and social equity, of the system of rights to use land, waste, and ecological resources
- Effective integration of environmental consideration into all sectoral policies
- Establishment of a system of subregional educational institutes to provide high caliber research and training on sustainable development policy
- Elimination of barriers to technology transfer and establishment of a viable commercial market for environmental sound technologies

#### 9. Governance Reform for Sustainable Development

- All countries to have a fully functional national multi-stakeholder mechanism (e.g. National Councils for Sustainable Development) as soon as possible
- Credible and effective subregional multi-stakeholder mechanisms for monitoring progress on sustainable development
- Increased decentralization with real empowerment of local communities
- Elimination of pollution transfers by transnational corporations through movement of highly polluting technologies into Southeast Asia
- Elimination of illegal trans-boundary trade in flora and fauna
- Completion of the rationalization, based on economics and social equity, of the system
  of rights to use land, waste, and ecological resources

Source: ask force for the Preparation for WSSD in Asia and the Pacific (2001). Southeast Asia Subregional Report to WSSD.

- Measures towards strengthening social responsibility and accountability in the private sector, international organizations, and civil society.
- Intimate involvement of the existing multilateral agencies which have strong subregional interests as well as explicit mandates for sustainable development in Southeast Asia (e.g., ADB, ASEAN, ESCAP, MRC, UNDP, UNEP) in the development, refinement and implementation of Southeast Asian sustainable development action
- plans. This would include undertaking capacity building and technical assistance programs to support integration of environment into sectoral planning.
- Commitment to a Rights-based Approach
  to sustainable development and the principle of free prior informed consent in the
  implementation of development projects.
  Among other things, the plight of indigenous peoples, of whom Asia has one-third
  of the entire world population, must be
  given due attention and their rights

accorded due respect. The basic right of access to safe water and sanitation must be the basis for their provision to poor rural and urban communities, such that the perverse cost structure for water where the poor often pay much more per unit of water than the rich is corrected. The rights of local communities directly affected by development projects must be upheld, including in ASEAN mega-infrastructure projects and Clean Development Mechanism (CDM) projects based on community resources.

# 4.2 Strategic Plan of Action for the Environment (SPAE),1999-2004

The Hanoi Plan of Action (HPA) adopted by the ASEAN leaders provides the details for the pursuit of the subregion's sustainable development goals in the form of a specific action agenda, initially covering the period from 1999-2004. The Strategic Plan of Action for the Environment (SPAE), 1999-2004, includes 15 specific, time-bound ASEAN initiatives related to environmental protection and the promotion of sustainable development. Table 3 lists the elements of the action agenda.

## 4.3 Subregional Action Plans: Action Agenda

# 4.3.1 Sustainable Urban Planning and Infrastructure Development

- Address the issue of rapid urbanization at the root, i.e. by formulating an effective rural development strategy that will arrest the rapid rural-urban migration flows
- Prepare detailed work plan and budget for urban infrastructure improvement in cities under three size categories: populations exceeding 10M (Bangkok, Jakarta, Manila); 1M-10M; and 100,000-1,000,000.
- Support implementation of the Healthy Cities Project in order to improve the health and quality of life of urban dwellers through improved living conditions and better health services in association with various urban development activities

- Support implementation of the ASEAN Work Program on HIV/AIDS II (2002-2005)
- Source donor assistance for:
  - Reform of legal framework for infra structure development and financing
  - Development of enabling policies infra structure projects of local governments
  - Capacity building for local (municipal) officials

# 4.3.2 Sustainable Land Management and Biodiversity Protection

- Prepare detailed work plan and budget for:
  - Southeast Asian sustainable forestry management.
  - Southeast Asian protected area manage ment.
- Pursue demonstration projects on:
  - Watershed protection in the Greater Mekong Subregion (GMS)
  - Sustainable forestry in Cambodia, Indonesia, Philippines, Myanmar and Malaysia
  - Sustainable agriculture
- Secure multilateral cooperation to curb illegal logging and illegal log and timber trade at both the selling and buying sides, including support for the Forest Law Enforcement and Governance (FLEG) initiative (DFID and World Bank)



## Table 3 ASEAN Strategic Plan of Action for the Environment, 1999-2004

- 1. Carry out the ASEAN Cooperation Plan on Transboundary Pollution with emphasis on the Regional Haze Action Plan by the year 2001;
- 2. Strengthen the ASEAN Specialized Meteorological Centre with emphasis on its ability to monitor forest and land fires and provide early warning on transboundary haze by the year 2001;
- 3. Establish the ASEAN Regional Research and Training Centre for Land and Forest Fire Management by the year 2004;
- 4. Strengthen the ASEAN Regional Centre for Biodiversity Conservation by establishing networks of relevant institutions and carry out collaborative training and research by the year 2001;
- 5. Promote regional coordination for the protection of the ASEAN Heritage Parks and Reserves;
- 6. Develop a framework and improve regional coordination for the integrated protection and management of coastal zones by the year 2001;
- 7. Strengthen institutional and legal capacities to carry out Agenda 21 and other international environmental agreements by the year 2001;
- 8. Harmonize the environmental databases of member countries by the year 2001;
- 9. Carry out a regional water conservation program by the year 2001;
- 10. Establish a regional centre or network for the promotion of environmentally sound technologies by the year 2004;
- 11. Draw up and adopt an ASEAN Protocol on access to genetic resources by the year 2004;
- 12. Develop a regional Action Plan for the Protection of the Marine Environment from Land-based and Sea-based Activities by the year 2004;
- 13. Carry out the Framework to Achieve Long-Term Environmental Goals for Ambient Air and River Water Qualities for ASEAN Countries;
- 14. Enhance regional efforts in dealing with climatic change; and
- 15. Enhance public information and education in awareness of and participation in is sues on the environment and sustainable development.

- Formulate strategies and programs for the sustainable management of wetlands including peatlands in the subregion, including support for the ASEAN Peatlands Management Initiative
- Prevent expansion of mining activities into protected areas, and monitor results and recommendations of the Global Extractive Industries Review
- Pursue education and public participation of local communities in SRAP demonstration projects.
- Undertake education and training of policymakers and managers in public participation.

