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Institute for Global Environmental Strategies

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IGES

2006 Top News on the Environment in Asia

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Top News on the Environment in Asia

Contents

〈Reports are placed in alphabetical order〉

2006 Top News on the Environment in Asia — Summary

Introduction

The Institute for Global Environmental Strategies (IGES) has been releasing a collection of the top news on the environment in the Asia-Pacific region every year since 1998. This has been with the aim of collecting and organising information about environmental issues and policy trends in the region, and to report on how the region addresses environmental problems and how it works to create a sustainable society. For this year's top news on the environment in Asia, we have collected a total of 121 news items from three organisations and 23 countries. The news gathered does not necessarily represent the official stance of the nations and organisations, but all such information is carefully selected by researchers and institutes so as to reflect recent environmental trends in the Asia-Pacific region.

Information provided by countries varies widely. It is classified into seven categories in this summary—Climate Change, Air Quality, Water Environment, Waste and Recycling, Forest, Nature Conservation, and Cross-sectoral Approach.

1. Climate Change

Climate change, a serious global concern, is also an urgent topic for the Asia-Pacific region pursuing sustainable development.

The Asia-Pacific Partnership on Clean Development and Climate, which comprises Australia, China, India, Japan, the Republic of Korea and the United States, held its inaugural meeting in Sydney, Australia, in January and discussed a new model for international climate change. Discussions on the design of the climate regime beyond 2012 attract broad attention, and IGES has organised consultations among various stakeholders in northeast, southeast, and south Asia regions to ensure that the views of the whole region are reflected in the international climate framework.

Efforts to develop renewable energy have been reported. In Australia, a Solar City project has been launched that will install 17,000 solar panels and 7,000 smart meters in individual homes and commercial facilities in the city of Adelaide. The project is expected to reduce the cost of energy consumption by 5 million Australian dollars and greenhouse gases by 30,000 tons a year. In Thailand, the Ministry of Energy has offered incentives to very small power projects (VSPPs) to sell their output with renewable power, combined heat and power (CHP) etc., to the national grid. In Malaysia, the development of bio-fuels from palm oil is gaining momentum as a source of sustainable energy. In the Philippines, the final approval of the Biofuels Act of 2006 was assured. Ethanol, in particular, is attracting attention as a source of clean energy.

2. Air Quality

In the Asia-Pacific region, air pollution caused by motorisation and industrial activities remains a serious problem as rapid urbanisation continues.

In Pakistan, according to the British Broadcasting Corporation (BBC), the quality of air is at its worst level yet. This deterioration is due to low-quality fuels combined with a surge in the number of vehicles, especially in urban areas, making a mockery of the government's efforts to promote compressed natural gas. According to the BBC report, the amount of dust and particulate matter in Pakistan is twice the world's average, or five times the level in advanced industrial nations. A report from the Fiji Islands reveals that the local diesel fuel contains large amounts of sulfur, which makes

the fuel difficult to burn and increases the emissions of pollutants.

In Indonesia, the problem of haze reached a critical level as it began to drift toward Singapore, Malaysia and other neighbouring areas. The situation worsened in September and October in Malaysia, causing respiratory and eye problems. Transportation and economic activities were also disrupted.

To deal with air quality problems, the Republic of Korea has compiled a database of research papers and statistics in metropolitan area, and by August the database contained 5,685 information items.

3. Water Environment

Reports of worsening water pollution in rivers and seas were particularly numerous this year.

In China, over 130 cases of water pollution, involving cadmium, arsenic compounds and other chemical substances, have been reported since the Songhua River incident in November 2005. The growing number of accidents caused by environmental contaminants is a serious social concern. In Bangladesh, the diversion of water through barrage and dams constructed in the upper reaches of the Meghna River have reduced the amount of water in the lower reaches and caused an influx of saline water, causing serious environmental problems in the southwest. In Pakistan, due to ineffective enforcement of laws regulating industrial effluents, many factories discharge waste into water sources from which drinking water is drawn. This year, thousands of people fell ill due to contaminated drinking water.

Marine pollution also remains a serious environmental threat. In Pakistan, work is still underway to clean up oil spills caused by a tanker accident several years ago. In the Philippines, a tanker that sank off Guimaras Island caused heavy oil spills contaminating over 15 square kilometres of coral reefs, 220 km of coastline, and over 1,000 hectares of marine reservation. With about half the population of Guimaras province directly affected, the spills are the worst environmental disaster in the history of the Philippines. In the Fiji Islands, polluting substances from outdated human waste treatment facilities, and timber processing plants in Vanua Levu, were discharged into the river, contaminating the sea near the estuary.

Various efforts are being made in many nations to improve water quality. In the Republic of Korea, authorities have proposed a Water Environment Management Master Plan for the next ten years. In addition to main rivers and upper reaches as primary sources of drinking water, the plan requires the quality of water in smaller rivers and along coastal areas to be closely monitored. In August, China enacted the Regulation of the Yellow River Water Control to cope with runoff problems. In Vietnam, the government will install aquatic environment warning systems in northern regions to facilitate sustainable aquaculture development.

Further, the Asia-Pacific Water Forum (APWF) was established in the Ministerial Meeting during the Fourth World Water Forum (WWF4) in March. The Forum is expected to heighten not only national involvement in water resource preservation, but also invigorate coordinated activities in the Asia-Pacific region.

4. Waste and Recycling

Waste management has become a serious issue in many Asian countries where the problem is compounded by population growth, rapid urbanisation, and expanding economic activities.

This year has seen a sharp increase in waste-related reports. A survey conducted by the Bangladesh Bureau of Statistics (BBS) shows that domestic industries spent only 0.11% of total production cost on waste management last year, while standards set by the Department of Environment on industrial pollutants were not

effectively enforced due to lack of resources. In Bhutan, chemical plants which do not have proper waste disposal facilities simply dispose of untreated waste, seriously damaging the health of the local people. In India, E-waste has become an environmental menace and about 10,000-12,000 tons of e-waste are generated in Mumbai annually. In Malaysia, a citizens' protest against landfills forced the government to review the landfill situation nation-wide. In the Philippines, the Japan-Philippines Economic Partnership Agreement signed in September drew protests from environmental groups and citizens, who opposed it on the ground that it might allow an influx of toxic and hazardous waste from Japan.

In Fiji, landfill that contaminated the sea was replaced by a modern waste processing centre that is considered to be even more advanced than those in Europe.

Bilateral efforts have also been reported: one to stimulate economic activity and the other to protect the environment. In Japan, under the keyword "MOTTAINAI", efforts are being made to promote the 3Rs (Reduce, Reuse, Recycle). The importance of 3R promotion in Asia was shared at the Asia 3R Conference held in Tokyo from 30 October to 1 November. In Thailand, a public-private partnership began to collect and recycle discarded fluorescent lamps. In Malaysia, the government has set the minimum recycling rate at 22%, to be achieved by 2020, calling on its citizens to regard recycling as a national culture. In Bhutan, soft drink manufacturers constructed a bottle crushing unit in Thimphu and started to collect or buy used bottles.

5. Forest

Numerous efforts to preserve the rich forest resources of the Asia-Pacific region have been reported.

In the Philippines, the public and private sectors jointly launched a large project to plant trees along major highways. As of the end of August, about 800,000 trees, far more than the initial target, had been planted along 3,900 km of highways. In Vietnam, the government has permitted foreign interests to hire planted forest serving their production purposes and is now considering permitting businesses to lease natural forest for eco-tourism and production. To stop illegal timber extraction in Kachin State, Myanmar, the governments of China and Myanmar agreed on cooperation. Bhutan is set to establish the Environmental and Forestry Institute in 2008 to train forestry guards and rangers in cooperation with Yale University in the U.S. In Japan, for the first time in Asia, the government began in April to procure wood and wood products that have been produced legally and in a sustained manner. Public concerns over illegal logging are expected to rise in Japan, the world's largest importer of tropical plywood and the third largest importer of tropical logs.

6. Nature Conservation

Various efforts to conserve nature were reported this year.

In Nepal, the government bans the import and production of Diclofenac, a livestock drug, to protect vultures which are on the verge of extinction. The vultures feed on the carcasses of animals treated with the drug, which causes the birds to develop kidney failure and die. In Nepal, about 90% of the vulture population is estimated to have died in just 10 years. For management efficiency, the Nepalese government is proceeding with a plan to transfer the management of national parks and wildlife reserves to private operators. In Sri Lanka, the tsunami of December 2004 highlighted the role for coastal protection played by coral reefs and mangroves resulting in the regeneration of efforts to protect and manage those coastal defences. In Bangladesh, the government turned down a request by a British company to conduct seismic surveys for gas exploration off

the island of Saint Martins. The decision was intended to protect the bio-diversity around the island which has rich coral reefs. Singapore established a National Biodiversity Reference Centre in May, strengthening overall efforts to protect the country's biodiversity, while a law to protect endangered species was revised to toughen penalties on the trade in illegal wildlife. In Australia, where nationwide nature protection has been enforced since 1997, protection areas have increased to cover about 11% of the country. Australia, which has about one third of the world's marine protection areas, has established thirteen new marine protection areas to bolster protection of the valuable environment in its southeastern waters. Bhutan received the 2006 J. Paul Getty Conservation Leadership Award this year, following the UNEP's Champions of the Earth Award it won last year, in recognition of its efforts to protect nature and promote its sustainable use.

7. Cross-sectoral Approach

Promotion of Comprehensive Measures

The Strategic Environmental Assessment (SEA) system introduced in June in the Republic of Korea is expected to minimise environmental disputes stemming from large-scale national projects. In Fiji, the Environmental Management Act approved in 2005 went into effect this year. The Act is designed to promote sustainable development while protecting the nation's environment. Vietnam ran campaigns to raise public awareness about environmental protection, calling on citizens to take action toward environmental protection on a global scale.

Health Damage and the Environment

This year marked the 50th anniversary of the official acknowledgement of Minamata Disease, the starting point of environmental issues in Japan. As of March, the government had recognised 2,955 people as Minamata patients. Several countries have reported countermeasures against industrial pollution. In the Republic of Korea, the authorities plan to implement a health evaluation programme this year, in which they will gather information and data, by region and social strata, on children's asthma and atopic problems, and frequency of birth defects in relation to environmental contamination.

Trade and the Environment

An international project, called the Project Sky Hole Patching, to tackle the illegal trading of ozone-depleting substances and dangerous waste began in September with customs offices and other international organisations from Asia participating.

Technology Development and the Environment

To promote technological innovation for sustainability, China restricts the use of specified harmful electric/electronic substances in order to minimise environmental burden during the product lifecycle from production to disposal. To implement this policy, the China RoHS (Administrative Measure on the Control of Pollution Caused by Electronic Information Products) was promulgated in February, to be enforced in March 2007.

Measures by Stakeholders

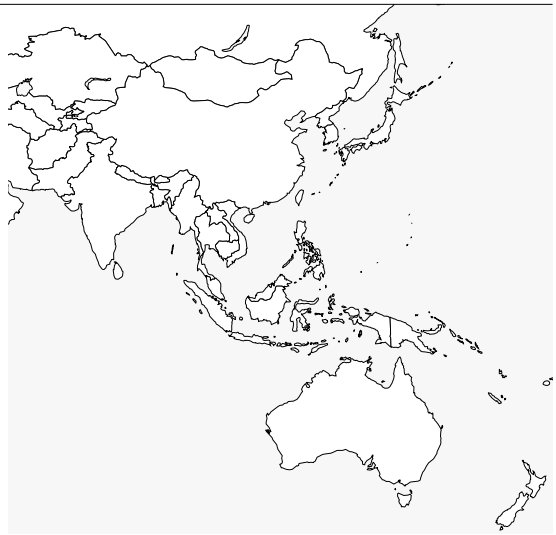
Realisation of sustainable business has become increasingly important in Asia where the economy continues to expand. This year, progress in China was reported, where the concept of Corporate Social Responsibility (CSR) is emerging. The first China Enterprise Development Voluntary Innovation Forum was held in Beijing in September, promoting exchanges between government officials, academic researchers, and company practitioners. The following month saw the

formation of the Chinese Federation for Corporate Social Responsibility with thirteen Chinese and foreign enterprises as members.

The UNEP reported on children's efforts to deal with environmental issues across national borders. In Malaysia, about 200 children from 60 countries attended the Tunza International Children's Conference to discuss their environmental activities, preservation and promotion of sustainability among other issues.

The Asia-Pacific Region

Institute for Global Environmental Strategies (IGES)



1. Asia-Pacific Perspectives on Climate Change Regime beyond 2012

The Kyoto Protocol of the United Nations Framework Convention on Climate Change (UNFCCC), which entered into force in February 2005, is set to expire in 2012. Discussions on climate regime beyond 2012 were initiated, therefore, at the 11th Conference of Parties (COP11) held in Montreal in 2005. While the success of the future climate regime largely rests on policies and measures adopted in the Asia-Pacific region, very few attempts were made to reflect Asian concerns and aspirations in climate negotiations to date. With a view to fostering constructive thinking and consensus-building, IGES organised consultations with diverse stakeholders in Asia in 2005 and 2006, and disseminated the outcomes of such consultations at COP11 and COP12. Participants recommended that the future climate regime should facilitate pragmatic measures to mainstream climate concerns in energy and development planning, and provide operational support for development of climate-friendly energy policies. Participants stressed the need for strengthening the Clean Development Mechanism (CDM) by providing an early, clear signal for its continuity beyond 2012, and by widening its scope to sector-, programme-, or policy-based CDM. Stakeholders noted the need for treating critical low carbon technologies as public goods and for strengthening the existing international technology cooperation agreements through building synergies with non-UNFCCC initiatives. They also suggested that for establishing an adaptation protocol and for enlarging the base of funds available, adaptation must be explored through active involvement of the private sector and mainstreaming of adaptation concerns in development planning.