# 4.3.3 Sustainable Coastal Zone Management

- Establish institutional linkages between the designated SRAP implementing agency and the ongoing PEMSEA, COBSEA, and ASEAN programs for integrated coastal management.
- Establish linkages between educators and media personnel to promote integrated coastal management.
- Develop detailed work plan and budget for:
  - Coral reef protection demonstration projects involving local communities in project execution.
  - Sustainable coastal community demon stration projects.

## 4.3.4 Air Quality Management and Protection

- Prepare detailed work plan and budget for an assessment that examines urban air quality improvement alternatives for large cities in Southeast Asia.
- Pursue urban air quality improvement demonstration projects.
- Support the implementation of the Regional Haze Action Plan (RHAP), covering all aspects of prevention, monitoring and mitigation.

 Operationalize the ASEAN Agreement on Transboundary Haze Pollution and support the establishment of coordination and monitoring mechanisms, disaster relief efforts, research and development, and the establishment of a trust fund.

## 4.3.5 Sustainable Water Resource Managment

- Embark on a focused and integrative approach to water resources management, sanitation and human settlements, including:
  - Participatory and integrative management mechanisms to balance the competing demands for freshwater resources among domestic, agricultural and industrial/ commercial uses
  - Holistic and comprehensive approach to wastewater management including education of households on proper sanitation and sewerage disposal; economic incentives to proper industrial waste management; and fair pricing of water supply and sanitation services, whether publicly or privately provided
- Sustain and strengthen the existing MRC programs
- Develop a regional freshwater resource program, including promotion of conservation of water resources through research and development and information sharing
- Pursue the Greater Mekong Subregion (GMS) watershed protection demonstration project

# 4.3.6 Science and Technology for Sustainable Development

- Intensify research and development to develop energy efficient and environmentally sound technologies
- Establish sustainable development policy research capability at an existing institution in SE Asia.
- Promotion of clean production and dissemination of environmentally-sound technologies especially to small and medium enterprises. An inventory of such technologies available in the region should be undertaken with the Asian Institute of

Technology as recommended lead institution, and mechanisms developed for intraregional exchange and dissemination of such technologies

 Realize the early establishment of an ASEAN regional center or network for the promotion of environmentally sound technologies (ESTs) through:

 Incentives to facilitate the adoption of ESTs by small and medium enterprises

(SMEs)

- An ASEAN Initiative on Clean Technologies that may include (a) education and training on clean technologies and on clean technology assessment, (b) data base management, information and dis semination, (c) technology transfer activities, including implementation of joint research and demonstration projects;
- A capacity development program to focus on specific ASEAN industries and products that currently play an important role in projected tradegrowth within the region, including development of:
- Environmental benchmarks that represent "best practices" for these industries and products
- Programs in low- and no-waste manufacturing approaches or manage ment techniques
- "Model" approaches for environmental assessment techniques
- Provide the necessary policy framework for rigorous research and for open dissemination of findings by the scientific and technological community

# 4.3.7 Southeast Asian Sustainable Development Information Network

 Explore possibility of establishing the proposed network within ASEAN headquarters

#### 4.3.8 Policy Reform for Sustainable Development

Undertake comprehensive review of industrial and natural resource policies for coherence and consistency (i.e. to avoid undue encouragement of industrial processing of products based on primary resources that are the subject of conserva-

tion policies)

- Tap macroeconomists in multilateral institutions to provide assistance to Southeast Asian countries in developing new economic policies that promote environmental sustainability
- Undertake capacity building and technical assistance programs to:

Support integration of environment intosectoral planning

- Reform existing institutions and where necessary, create new ones to under take national and sub-national environ mental planning
- Support regional and subregional coop eration on the environment through capacity building for decision-makers and technical experts.

- Support development of regional and subregional environmental institutions

- Develop environmental services as an economic growth sector for ASEAN through trade and investment
- Assist establishment of a private sector subregional clearinghouse for environmentally sound technologies, with a mandate for technology assessment and dissemination
- Provide for effective governance of transnational corporations (TNCs) to ensure responsible corporate citizenship and sustainable production practices
- Adopt the Integrated Product Planning principle, which asserts the responsibility of producers to assume the costs of the entire product cycle spanning raw material extraction to processing to disposal of waste materials (including retrieval of non-biodegradable packaging) and rehabilitation of degraded environment and natural resources resulting from its production operations (e.g. abandoned mining sites)

#### 4.3.9 Governance Reform for Sustainable Development

In addition to the measures addressing the institutional and policy framework already described above, the following are recommended:

- Strengthen measures to ensure accountability (e.g. anti-corruption policies and programs)
- Pursue measures to improve governance in the legislative and judiciary branches of government
- Undertake measures to instill a sense of social responsibility and accountability into private sector, international organizations, and civil society
- Encourage multilateral institutions to extend support for public sector reforms toward improvement in quality and efficiency of public service delivery
- Create governance information support networks composed of government, NGOs, and academia for exchange of information between global, subregional, national and locals levels and between the government and civil society.
- Support the implementation of the ASEAN
  Framework Plan of Action on Rural Development and Poverty Eradication and
  related programs, including actions to:
  - Build or enhance capacities for research, as sessment and monitoring of poverty
  - Train facilitators on rural development and poverty eradication
  - Enhance public awareness on rural development and poverty eradication
  - Develop strategies for creating employ ment and income-generating activities
  - Develop mechanisms to allow greater multistakeholder preparation at all stages of sustainable development
  - Build technical and financial capabilities at the local and community levels.
- Create a multi-stakeholder subregional sustainable development monitoring mechanism
- Establish mechanisms for monitoring and integrating commitments to Multilateral Environmental Agreements (MEAs) into national and regional strategies and action plans, and efforts to identify inter-linkages among such MEAs to facilitate consistent and integrative implementation of commitments thereto.

#### 4.3.10 Emerging Issues

Important emerging issues that affect SE Asia include those related to globalization and trade, biotechnology and information technology.