2. Inequity in CDM — A Growing Concern in Asia

Since the entry into force of the Kyoto Protocol in February 2005, expectations for utilising the Clean Development Mechanism (CDM) as an effective tool to reduce greenhouse gas emissions and promote financial and technological flows have heightened across Asia. Currently, Asia accounts for more than 60% of CDM projects and more than 80% of CER (Certified Emission Reductions) transactions in the world. However, Asian stakeholders are increasingly concerned that CDM in its current form is failing in its mandate to promote sustainable development because of large geographic and sectoral inequity. Indeed, China and India account for most of the CDM projects in Asia, while countries such as Lao PDR, Thailand, Maldives, Myanmar, and Singapore do not have any projects. Many least developed countries including Bangladesh, Bhutan,

Cambodia, Mongolia, Nepal and other countries in Southeast Asia have only one or very few projects. Moreover, more than two-thirds of total CER in the region are from projects that capture or destroy gases with high global warming potential like methane, nitrous oxide and hydrofluorocarbons at existing facilities. Such projects offer large volumes of cheap CERs but contribute least to sustainable development. Strengthening capacity of stakeholders in different countries and sectors is one way to improve equity. IGES is trying to assist various Asian countries in this effort through its CDM capacity building initiative.

3. Japan First Asian Country to Launch Public Procurement of Legal and Sustainable Wood

In April 2006 Japan revised its public procurement policy, which included introducing modalities to verify the legality and sustainability of specified wood and wood products procured by government agencies. The modalities are set out in a Forestry Agency guideline under a Basic Policy on promoting green procurement based on the "Green Purchasing Law" (2000 No. 100). While such policies already exist in six EU countries, Japan is the first country in Asia to use public procurement to tackle imports of timber from potentially illegal sources.

Illegal logging is broadly recognised as one of the most critical proximate causes for the loss of forest cover and quality in Southeast Asia and the Russian Far East. Japan is the world's largest importer of tropical plywood (primarily from Indonesia and Malaysia) and the third-largest importer of tropical logs. Japan's largest supplier of logs is Russia. Public procurement accounts for a significant proportion of imported timber.

Log pond, concession forest, Sarawak (2006)
©IGES

Japan's new policy can be expected to raise awareness amongst the industry sector and the general public of illegal and unsustainable logging and its consequences. To become a robust policy, Japan's public timber procurement requires further effort to develop effective systems for assessing legality and sustainability that include third-party monitoring and expert advice for procurement agents.

4. Co-benefits in the Context of Climate Change and Urban Issues in Asian Cities Explored

A number of events took place in 2006 to address co-benefits in the context of climate change and urban issues in Asia. The co-benefits approach has been hailed as a first step to bring synergy in the global and local debates of solving environmental problems. With COP/MOP-1 of UNFCCC in Montreal paving ways for Programmatic Clean Development Mechanisms, a number of avenues have opened up for urban issues to benefit from a co-benefits approach. The US-Japan Workshop on Climate Actions and Co-benefits, organised by the Institute for Global Environmental Strategies, the Ministry of Environment Japan and the United States Environmental Protection Agency explored the potential of a co-benefit approach with a firm focus in Asia on 22-23 March, 2006 in Washington DC. This was followed by a session at the World Urban Forum in Vancouver in June 2006 by IGES to explore barriers and opportunities. An official side event by the Energy Research Center, Netherlands

and the Global Carbon Project at COP-12 of UNFCCC on 15 November further explored barriers and opportunities of co-benefit approach applied to air quality and urban transportation with lessons from Asian cities and beyond. The key institutional issues to realise the co-benefits were discussed at a workshop entitled "Institutional Dimensions of Urban and Regional Carbon Management" in Bali on 5 December, 2006 organised by the Global Carbon Project and the International Human Dimensions Programs on Global Change. These events have raised the issues of co-benefits to a new level and initiated a dialogue on how to help urban decision makers to streamline greenhouse gas emissions concerns and what support base should be mobilised at different scales of environmental governance.

5. China Enters a New Stage on Corporate Social Responsibility (CSR)

Across the countries in Asia and the Pacific, various events on Corporate Social Responsibility (CSR) were held in 2006. The Asian Forum on Corporate Social Responsibility, which is one of the major events on CSR in Asia, held its 5th annual conference. Conferences targeting financial institutions attracted more participants. Seminars on CSR have become a business in Asia as well. The idea of CSR seems to be permeating into companies in the region. The trend was clearly recognised in China, where activities by governments, companies, civil society organisations, universities, and the media started to form China's own dynamic CSR movement.

Aside from government activities that prioritised its anti-corruption campaign on "business bribery" in 2006, companies and other organisations have become major players on CSR movements. The China National Textile and Apparel Council developed CSC9000T, the first CSR management system developed by an industry organisation, in May 2005. Backed by the government, they were able to strengthen promotion of the standard. It has being widely perceived that CSR contributes to competitive edge. The China Enterprise Reform & Development Society, a nation-wide private academic organisation, consisting of individuals from academia, industry and civil society organisations, established the China Corporate Social Responsibility Alliance in December 2005 in order to promote the CSR activities of Chinese companies by mobilising society's abilities comprehensively. The alliance organised its first China Enterprise Development Voluntary Innovation Forum in Beijing September 2006 that promoted exchanges between government officials, academic researchers and company practitioners. Another initiative is the establishment of the Chinese Federation For Corporate Social Responsibility in October 2006, launched by 13 Chinese and foreign-owned enterprises to support underprivileged areas of China and undertake more social responsibility.

CSR activities in China seem to have entered a new development stage that makes companies cooperate and compete each other. Behind this, various CSR promotion organisations are emerging who support and put pressure on companies by developing internet-based information exchanges.

6. Launch of the Asia-Pacific Water Forum (APWF): towards Asian Collaboration on Water Issues

The Fourth World Water Forum (WWF4) was held in Mexico City in March 2006 and gave stakeholders from all over the world a chance to share activities for solving water issues and their outcomes. Regional preparatory activities brought out a common understanding that, whilst respecting the history and characteristic of each activity, it is crucial to

share the information on regional water issues in order to solve them. The Asia-Pacific region has also recognised that the diversity of the region is not a barrier but actually an important factor in solving water problems. In this regard, the establishment of the Asia-Pacific Water Forum (APWF) was declared at the Ministerial Meeting during the WWF4 aiming to strengthen stakeholder cooperation on common issues and challenges for water in the region. The APWF has proposed to organise an Asia-Pacific Water Summit every two or three years. In addition to strengthening national efforts, more region-based collaborative activities to solve the water issues are expected.
(For details on the APWF, please refer to http://www.apwf.org/)

7. Holding of the Asia 3R Conference

3Rs are "reduce, reuse and recycle" when applied to the control of waste materials. The 3R Initiative, proposed by Japan, aims to build a sound material-cycle society through the effective use of resources and materials. It was approved by the leaders of each nation at the G8 Sea Island Summit, having been adopted as a 'G8 Action Plan: Science and Technology for Sustainable Development: 3R Action Plan and Progress on Implementation'.

Along with the plan, the Ministerial Conference on the 3R Initiative in April 2005 and the Senior Officials Meeting on the 3R Initiative in Tokyo in March 2006 were held in order to promote further international cooperation on 3Rs. In the Asian region, where economic growth is accompanied by increases in the amount and variety of waste produced, the movement across borders of recyclable materials including waste have become marked in recent years and promotion of the 3Rs has become especially important. At the Senior Officials Meeting on the 3R Initiative which was held in March 2006, Japanese Government proposed to further promote the 3Rs in Asia and this was welcomed by the participating ministers.

As one part of efforts to promote the 3Rs in Asia, the 3R South Asia Expert Workshop was organised by UNEP and IGES and held from 30 August to 1 September 2006 in Kathmandu, Nepal. Participants discussed waste management and 3R-related challenges faced by developing countries, and possible solutions. In addition, the Asia 3R Conference was held from 30 October to 1 November 2006 and the outcomes of the discussions were brought together in the Chair's summary. After the Senior Officials Meeting on the 3R Initiative where Japanese government expressed its commitment, the Government proposed to hold this conference in order to promote 3Rs in Asia.

Those in charge of policy on waste and the 3Rs from 19 Asian countries, France, Germany, Britain and the United States among the G8 Nations as well as the European Commission and 8 international institutes attended the conference where measures to deal with the priority issues in Asia - 3Rs in municipal organic waste as well as E-waste and medical waste - among others, were discussed.

Regarding the 3Rs in municipal organic waste, successful examples of biomass activities and efficient composting system were discussed.

As for E-waste, it was pointed out that it is important to enforce the relevant rules on the trans-boundary movement of such waste as well as to updating network activities preventing its illegal import and export. Carrying out the policy measures on E-waste under the Basel Convention and stopping inappropriate recycling are also important issues. With regards measures on medical waste, a precise definition of 'medical waste' separate from other kinds of waste was highlighted as being necessary, with the setting-up of regulations, strategy and guidelines on the national level being crucial.

Also, as 'important points to be noted on the 3Rs in Asia', the following are indicated as

important points 1) establishment of 3Rs taking into account a country's capacity 2) greater efforts in promotion of appropriate technology and cooperation over funding and technology from the perspectives of environment load, economy and social acceptance, and 3) traceability, accountability and transparency of future regional cooperation plans for Asia. Hereafter, it is proposed that further discussion continues at the 3R Knowledge Hub, the thematic working group on solid and hazardous waste under the Regional Forum for Environment and Health in the Southeast and East Asian Countries served by WHO and UNEP as the joint secretariat, and others.

Source: http://www.env.go.jp/recycle/3r/

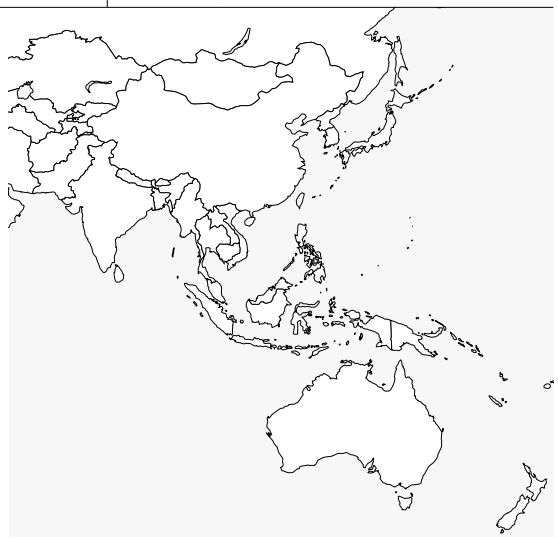
8. The First APFED Award — The Ryutaro Hashimoto Award — was Given to the Solomon Islands' Coconut Oil Production Firm

The Asia-Pacific Forum for Environment and Development (APFED), a group of eminent persons from Asia and the Pacific supported by the Government of Japan, has launched the APFED Award Programme for the first time in 2006. The Award Programme gives recognition for successful undertakings addressing environmental management and sustainable development and provides practitioners with incentives to promote the replication of such undertakings. The Award was named after late Mr. Ryutaro Hashimoto, the former Prime Minister of Japan who was a pioneer in promoting the APFED activities as its Chairman from its outset until March 2005.

The Gold Award was given to "Rehabilitating a Rural Economy with Virgin Coconut Oil Production" undertaken by Kokonut Pacific Solomon Islands Limited-KPSI. This project supported the rehabilitation of a rural economy by making effective use of coconut — the most important resource for the communities. It significantly improved the livelihoods of coastal communities in the Solomon Islands by setting up a complete Direct Micro Expelling (DME) System that enabled the farmers and villagers to produce virgin coconut oil of export quality and to provide fuel for local transport in the midst of economic crisis and exacerbating poverty. Likewise, the Silver Prizes were given to two projects; Geumho River cleaning project in the City of Daegu, Republic of Korea, and Christie Walk Eco-city Project in Adelaide, Australia. Incentive Prizes were given to two projects; an integrated water management project in the Philippines and legal support project for environmental justice in China.

The Award ceremony was conducted at the APFED II Second Plenary Meeting held in Adelaide, Australia from 31 July — 1 August 2006. At this meeting, the APFED Showcase Programme was also launched to give funds of up to US$30,000 to support experimentation relating to the policies and measures recommended in the APFED Final Report of 2004. An Asia-Pacific regional network of policy research institutes for sustainable development was also launched at this meeting. The network is called "NetRes" that stands for an Asia — Pacific Regional Network of Policy Research Institute for Environment and Sustainable Development. 6 institutes from the region have signed the Instrument of Establishment for NetRes as of December 2006.