To address challenges due to globalization of trade, the following are recommended:

- Undertake a subregional assessment of the impacts of globalization, particularly on critical sectors such as agriculture. The impacts of globalization on the economy and society in countries of the subregion have not been fully assessed. Civil society organizations in the region must assert their active role in participating in or initiating this assessment processes. Many civil society organizations are beginning to adopt various tools and methodologies for sustainability assessment of trade.
- Respect the autonomy of legitimate environmental policies. There are three areas for observing such autonomy. First, trade measures pursuant to the Multilateral Environmental Agreements (MEAs) - the backbone of international environmental cooperation - should not be subordinated to the WTO. In particular, these should be consistent with WTO rules, and their necessity should be beyond the review by WTO dispute panels. Second, the precautionary principle, a tenet of environmental regulation in the face of uncertainty, needs to be respected. Third, trade rules are required to support certification and eco-labeling and to move Southeast Asia and the rest of the world towards more sustainable patterns of production and consumption.
- Make trade policy more transparent and participatory. There is a need to develop a consistent trade regime that will promote intra- and extra-ASEAN trade, allowing more effective agglomeration of production activities toward optimum scales of natural resource use. It is necessary to raise the capacities for multi-stakeholder sustainability assessment of trade-related policies in the Southeast Asia. Demonstration projects. The application of sustainability assessment tools for evaluation of trade-related policies should be carried out in partnership with multi-stakeholder bodies. These can be designed

- to build on the work presently underway by UNEP and WWF. UNEP recently released a reference manual on the integrated assessment of the economic, environmental and social/developmental impacts of trade policies, while WWF has started a global project on sustainability assessment of trade-related policies, with a case study in the Philippines.
- Develop clear policy guidelines in promoting clean industries and technologies
- Develop a code of conduct, or best practices for multinational enterprises (MNEs) to contribute to the sustainable development efforts of ASEAN member countries
- Promote the use of e-commerce in the trading of agricultural products through the ASEAN e-Farmers initiative which would improve the market reach of small farmers and fisher folk
- Strengthening consumer organizations in the countries of the subregion. Each country in the subregion should have a national network of consumer associations by the end of 2005.
- Strengthening small producers networks on major crops produced by agricultural communities in Southeast Asia. Governments and civil society organizations can further support this idea by creating Fair Trade Networks in support of small producers starting in 2004.

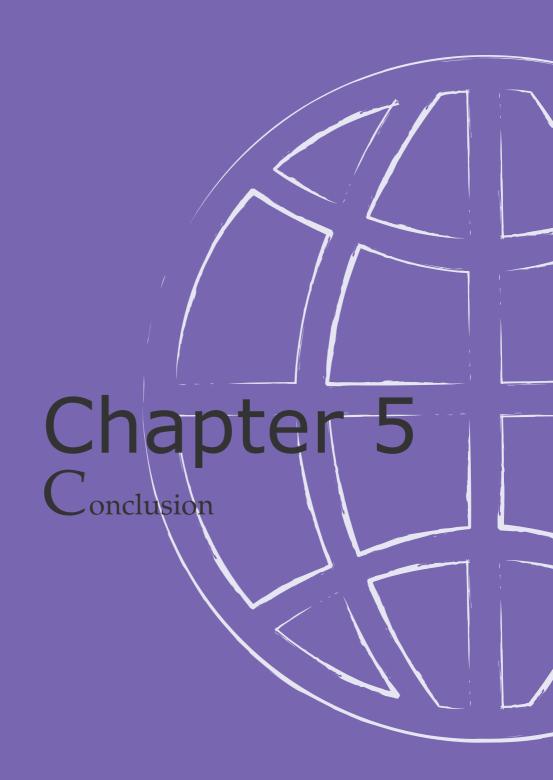
#### To address biotechnology issues:

• Formulate and disseminate government policies on biotechnology. Governments need to develop a clear policy framework on biotechnology, in particular, on the use of genetically modified organisms (GMOs). At the same time, information campaigns are required to educate people about GMOs from the highest levels of government to the grassroots. Civil society organizations must likewise educate government officials about GMOs through dialogue, seminars and through professional organizations. A task force should be formed within ASEAN by 2003 to prepare the needed instructional material.

• Push for an immediate moratorium on field-testing of GMO products in Southeast Asia for a 5-year period. These technologies should not be adopted until their impacts are better understood. Once the altered genes are released into nature, it would be difficult or impossible to retrieve them. The initiators of GMO technologies must assume the responsibility to guarantee the safety of these organisms before releasing them in nature. Subregional strategies are required for a consistent Southeast Asia approach.

To address Intellectual Property Rights (IPR) issues:

Ensure that policies and practices relating to Intellectual Property Rights (IPRs) and the conservation of biodiversity are mutually supportive. Governments should adopt an integrated approach for implementing the objectives of the Convention on Biological Diversity (CBD). Action at the international level would include taking action at the WTO, FAO, UNCTAD, UNESCO and the World Intellectual Property Organization (WIPO). This would also mean that the TRIPS agreement does not interfere with the ability of governments to implement their obligations under the CBD. At the national level, action would include an integrated approach to policy making that relate to IPRs, the CBD and the TRIPS Agreement.



# Chapters

Based on the above, the collective and individual work agenda facing the Southeast Asian countries in the years ahead is indeed a heavy one. It is an agenda that cannot be carried out by governments alone, nor by civil society, business or any international development institutions acting by themselves.

Through the 1990s, especially in the aftermath of the Rio Earth Summit and into the 21st century, partnership has been the new buzzword in development discussions. But more than a buzzword, it is now widely accepted as the appropriate and most effective mode of working for sustainable development. Collaboration, cooperation and counterparting among governments, civil society, business and the international development institutions could make an otherwise overwhelming action agenda a doable one.

Southeast Asia has made strong headway in fostering and effectively harnessing such partnerships for sustainable development. It has been manifested among the ASEAN governments through the HPA and SPAE, among many other forms of cooperation already undertaken. It was likewise exemplified in the fruitful collaboration among ADB, ESCAP, UNEP, UNDP in supporting the subregion's preparations for WSSD. It has been seen in countless initiatives undertaken by civil society groups working in partnership with national and local governments at the policy level and on the ground. It has likewise been evident in cooperative endeavors between governments and the private business sector, including in infrastructure development. Partnerships between civil society and private business are relatively new but are also gaining ground.