The Asia-Pacific Region



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Regional Office for Asia and the Pacific (UNEP/ROAP)

1. Eco-Villages Launched in Sri Lanka and Indonesia

Around 245 Sri Lankans and 1000 Indonesians, victims of the December 2004 earthquake and tsunami, are the pioneering inhabitants of eco-villages built in the two countries for the first time.

In March this year, 55 families in Sri Lanka moved into their homes in Lagoswatta Village, Kalutara, which stands on more than 5 acres of land. The village comes complete with rainwater harvesting tanks, roads and a multipurpose centre with a bank, health centre, library, vocational training centre, and community hall, among others. Each home measures 500 sq. ft and has two bedrooms, a living room, kitchen and toilet. Along with solar panels on buildings and houses, the village was also built with waste segregation, composting of organic waste, recycling of inorganic waste, and an underground system for recycling wastewater.

In Indonesia, UNEP supported the Ministry of Environment (MoE) to design and construct a pilot eco-house in the old Labuy Village in Banda Aceh. Subsequently, UNEP and the MoE assisted in development of plans for an eco-village in a new Labuy village. UNEP supported the topography survey, site plan, and comprehensive master plan for the village that will be built on 50 hectares of land secured by the Aceh and Nias Rehabilitation and Reconstruction Agency (BRR). UNEP will also support the construction of different types of demonstration eco-houses in this eco-village. Based on these eco-houses, the BRR will replicate more than 250 eco-homes in the new Labuy Village from 2007.

EcoVillage, Lagoswatta Village, Kalutara, Sri Lanka
©UNEP

The eco-village project is one of six demonstration sites currently being set up in Bhutan, China, Indonesia, Maldives and Thailand.

2. Asian Countries Join 'Project Sky Hole Patching' to Tackle Illegal Trade in Ozone-Depleting Substances and Dangerous Waste

Around 20 customs authorities spanning 18 countries in the Asia Pacific region - Australia,

Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China (including customs authorities in Hong Kong and Macau), Fiji, India, Japan, Republic of Korea, Maldives, Mongolia, New Zealand, Philippines, Samoa, Sri Lanka, Thailand, and Viet Nam- have come on board an innovative project to curb illegal trade in ozone depleting substances (ODS) and hazardous waste. The project, initiated by China Customs and dubbed "Project Sky Hole Patching", began on 1 September 2006 and is designed to keep track of movement of suspicious shipments of ozone depleting chemicals and dangerous commodities when they are imported, re-exported and transshipped across several customs territories in the region.

The project involves customs and environment authorities, the World Customs Organisation's Regional Intelligence Liaison Office for Asia and the Pacific (RILO A/P), the Compliance Assistance Programme (CAP) of UNEP's Division of Technology, Industry and Economics, Basel Convention Regional Centers and other key international organisations.

The operation is conducted in two phases with the first six-month phase focusing on ODS. The second phase will include hazardous waste. RILO A/P and UNEP Regional Office for Asia and the Pacific (ROAP) CAP will facilitate the operation for the region in consultation with regional and international institutions dealing with ODS and dangerous waste.

Source: www.uneptie.org/ozonaction

Painting by 8-year-old Laila Nuri from Indonesia.
©UNEP

3. Voluntary Mechanism to Boost Monitoring of CFC Movement and Licensing Systems in South and Southeast Asia

A voluntary mechanism that enables National Ozone Units to consult registered importers and exporters of chloroflurocarbons (CFCs) and inform their counterparts before issuing import/export licenses is being piloted in South and Southeast Asia (SA-SEAP).

Through the mechanism, the 'Informal Prior Informed Consent on Export and Import of CFCs', network countries comprising Australia, Afghanistan, Bangladesh, Bhutan, Brunei, Cambodia, China, Fiji, India, Iran, Japan, DPR Korea, Republic of Korea, Lao PDR, Malaysia, Maldives, Mongolia, Myanmar, Nepal, Pakistan, Philippines, Singapore, Sri Lanka, Thailand, and Viet Nam, can monitor the export, import and re-export of CFCs within the region. It will help strengthen the management of import and export of CFCs in the region and implement more effective national licensing systems. It will also assist network countries to meet their compliance commitments.

The Asia and Pacific region has three of the main producers of CFCs, namely China, India and Republic of Korea.

Source: www.uneptie.org/ozonaction

4. Guide for Asian Industry to Reduce Energy Costs and Greenhouse Gas Emissions

An energy efficiency guide that gives Asian companies the opportunity to reduce production costs and greenhouse gas emissions, key to addressing climate change and improving environmental performance, was released in January 2006.

The Energy Efficiency Guide for Industry in Asia documents how 40 Asian companies in the cement, chemicals, ceramics, pulp and paper,

©UNEP

and steel sectors were able to reduce greenhouse gas emissions by several tons to more than 85,000 tons of CO2 per year by taking energy efficiency measures. In the process, each company saved between several hundred dollars to more than US$4 million per year.

The Guide was developed by UNEP with national bodies in Bangladesh, China, India, Indonesia, Mongolia, Philippines, Sri Lanka, Thailand, and Viet Nam and funded by the Swedish International Development Cooperation Agency (Sida).

It provides a methodology, technical information, tools, case studies, and a contact and information database. It is available in hard copy, on CD Rom and on www.energyefficiencyasia.org. Parts of the Guide were also translated into several Asian languages, including Bahasa Indonesian, Bangla, Chinese, Mongolian, Singala, Tamil, Vietnamese, and Thai.

The Guide was also launched in all the participating countries in Asia.

Source: http://www.roap.unep.org/program/techno.cfm

5. First Batch of Students Begin Studies in UNEP's Master's Programme in Environmental Management and Sustainable Development

Fourteen students from Samoa, Turkmenistan, Thailand, Mongolia, China and France were the first batch of students who began their studies in a new Master's Programme in Environmental Management and Sustainable Development launched by the UNEP-Tongji Institute of Environment for Sustainable Development (IESD) in Shanghai on 18 September 2006. The Master's Programme was developed with the Regional University Consortium (RUC), made up of Griffith University, University of New South Wales and Wollongong University in Australia, Nanyang Technological University in Singapore, Asian Institute of Technology in Thailand, United Nations University in Japan, Yale University in the US and and the UNEP-Tongji IESD.

The 2-year Master's Programme, developed as a new model of education for sustainable development, comprises six core courses: Human Dimensions and Sustainability, Environmental Dimensions of Sustainable Development, Social Dimensions of Sustainable Development, Circular Economy and Economic Dimensions of Sustainable Development, Sustainable Development: Tools and Frameworks, Sustainable Development: Institutions and Policies, and an elective course on Global Environmental Challenges. Students will also pursue a semester in one of the RUC universities to pursue electives or conduct research of interest.