Still, the scope for further widening and deepening such partnerships in Southeast Asia remains large. ASEAN can lead the way by effecting stronger and more systematic participation by both by civil society and the private business sector in its development processes, thereby asserting the three-way partnership that is increasingly becoming the norm in the work for sustainable development everywhere. As an emerging focal point in the global economy and community of nations, Southeast Asia cannot but demonstrate the same in its own quest for a development whose benefits transcend countries, peoples, and generations.

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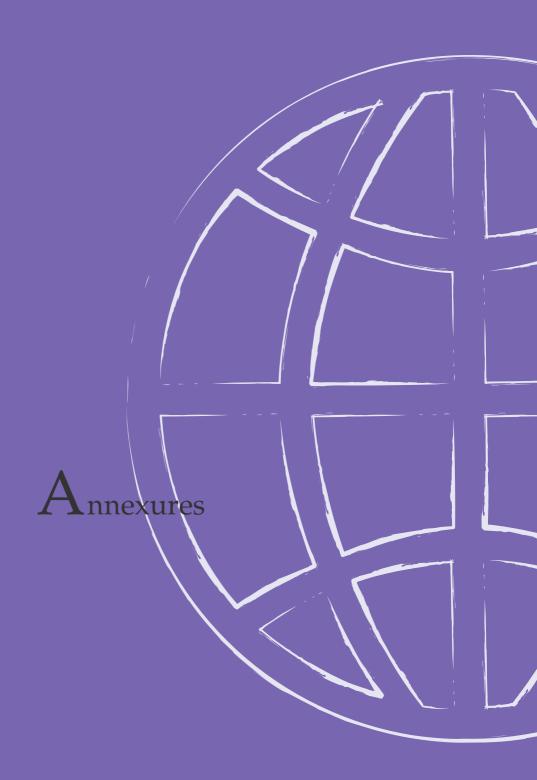
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#### Annex 1. Glossary of Acronyms

ADB - Asian Development Bank

ASEAN - Association of Southeast Asian Nations
CBD - Convention on Biological Diversity
CDM - Clean Development Mechanism

CSO - civil society organization

DFID - Department for International Development (UK)

EEZ - Exclusive Economic Zone

ESCAP - Economic and Social Commission for Asia and the Pacific

ESTs - environmentally sound technologies
FAO - Food and Agriculture Organization
FLEG - Forest Law Enforcement and Governance
GATT - General Agreement on Tariffs and Trade

GHG - greenhouse gas

GMOs - genetically modified organisms
GMS - Greater Mekong Subregion
HDI - Human Development Index
HPA - Hanoi Plan of Action

ICT - information and communication technology

IPR - intellectual property rights

Lao PDR - Lao People's Democratic Republic
MDGs - Millenium Development Goals
MEAs - multilateral environmental agreements

MRC - Mekong River Commission

NCSD - national council for sustainable Development NSDS - national sustainable development strategy

POPs - persistent organic pollutants

SARS - Severe Acute Respiratory Syndrome

SEAFDEC - Southeast Asian Fisheries Development Center SPAE - Strategic Plan of Action on the Environment

SRAP - Subregional Action Plan
TNCs - transnational corporations

TRIPS - trade related intellectual property issues

UNCED - United Nations Conference on Environment and Development
UNCTAD - United Nations Conference on Trade and Development

UNDP - United Nations Development Programme
UNEP - United Nations Environment Programme

UNESCO - United Nations Education and Social Commission

WHO - World Health Organization

WIPO - World Intellectual Property Organization
WSSD - World Summit on Sustainable Development

WTO - World Trade Organization

Annex 2. Selected Conventions Signed or Ratified by the Southeast Asian Countries

Treaty or Convention	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar 1971)		S-1999	EIF-1992		EIF-1995		EIF-1994		R-1998	EIF-1989
Convention on International Trade in Endangered Species of Wild Fauna and Flora (Wash- ington 1973)		R-1997 EIF-1997	EIF-1979	R-1998 EIF-1998	EIF-19978	EIF-1997	R-1981 EIF-1981	EIF-1987	R-1983 EIF-1983	EIF-1994
United Nations Convention on the Law of the Sea (Montego Bay 1982)		S-1983	R-1986 EIF-1994	EIF-1999	R-1996 EIF-1996	R-1996 EIF-1996	R-1994 EIF-1994	R-1994 EIF-1994	S-1982	R-1994 EIF-1994
Convention for the Protection of the Ozone Layer (Vienna 1985)			EIF-1992		EIF-1989	EIF-1994	EIF-1991	EIF-1989	EIF-1989	EIF-1994
ASEAN Agreement on the Conservation of Nature and Natural Resources (Kuala Lumpur 1985)	S-1985		S-1985 R-1986	EIF-1998	S-1985		S-1985 R-1986	S-1985	S-1985 R-1986	
Protocol on Substances that Deplete the Ozone Layer (Montreal 1987)	EIF-1993		R-1992 EIF-1992	EIF-1995	EIF-1989	EIF-1994	R-1991 EIF-1991	EIF-1989	R-1989 EIF-1989	EIF-1994
United Nations Framework Convention on Climate Change (New York 1992)		EIF-1996	R-1994 EIF-1994	EIF-1996	R-1994 EIF-1994	R-1994 EIF-1995	R-1994 EIF-1994	R-1997 EIF-199	R-1984 EIF-1985	R-1994 EIF-199
Convention on Biological Diversity (Rio de Janeiro 1992)		EIF-1995	R-1994 EIF-1994		R-1994 EIF-1994	R-1994 EIF-1995	R-1993 EIF-1994	R-1995 EIF-199	S-1992	R-1994 EIF-1995
International Tropical Timber Agreement (Geneva 1994)		EIF-1997	R-1995 EIF-1997	S-1995 EIF-1996	R-1995 EIF-1997	R-1996 EIF-1997	S-1994		R-1986 EIF-1987	
Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin (Chiang Rai 1995)		R-1997 EIF-1997	R-1998 EIF-1998	S-1995	R-1995 EIF-1997	EIF-1997	S-1994	EIF-1998	R-1981 EIF-1981	R-1998 EIF-1998
Kyoto Protocol to the United Nations Framework Convent ion on Climate Change (Kyoto 1997)		S-1995		S-1995					A-2001	R-1994 EIF-1995
World Trade Organization (1995)	1995	Observer	S-1995	Observer	1995	1995	1995	1995	1995	Observer
Kyoto Protocol to the United Nations Framework Conven- tion on Climate Change (Kyoto 1997)			S-998	S-998	S – 1999		S-1998		S-1999	S-1998

S = year signed

EIF = Entry into Force

R = year ratified A = Accession

Annex 3. Institutions for Sustainable Development in Southeast Asia

Country	Vision Document	Main Sustainable Development Institutions	National Sustainable Development Mechanism
Brunei Darussalam	National Development Plan	Ministry of Development	National Committee on Environment
Cambodia	National Environment Action Plan	Ministry of Environment	
East Timor			
Indonesia	Indonesia Agenda 21	Ministry of State for Environment	National Council for Sustainable Development (Presidential issuance pending)
Lao People's Democratic Republic		Office of Prime Minister Science Technology and Environment Agency	
Malaysia	Vision 2020; National Vision Policy; Third Outline Perspective Plan; Eighth Malaysia Plan.	Economic Planning Unit, Prime Minister's Department; Ministry of Science Technology and Environment; State Economic Planning Units.	National Development Council; National Development Planning Committee; State Planning Councils.
Myanmar	Myanmar Agenda 21	National Commission for Environmental Affairs	
Philippines	Philippines Agenda 21	National Economic and Development Authority Department of Environment and Natural Resources	Philippine Council for Sustainable Development
Singapore	Singapore Green Plan	Ministry of Environment	Multi-agency committee on sustainable development
Thailand	National Economic and Social Development Plan	Ministry of Science Technology and Environment	National Council for Sustainable Development- Thailand
Viet Nam	Environmental Vision 2020 National Strategy for Environmental Protection 2001-2010 National Environmental Action Plan 2001-2005	Ministry of Science Technology and Environment National Environmental Agency Ministry of Planning and Investment	

Source: ADB and ESCAP 2000 and Country Reports

#### Annex 4. Subregional Cooperation Mechanisms

#### 1. Association of Southeast Asian Nations (ASEAN)

The Association of Southeast Nations (ASEAN), comprising ten countries of the Southeast Asian Region, is an intergovernmental organization, with the political mandate to coordinate all regional activities in the region. Environment and sustainable development is an important area where cooperation has been fostered since the early years of its establishment in 1967.

ASEAN has a strong political, institutional, and policy framework for environmental cooperation in the region. In addition to implementing its own activities for the region, ASEAN has the mandate to coordinate all regional activities that are implemented by other organizations in the region.

ASEAN views environment as an integral part of sustainable development. Towards this end, environmental initiatives are undertaken in an integrated manner with other socio economic goals. The overall framework is set out in ASEAN Vision 2020, which among others envisions "a clean and green ASEAN with fully established mechanisms for sustainable development to ensure the protection of the region's environment, the sustainability of its natural resources, and the high quality of life of its people." This vision is implemented through a series of medium-term action plans, the Ha Noi Plan of Action 1999-2004 being the first of such action plan. The objectives of the Action Plan as it pertains to environment are shown in Part C. These objectives are in turn translated into short-term operational activities as detailed out in the Strategic Plan of Action on the Environment. In addition, the Environment Ministers at their formal meetings issue Ministerial Declarations that

highlight priority issues and actions needed on current developments in the field of environment.

ASEAN has a strong institutional framework (shown below) where environmental issues are implemented, monitored, and reviewed periodically right up to the level of the heads of state/government. In addition, close collaboration with other relevant sectors both at the national and regional level ensures that environmental issues are well integrated with the social and economic sectors.

As such, ASEAN considers that Agenda 21 has been fully incorporated, and vigorously implemented in the region based on the concept of sustainable development as enunciated at Rio. ASEAN too has set forth a vision for environmental protection, and sustainable development for the future through its ASEAN Vision 2020.

However, as a group of developing nations, ASEAN faces insurmountable problems in terms of capacity, human resource, finance, and technology to fully implement Agenda 21. ASEAN has attempted to leverage it national resources with those of other relevant regional and international organizations such as the United Nations Environment Programme and the Asian Development Bank to implement effectively regional programs. ASEAN is well placed to further synergize other regional initiatives to serve the interests of member countries and the region, through its political mandate and institutional framework if such activities are well integrated with ASEAN.

In spite of these constraints, ASEAN has made notable achievements in the area of environmental protection. Among these are the following:

**Transboundary Haze** - ASEAN has drawn up a regional plan of action and is implementing various activities to mitigate the causes and effects of transboundary haze. An ASEAN Agreement on Transboundary Haze Pollution has been finalized and is considered by member countries for adoption

Nature Conservation and Biodiversity - The ASEAN Regional Center for Biodiversity Conservation is fully operational with the support of EC, and undertakes institutional network working, research, information dissemination etc.

Coastal and Marine Environment - ASEAN recognizes there are other major initiatives in the region, such as COBSEA, PEMSEA, and is attempting to coordinate and integrate these activities to achieve sustainable development of the region's coastal and marine environment.

Global Environmental Issues - ASEAN promotes common understanding to articulate regional concerns at these international fora. ASEAN also fosters implementation of MEAs by sharing experiences and expertise among the member countries. ASEAN has embarked upon identifying major constraints and needs in terms of implementation, and at the request of Environment Ministers of ASEAN, is working towards greater ASEAN involvement in GEF projects for the region.

Other major activities undertaken are promotion of environmentally sound technologies, adoption and implementation of the ASEAN Environmental Education Action Plan 2000-2005, harmonization of environmental indicators, and publication of the periodical ASEAN State of the Environment Reports.