The curriculum for the Master's programme will be published by UNEP-Tongji IESD for students, instructors, and universities interested in education for sustainable development across the Asia-Pacific region. Scholarships for candidates from developing countries were provided by UNEP.

Source: http://www.roap.unep.org/program/edu.cfm

6. Children From Around the World Lend Their Voice for the Protection of Forests

Children and their chaperones committed to take concrete action towards protecting the

environment during the Tunza International Children's Conference that was held in Putrajaya, Malaysia August 26-30, 2006. The Children's Conference brought together nearly 200 children from 60 countries. The children, all members of environmental clubs in their schools or communities, were selected based on the creativity and the inspirational qualities of their environmental projects.

During the conference, these children had an opportunity to learn about environmental activities of their peers in schools, communities and countries, voice their concerns on the current state of the world's environment and share ideas on what they can do to promote environmental protection, conservation and sustainability.

A new Junior Board, made up of 12 children ranging between 10-12 years of age and from different regions, was elected during the Conference. The new Junior Board members will serve through the 2008 International Children's Conference, which will be held in Norway. Ten-year-old Bradley B. Lewis from Australia and twelve-year Samuel A. Loyola from the Philippines, were Asia Pacific's elected representatives.

Since the Conference, UNEP has established a Bulletin Board where delegates can post information on their work and progress in their countries along with a 'Share Your Story' page that allows delegates to write about a project they were involved in after the Conference.

Source: http://www.unep.org/tunza/children/Events/Events.asp

International Children Conference logo is a painting of 11-year-old Yoshita Parapitak from Thailand, who won the Green City Special Prizes of 14th Painting Comp.

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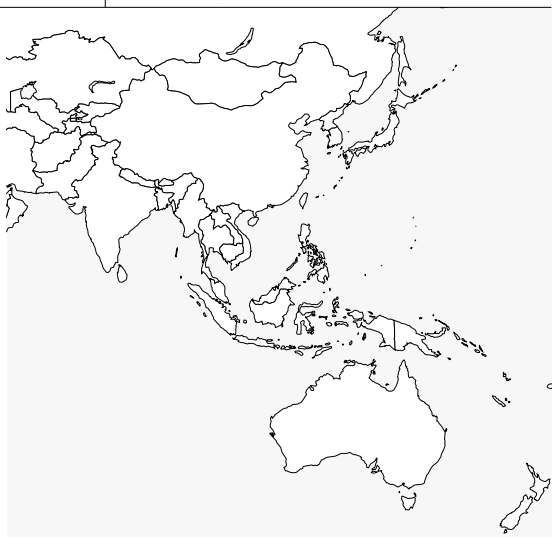
Central Asia

Bulat K. Yessekin
Executive Director
Regional Environmental Centre for Central Asia (CAREC)



1. Secondary Schools of Kazakhstan are Provided with Educational Materials on Climate Change in the Kazakh Language

Presently, global climate change is a great issue. One of the main reasons for climate change is increased greenhouse emissions in the atmosphere and carbonic gas is the major emission. The main source of carbonic emissions is fossil fuel, burnt by power plants to produce energy that we use in our everyday life.

The project "Education for sustainability and climate change in Central Asia" has been implemented by CAREC in 2005-06 in cooperation with a UK NGO "Field Study Council", the business organisation "Climate Care" and the Norwegian energy project "SPIRE", under the support of the UK Environmental Department.

The overall project objective is to develop a new type of youth behaviour which will enhance energy preservation and reduced emissions through improved practical understanding of the climate change process in the context of sustainable development.

The project is a follow-up of CAREC activities, related to the development of Climate Change posters and a video, completed in 2003-2005. The project outputs: posters, video reels in tapes and CDs and methodological teacher's guides in the Russian language were provided to experimental Central Asian (CA) schools.

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After the project was implemented, CAREC involved relevant stakeholders in fund-raising activities to adjust, produce, translate and distribute educational materials: teacher's guides, posters and video reels in the CA national languages, including the Kazakh language. All these materials were highly appraised by the Ministry of Education and Science and recommended to be taught as a part of Natural Sciences in secondary schools of the Republic of Kazakhstan.

Source: www.carec.kz

2. The Fifth Anniversary International Central Asian Conference on Education for Sustainable Development (ESD). 24-25 October, Bishkek, Republic of Kyrgyzstan

The Conference was conducted under the informational and organisational support of the Environment Education Programme of the CAREC, in cooperation and under the financial support of the partners: Government of Kyrgyz Republic, UNESCO - Cluster Office in Almaty and Regional Office in Bangkok; European Commission, Japanese Founds-in-Trust and OSCE Centres in Almaty and Bishkek.

The goal of this Conference: was strengthening interstate and inter-sectoral cooperation in the ESD field, and coordination and integration of national programmes with global and regional initiatives.

In addition to that, reports of CA countries were prepared based on indicators on ESD developed by UNECE Expert Group, and included in the publication "Progress report on ESD in CA". This report is Central Asia's first experience of preparing reports on the implementation of UNECE Strategy on ESD in preparation for the Belgrade Ministerial Conference of "Environment for Europe" process in October 2007.

In conclusion, the conference adopted the final document "The Statement of Central Asia countries and partners on education for sustainable development to the international society, partners and donors".

Experience of subregional cooperation of CA countries on ESD is recognised by our partners as one of the best experiences in European and Asian regions, where CA takes an active part, due to its geographic location. One of the principles is mobilisation of all resources and efforts in order to develop joint policy and initiatives on ESD. Annual subregional conferences on ESD is the evidence of the sustainability of the Central Asian ESD process, and is a unique opportunity for new stakeholders to join the process.

Source: www.carec.kz

3. Small Grants Programme "Sustainable Development of Caspian Communities" — Bringing Big Results from Small Grants

A Small Grants Programme (SGP) is one of the two components of an EU regional project. The components were developed in support of the Caspian Environmental Programme (CEP) second phase and events for providing Sustainable Development of Caspian Communities. The Programme is administered by CAREC in cooperation with REC Caucasus and REC Russia.

The Caspian Sea is a unique and peculiar part of nature. The environmental situation on the Kazakhstan coast of the Caspian Sea is one of the most serious in the country. The unfavourable environmental situation is aggravated by malnutrition, a high rate of tuberculosis, which, in combination with low income, brings worsened health for the local community.

Given the situation in the region over the period 2004-2006, the Small Grants Programme in Kazakhstan financed the projects, mainly aimed at business development and opening of vacancies for the local communities, thus supporting the social and economic policy of the country. The policy is aimed at developing small and medium business, to ensure employment and improve living standards in rural areas. In total, the Programme supported 154 projects and presently they are changing the life of the local communities for the better.