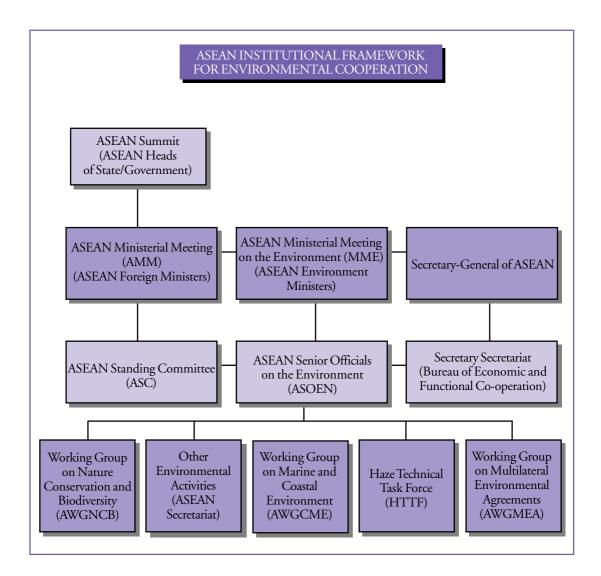
As mentioned above, this summary only provides a glimpse of environmental activities in the region. Developments in the social and economic sectors are readily available at the ASEAN website (www.aseansec.org). The 2nd ASEAN State of the Environment Report

provides an excellent overview of the status of development in various environmental, social and economic sectors, and should be referred to for further authoritative information.

#### 2. Greater Mekong Subregion (GMS)

The Greater Mekong Subregion Program was initiated in 1992, with the assistance of ADB. The Program promotes the development of the six participating countries (Cambodia, Lao PDR, Myanmar, People's Republic of China, Thailand, and Vietnam), by helping to strengthen economic linkages among them. The ultimate objective of the Program is to facilitate sustainable economic growth and to improve the standard of living of the people, thereby reducing poverty in the subregion. A number of environment-related projects have been undertaken with assistance from ADB and other donors, including:

- Subregional Environmental Monitoring System (SEMIS I and II) Together with UNEP, this project established the procedures for the six GMS countries to share environmental information, and setting up of a subregional environmental database accessible to all using standard data and metadata formats.
- Subregional Environmental Training and Institutional Strengthening (SETIS) Involves identifying the critical training needs in the areas of policy reform and capacity building in the environment sector, and the provision of training modules/ reference documents to develop and environment program. It also involves organizing national training workshops and regional forums/ training sessions on specific environmental issues or problems and formulating actions to create training centers for natural resources management in the GMS.
- Poverty Reduction and Environmental Management in Remote GMS Watersheds
   The project involves assisting the GMS governments in developing a framework of mutually consistent policies, strategies, stan-



dards, and guidelines to halt and ultimately reverse the current trends in deforestation. It also includes preparing investment projects to address the interrelated issues of poverty reduction and environmental protection in communities in three remote watershed areas of the GMS.

 Strategic Environmental Framework for Greater Mekong Subregion - The objective of this project is the preparation of a subregional strategic framework integrating environmental considerations in economic development planning and implementation within the context of the GMS program. It involves promoting multi-disciplinary and calibrated approach to formulating environmental responses. It also strengthens environmental performance monitoring through design of indicators and capacity building. This project was implemented with UNEP.

 Protection and Management of Critical Wetlands in the Lower Mekong Basin -The project promotes integrated resource management in critical wetlands of regional significance and protect/ preserve their unique environment. The project consists of developing sustainable management systems of renewable natural resources and agricultural production systems and improving the understanding of the relationships between hydrology, wetland biodiversity, and productivity. The project also includes preparing investment proposals to develop community-based integrated management systems for fisheries, forestry, and agricultural resources of the inundation zone of Tonle Sap and Siphandon.

## 3. Mekong River Commission (MRC)

The Mekong River Commission, established in 1995, is composed of Cambodia, Lao PDR, Thailand and Viet Nam. MRC maintains regular dialogue with the two upper states of the Mekong River Basin, the People's Republic of China and Myanmar. The MRC member countries agree to cooperate in all fields of sustainable development, utilization, management and conservation of the water and related resources of the Mekong River Basin, such as navigation, flood control, fisheries, agriculture, hydropower and environmental protection. The MRC consists of three permanent bodies: The Council, the Joint Committee (JC) and the Secretariat. The National Mekong Committees (NMCs) act as focal points for the Commission in each of the member countries and are served by the respective National Mekong Committee Secretariats.

The MRC has established comprehensive environmental training programs, as well as a specific training project for introducing ISO 14000 in the MRC riparian countries. ADB in 1996 supported MRC for implementation of the linkage of the Mekong Geographic Information System (GIS) and Water Resources Databases, and production of thematic layers. Under this project, the linkage of the Mekong GIS with the hydrological and water quality statistical databases has been finalized. The MRC riparian counterpart agencies have participated actively in the development of

thematic data layers for characterization of the LMB.

#### 4. Indonesia-Malaysia-Thailand Growth Triangle (IMT-GT)

The Indonesia-Malaysia-Thailand Growth Triangle consists of the two Indonesian provinces of North Sumatra and Daerah Istimewa (DI) Aceh; the four northern Malaysian states of Kedah, Penang, Perak, and Perlis; and five provinces of southern Thailand-Narathiwat, Pattani, Satun, Songkhla, and Yala. Following the request for assistance from the governments of the three countries in 1993, ADB undertook a study and prepared a development strategy for IMT-GT to promote regional economic cooperation in this growth area. The overall goal is to accelerate private sector-led economic growth and development in the IMT-GT.

The initiatives identified seek to (i) promote foreign direct investment and facilitate economic development of the subregions by exploiting underlying economic complementarities and investment opportunities; (ii) enhance international competitiveness for direct investment and export production; (iii) lower transport and transaction costs; and (iv) reduce production and distribution costs through economies of scale.

#### 5. Brunei Darussalam-Indonesia-Malaysia-Philippines East ASEAN Growth Area (BIMP-EAGA)

The Brunei Darussalam-Indonesia-Malaysia-Philippines East ASEAN Growth Area or BIMP-EAGA initiative was launched by the four governments in 1994. The objective was to hasten, through regional cooperation, the development of the economy of Brunei and subregions of the three other countries. BIMP-EAGA consists of Brunei Darussalam; heast and West Kalimantan, Central Kalimantan, South Kalimantan, North Sulawesi, Central Sulawesi, South Sulawesi, Southeast Sulawesi, Maluku, and Irian Jaya in Indonesia; Sabah and Sarawak states and the Federal Territory of Labuan in Malaysia; and the Island of Mindanao and Palawan Province in the Philippines.

BIMP-EAGA is eyed as a major location in ASEAN of high value added agro-industry, natural resource- based manufacturing, and high-grade tourism as well as nonresourcebased industries.

#### Southeast Asia Water Partner ship

With the assistance of the Global Water Partnership (GWP) and ADB, the Southeast Asia Technical Advisory Committee (SEATAC) was established in 1997 to promote integrated water resources management (IWRM) in the subregion. SEATAC membership includes all the SE Asian countries, except East Timor. Under a technical assistance project funded by the Swedish International Development Agency (Sida) and GWP, and implemented by ADB, SEATAC conducted several national and subregional consultations. The objectives of the technical assistance project were to identify the priority issues on IWRM for which strategic assistance are required, and to formulate a vision for the sector together with the corresponding framework for action to attain the vision. A subregional report on Vision to Action for Water in the 21st Century, containing the results of the consultations were presented during the World Water Council's 2nd World Water Forum in The Hague in 2000.

As a next step, SEATAC has proposed to facilitate and support the preparation and implementation of the national Program for Action for Water Security in the SE Asian countries, which will also involve all the other stake-

holders in sector within the subregion. The outputs envisaged include:

- Incorporation of IWRM principles in national water security policies and strategies,
- Generation and dissemination of know-how on critical IWRM measures,
- Establishment of guidelines to assist countries develop adequate institutional frameworks and enabling legislation,
- Enhanced professional and general understanding and acceptance of IWRM capacity in the region, and
- A fully functional, sustainable and participatory regional partnership (or similar association) established with supporting mechanisms capable of promoting regional cooperation through networking, and championing IWRM issues and activities in the region and the countries.

The sustainability of the SEATAC as an institution is a major challenge for the members of the group. At present, SEATAC is dependent on GWP-Sida and other donors for funding. It has been proposed to bring SEATAC under the ASEAN umbrella, but until such time a more sustainable setup has to be found.

#### Partnerships in Environ mental Management for the Seas of East Asia (PEMSEA)

The PEMSEA Programme was developed to address the national and transboundary environmental concerns of the Seas of East Asia. Recognizing the threats to their own living environment, eleven countries in the East Asia region, namely, Brunei Darussalam, Cambodia, Democratic People's Republic of Korea, Indonesia, Malaysia, People's Republic of China, Philippines, Republic of Korea, Singapore, Thailand and Vietnam decided to work together to protect the life support systems of the Seas of East Asia and to enable the sustainable use of their renewable resources through intergovernmental, interagency and intersectoral partnerships.

From 1994 to 1999, the Global Environmental Facility (GEF) provided the catalytic fund (US\$ 8 million) for addressing marine pollution problems under the Regional Programme for Marine Pollution Prevention and Management in the East Asian Seas region. This was followed by a follow-on phase to build stronger partnerships in addressing environmental management problems of the region. A new regional programme "Partnerships in Environmental Management for the Seas of East Asia (PEMSEA) was thus launched in October 1999 with GEF contributing US\$ 16.2 million and another US\$ 12.5 million co-financed primarily by the participating governments and other partners. The partnerships share a common vision, implement strategies and action plans to ensure that the seas of East Asia can continue contributing to the well being of the people of the region.

#### The PEMSEA Vision is stated as:

"The resource systems of the Seas of East Asia are a natural heritage, safeguarding sustainable and healthy food supply, livelihood, property and investment, and social, cultural and ecological values for the people of the region, while contributing to economic prosperity and accessibility to regional and global markets through safe and efficient maritime trade, thereby promoting a peaceful and harmonious co-existence for present and future generations."

#### PEMSEA Mission is:

"To build interagency, intersectoral and intergovernmental partnerships in environmental management for the Seas of East Asia."

The ultimate goal of the shared vision and mission is to improve the quality of life for the people of East Asia.

#### 8. Coordinating Body on the Seas of East Asia (COBSEA)

Under UNEP, the East Asian Seas Regional Coordinating Unit (EAS/RCU) is the Secretariat for the Coordinating Body on the Seas of East Asia (COBSEA). It is conceived as an action oriented program having concern for the consequences and causes of environmental degradation, and encompassing a comprehensive approach to addressing environmental problems through the management of marine and coastal areas. It is responsible to ten countries (Australia, Cambodia, China, Indonesia, R. Korea, Malaysia, Philippines, Singapore, Thailand and Viet Nam). Its mandate is to coordinate, where appropriate, the activities of governments, nongovernment organizations, donor agencies, UN agencies and individuals in caring for the marine environments of East Asian Seas. Apart from coordination, the Unit obtains funds to carry out marine management issues and is the lead agency for the United Nations in marine environmental matters in the Region.

A long-term plan for the East Asian Seas Regional Coordinating Unit (EAS/RCU) has been presented to the member states, whereby pollution and destruction of marine and costal habitats problems are identified as the priorities of the region. In addition to the "Strategic Action Programme for the South China Sea" there is now in place a recently approved \$US32 million UNEP GEF project in place "Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand" that is seeking to stabilize and reverse marine environmental destruction throughout much of SE Asia.

# 9. The Southeast Asian Fisheries Development Center (SEAFDEC)

SEAFDEC: The Southeast Asian Fisheries Development Center (SEAFDEC) is an inter-governmental agency established in 1967 with the mandate for promoting fisheries development in Southeast Asia. The SEAFDEC's ultimate goal is to assist Member Countries to develop fishery potentials for the improvement of food supply in the region through training, research and information programs and services. The Member Countries of SEAFDEC are at present Brunei Darussalam, Indonesia, Japan, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam. Membership of the Center is still open to other Southeast Asian countries. Cambodia have expressed their interest in joining SEAFDEC as new Member Countries. The policy-making body of SEAFDEC is the Council of Directors who each represents respective Member Countries. This Council holds annual meetings to discuss and provide guidance on the activities of SEAFDEC. The chief administrator of SEAFDEC is the Secretary-General whose office- the Secretariat -is located in Thailand. His functions are stipulated in the administrative and financial regulations of SEAFDEC.