It should be noted that the Kazakhstan part of the Programme is particular for the projects, aimed at production of kumys and shubat, mare's and camel milk products. Rehabilitated

production of these traditional and nutritious drinks has become not only a profitable business for grantors, but also a contribution to the improved health of the regional population.

Source: www.carec.kz

4. Improving EECCA Reporting on International Obligations in the Field of Climate Change and Air Pollution

The project was launched on 1 June 2006. The project activities are carried out under the Grant Agreement, signed between Tacis (European Commission) and European Environmental Agency: "Assistance to the European Environmental Agency in data collection in Eastern Europe, Caucasus and Central Asia". The project is a follow-up of the First Tacis project, implemented by EEA in 2003-2004 (Phase 1), which included a component, focusing on the emission inventories and projection, aimed to increase the quality of reporting of the new Convention on Long Range Transboundary Air Pollution (CRLTAP) parties. Project activities focused on holding a series of training workshops for EECCA experts and aimed to study the IPCC Guidelines in more detail to apply positive models, based on acting IPCC quality monitoring system

The first workshop (TACIS Training Seminar on Air and Green House Gas Emission Inventories and Reporting) was organised in October 2006 in Almaty, as a back-to-back event with the UNECE workshop on monitoring and modelling in order to better liaise with other relevant initiatives in the region and make better use of available resources.

The second workshop (TACIS Training Seminar on Air Quality Monitoring, Assessment and Management in EEA and EECCA region) was held in November 2006 in Moldova in order to make experts familiar with the European AIRBASE database and acting procedures for exchange of information. This workshop also raise air pollution issues and their healthcare impact in order to enhance further development of a system of monitoring of urban air pollution and the development of systems, ensuring free access to this information.

Source: www.carec.kz

Australia

Peter Woods
Chief Information Officer
Australian Government Department of the Environment and Heritage

1. Asia-Pacific Partnership Sets New Path to Address Climate Change

The inaugural meeting of the Asia-Pacific Partnership on Clean Development and Climate was held in Sydney, Australia in January 2006.

The historic meeting involving Ministers and business representatives from the six founding members - Australia, China, India, Japan, the Republic of Korea and United States - agreed on a new model for international climate change and energy collaboration.

The Asia-Pacific Partners are large, fast-growing economies that represent around half the world's emissions, energy use, GDP and population. The Partnership complements other global climate change initiatives.

In his opening address, the Australian Prime Minister noted that Partnership countries have invested many billions of dollars to address climate change. Australia alone has invested $A1.8 billion already in addressing climate change, including $A500 million for low emissions technologies and over $A200 million for renewable energy initiatives.

The Asia-Pacific Partnership recognises that technology collaboration, long-term commitments and significant investments are needed to tackle the sustainable generation and use of energy.

Asia-Pacific Partnership Ministers released the following:

- Charter
- Communiqué
- Work Plan

2. 11% of Australia Protected

Australia's National Reserve System now comprises almost 11 per cent of the country's land mass, representing a major investment in biodiversity conservation.

This nation-wide network of reserves is

especially set up to protect examples of Australia's unique landscapes, flora and fauna. It is made up of all national parks, 22 Indigenous Protected Areas, hundreds of privately-owned reserves managed by conservation NGO s and others, and thousands of private properties under perpetual conservation covenants.

In 1997 the Australian Government set up the National Reserve System Programme to accelerate the country's conservation effort. Since then 21 million hectares have been added to Australia's protected land areas.

Partnerships with conservation NGOs, Indigenous owners and the private sector have been a key element in developing the reserve system. Indigenous owners have added 14 million hectares of Aboriginal lands to the National Reserve System over the last decade and private landholders are managing their lands for conservation while still running profitable businesses.

Further information:
http://www.deh.gov.au/parks/nrs/index.html

3. Education for Sustainability

With the release of the Australian Government Strategy for the United Nations Decade of Education for Sustainable Development, 2005 — 2014, Australia has recognised that educating people on the importance of sustainability is both a national and an international priority.

The strategy acknowledges that new ways of living and working are required to achieve the required environmental, social and economic outcomes to be sustainable. By example, there are over 2,000 schools across Australia participating in the Australian Sustainable Schools Initiative (AuSSI), some of which have made waste and water reductions of up to 40 per cent, and significant savings on their energy costs.

The strategy builds on Australia's National Action Plan *Environmental Education for a Sustainable Future* released in 2000.

Further information:
http://www.deh.gov.au/education/index.html
http://www.deh.gov.au/education/decade/index.html

4. Australia's First Solar City

Adelaide Solar City, Australia's first solar city, is expected to save $A5 million of energy and at least 30,000 tonnes of greenhouse gas emissions per year.

Adelaide Solar City will see 17,000 solar panels installed on homes and commercial buildings, 7,000 smart meters installed in homes and businesses, and 40,000 energy efficiency and information packages distributed to consumers.

Solar Cities is part of the Australian Government's $A2 billion climate change strategy that aims to develop clean, low emission technologies, build an effective global response to the issue, increase understanding of climate change science and help communities adapt to the impacts of climate change.

The launch of Adelaide Solar City follows on from the establishment of the National Solar Energy Centre to research and demonstrate the innovative use of solar thermal technologies.

The Centre is a unique multi-solar collector facility which includes a solar tower used to provide temperatures high enough to produce a solar gas that contains over 26 per cent more energy than natural gas. This solar gas can then be turned into solar hydrogen, enabling solar energy to be stored and transported.

Further information:
http://www.greenhouse.gov.au/solarcities/index.html
http://www.det.csiro.au/science/r_h/nsec.htm

5. One Third of World's Marine Parks in Australian Waters

Australia has established 13 new Marine Protected Areas (MPAs) totalling 226,000 square kilometers to preserve the unique environment of Australia's south-eastern waters.

About one-third of the world's marine protected areas are now in Australian waters.

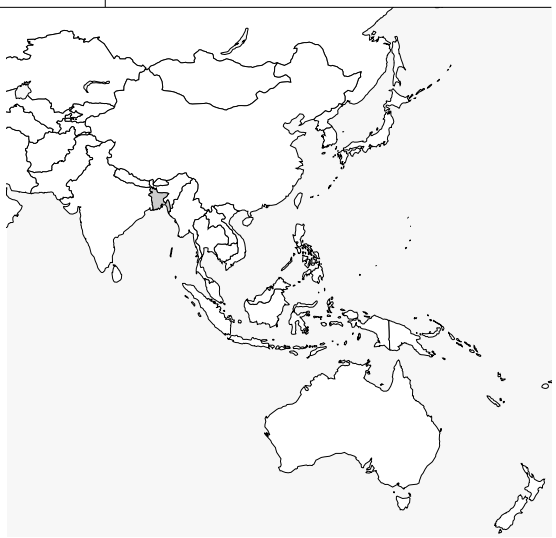
The MPA network is the culmination of extensive discussions with stakeholders and involves minimal impact on industry and multiple use areas.