The Secretary-General coordinates the activities of which the four technical departments of SEAFDEC, namely The Training Department (TD) in Thailand carries out research and training in marine fishing technology, marine engineering, marine fisheries extension and related subjects; The Marine Fisheries Research Department in Singapore who undertake research and training in fishery post-harvest technology; The Aquaculture Department in the Philippines where research and training in Aquaculture development are carried out; and The Marine Fishery Resources Development and

Management Department (MFRDMD) in Malaysia who undertake research and training in fishery resources development and management in the EEZs of the Member Countries.

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#### Annex 7. Good Practices in Sustainable Development In Southeast Asia

#### Box 1

Naga City People Empowerment Program and Participatory Planning Initiatives
Philippines

1998 Dubai International Award for Best Practices, UN Habitat 2002 Gawad Galing Pook Award, Philippines

The Naga City People Empowerment Program institutionalized "People Power" in the city by passing Empowerment Ordinance No. 95-092 that puts in place a clear and comprehensive framework for allowing its constituents to take active part in governance. The Program created the Naga People's Council, a body composed of respected men and women from NGOs, POs, cooperatives, and barangays (villages). It also implemented the Participatory Planning Initiatives (NCPPI) that involved the preparation of action plans on the following key health and environment concerns:

- Rehabilitation of Naga River
- Upgrading of the Naga City Hospital
- Improvement of solid waste management.

As mandated by its revolutionary "Empowerment Ordinance," the City Government tapped external technical assistance to train its people and other stakeholders on the highly participative Technology of Participation (ToP) planning techniques. The skills gained from said assistance enabled the city to:

- Prepare the Naga City River Watershed Strategic Management Plan based on extensive inputs from stakeholders who have approved the plan themselves through a stakeholder congress;
- Draft the Ecological Solid Waste Management Plan (EWAMP) that is helping enhance the system for local solid waste management, and
- Revitalize the moribund City Health Board, which is now managing the conduct of grassroots health planning exercises together with 27 village health councils of Naga. The City Health Plan (which will also guide the upgrading of the city hospital) will be based on the village health plans generated through these community-based planning exercises.

Sources: UN Habitat Best Practices; Galing Pook Foundation

#### Box 2

#### Revolving Capital Fund in Indonesia

A good practice on partnership between a corporate entity and the community

TotalFinaElf E&P Indonesia, a global corporation that seeks to further sustainable development in communities where it operates, launched Modal Dana Bergulir, or the Revolving Capital Fund (RCF) in East Kalimantan in June 2000. It provided seed capital loans and passed on managerial know-how to entrepreneurs seeking to start up village-based small and micro enterprises (SMEs) in 19 villages. Part of a wider aim of fostering sustainable revenue-generating ventures for the benefit of entire communities, RCF sought to ease the access of poorer people to capital. It also sought to involve entire villages by encouraging their self-reliance and mutual support.

By the end of 2000, RCF had ?110,000 in loans benefiting 780 beneficiaries. More significantly, the communities had taken over administration of the capital loans from the central fund manager assigned by TotalFinaElf. Because of the good performance, the RCF was extended and its policies and programs strengthened through the consultative processes that were institutionalized (e.g., focus group discussions). Said consultations led to the formulation of the Socio-Economic Strategic Plan that was drawn up on the basis of the aspirations of the local communities. By 2002, the RCF was already covering and helping uplift the economic and social conditions in 30 villages.

(As of 2002, TotalIndon had handed over 207 community projects to government and local communities, with the projects totally managed by the local communities themselves.)

Source: TotalFinaElf E&P website

#### BOX 3

The Government Housing Bank
Bangkok, Thailand
998 Dubai International Award for Best Practices, UN Haw

The Government Housing Bank (GHB) has played a key role in the development of Thailand's housing sector. The GHB has brought together the private sector, lending institutions, governments and home buyers to improve housing affordability in Thailand. It fostered partnerships which created interdependence among stakeholders to deliver a home to buyers. This created demand which led to a decrease in housing prices. The GHB has been able to break away from traditional practices and initiated a new savings deposit scheme with higher interest rates resulting in a substantial in-flow of funds. In offering low- interest loans to home buyers and developers alike the GHB has provided less restrictive access to borrowers and, as a result, forced commercial lenders to follow suit.

Source: UN Cyberschool

#### Box 4

Bantay Puerto Programme (Puerto Princesa City Nature Watch) Philippines 1998 Dubai International Award for Best Practices, UN Habitat Gawad Galing Pook Award, Philippines

The ecology and natural environment of the City of Puerto Princesa was suffering from illegal logging, illegal fishing, over- exploitation of its other natural resources. In 1992, the Mayor of the City embarked on a program to preserve the natural environment of the city through regulation, crime prevention and monitoring of the use of dangerous substances (primarily cyanide for fishing). Virtually all 120,000 residents, through the strong partnership among NGOs, government agencies and the private sector, were involved in the guarding of the City against bad elements that caused the apprehension and punishment of drug traffickers, poachers, illegal loggers, kaingineros (slash-and-burn farmers), blast-and-poison fishermen and other lawbreakers. The program led the central government to turn over the management of the St. Paul Subterranean River Park (5,753 ha.) to the City - creating a precedent in the history of the Philippines. The Park generates considerable income from tourism. The program is funded solely by the city government and represents 20 percent of its Annual Development Fund.

Source: Gawad Galing Pook Foundation; UN Cyberscool

#### Box 5

TREE for Legacy Tree Resources for Education, Enterprise and Legacy
Nueva Vizcaya Province, Philippines
2002 Gawad Galing Pook Award, Philippines

The program aims to (1) alleviate poverty in the province and (2) encourage its population to plant trees so that the current forest cover (25%) of their watershed may substantially improve in the shortest time possible. It has three distinct components, each one addressing a specific priority concern, namely:

- TREE for Education or the Children's Forest Program gives students the authority to plant and harvest trees and sell them for profit. The government provides seedlings, the schools set aside a plot, and the students plant as many as 50 trees on the plots. They get the proceeds from harvested trees, each of which could cost P5,000. Parents and teachers also receive harvesting rights as guardians of the school programs.
- TREE for Enterprise has the same scheme as the former but caters to non-students and allows the sale of trees for profit.
- TREE for Legacy provides harvesting rights in protected areas and watersheds to civil society and other community organizations.

By 2004, the program is expected to have planted 734,875 trees, covered 78 schools and involved 5,616 individuals.

Source: Galing Pook Foundation