Australia has also implemented a national plan to protect its coastal environment and safeguard its coastal industries and communities — the *Framework and Implementation Plan for a National Cooperative Approach to Integrated Coastal Zone Management.*

Further information:
http://www.deh.gov.au/coasts/mpa/index.html
http://www.oceans.gov.au/the_oceans_policy_overview.jsp
http://www.deh.gov.au/coasts/publications/framework/index.html

Bangladesh

Khandaker Mainuddin
Fellow, Bangladesh Centre for Advanced Studies (BCAS)
and MD. Golam Rabbani
Senior Research Officer, Bangladesh Centre for Advanced Studies (BCAS)



1. Intrusion of Saline Water: South West Region Faces Massive Environmental Degradation

Water experts warned that the southwestern region of the country would soon face massive environmental problems as the lower Meghna is failing to prevent the intrusion of saline water because of a shortage of fresh water flowing from upstream. The experts indicated that the flow of the lower Meghna, which receives the combined flow of the Brahmaputra, Padma and upper Meghna has already greatly decreased because of the diversion of water further upstream through the Farakka barrage and other dams constructed by India. If water is diverted from the Ganges-Brahmaputra, a basin under the proposed Indian river- linking project, agriculture, aquatic life and environment in the southwestern coastal areas of Bangladesh will be adversely affected. Agriculture, aquatic life and socioeconomic conditions in the southwestern region are most vulnerable as the lower Meghna cannot check the intrusion of saline water from downstream, as stated by Jahir Uddin Chowdhury, Professor of Institute of Water and Flood Management (IWFM) under the Bangladesh University of Engineering and Technology (BUET).

The Press Institute of Bangladesh (PIB) and IWFM jointly organised a three-day course at PIB in collaboration with the Institute of Water Modelling (IWM) and the Centre for Environmental and Geographic Information Services (CEGIS). MH Siddique, former Additional Director General of Bangladesh Water Development Board (BWDB) said that reduced flow of water from upstream has badly affected the agricultural sector, wetlands, groundwater level and fisheries resources causing ecological imbalances.

Source: The Daily Star, 28 March 2006.

2. Poor Waste Management Due to Lack of Fund

Bangladesh Bureau of Statistics (BBS) in a survey report revealed that the country's industries last year spent only 0.11 percent of their production cost for waste management. Industrial waste in the country poses a serious threat to human health and the environment. According to the BBS survey, the production cost of the industrial units was Taka 93.28 billion while the amount spent for environmental protection activities was only Taka 0.11 billion. Of this Taka 0.11 billion, around 0.05 billion was spent for the protection of ambient air, Taka 0.034 billion for waste water and the sewerage system and the remaining amount for non-hazardous and hazardous solid waste management. The report pointed out that only 39.2 percent of the industrial establishments have so far made some capital expenditure for

environment protection. Around 72 percent of establishments engaged with health and social work have had no such expenditure, the report said. The BBS survey, entitled "Environment Protection Expenditure Survey 2005" and supported by the United Nations Development Programme (UNDP) is the first such review in the country. The survey covered 605 industrial establishments including agricultural, manufacturing, electricity, gas, transport, hotel and health services units located mostly in Dhaka and Chittagong regions.

The report pointed out that the standard set by the Department of Environment (DoE) for various industrial and vehicular air pollutants cannot be effectively enforced due to lack of resources. It observed that most of the old industries lack treatment facilities and dump untreated effluents into the nearby ponds, lakes, and rivers polluting soil, surface water as well as ground water. According to the report, the DoE has identified around 1176 major polluting industrial units in the country including 365 textile mills, 189 tanneries, 118 chemicals and pesticide factories and 149 pharmaceuticals.

The BBS has brought out a report entitled "Compendium of Environment Statistics of Bangladesh" since last year, depicting the present condition of the country's environment along with supporting statistics and data.

Source: The Daily Star, 19 February 2006.

3. Dialogue on Health and Environmental Aspects of GM Foods

A group of environmentalists and NGO activists expressed concerns over the gradual introduction of genetically modified (GM) foods in the country. Jagrata Jubo Sangha (JJS) and Action Aid Bangladesh in association with Food Security Network and the European Commission organised a dialogue on "Genetic Engineering in Food and Agriculture: Threat to Farmers and Human Health". The speakers mentioned that GM foods pose a threat to biosafety but the government has no policy in this regard. Farida Akhter, Executive Director of UBINIG in her presentation said that GM crops have a lower yield or at best the same yield as non-GM crops. She also mentioned that intensification of GM crops increases the possibility of monocultures. Quoting from a publication she said that 39 countries are known to have been affected by an incident of GM contamination, illegal planting or adverse agricultural side effects since 1996. The Centre for Sustainable Development (CFSD) secretary general Mr. Mahfuzullah said that the traditional cultivation system would be destroyed due to the dominance of profit-driven multinational companies trying to promote GM foods. JJS Executive Director ATM Zakir Hossain, Action Aids Interim Country Director Mr. Shoyeb Siddique also spoke at the dialogue moderated by Syeda Rizwana Hasan, Director of Bangladesh Environment Lawyers' Association.

Source: The Daily Star, 18 July 2006.

4. Government Rules Out Seismic Survey Near Saint Martin Island

Environment Minister Mr. Tariqul Islam has ruled out the possibility of allowing Tullow to conduct a seismic survey for gas exploration within a radius of 10-kilometers of the coastal island of St. Martin in the Bay of Bengal. The Minister made the statement after receiving a report by an expert committee on the contentious environmental issue. The committee in the report advised the government not to allow any seismic survey on gas by Tullow in the immediate neighbourhood of the country's only coral island. If it is allowed within 10 km of St. Martin Island, it would threaten the existence of about 182 kinds of marine species in the area. Biodiversity of the island will be destroyed if seismic survey is conducted in the

area, the report said. Loud sounds and vibrations created during such seismic surveys will be extremely harmful for the existence of different marine species around the island. Since survey activities would force most of the species to migrate from the nearby area, there may even be permanent extinction of some rare species, experts feared.

St Martin is a small island in the Bay of Bengal, about 9 kms South of Cox's Bazar - Teknef peninsula. It is the southern-most territory of Bangladesh also lying about 8 kms west of the Myanmar coast near the mouth of the Naaf river. The island has attracted tourists from home and abroad. The beautiful natural surrounding coral reef of the island has an extension named Chera Dwip, which is one of the main attractions for the tourists.

Source: The Independent, 22 March 2006.

5. Environment-Friendly Low-Cost Bricks Developed Locally

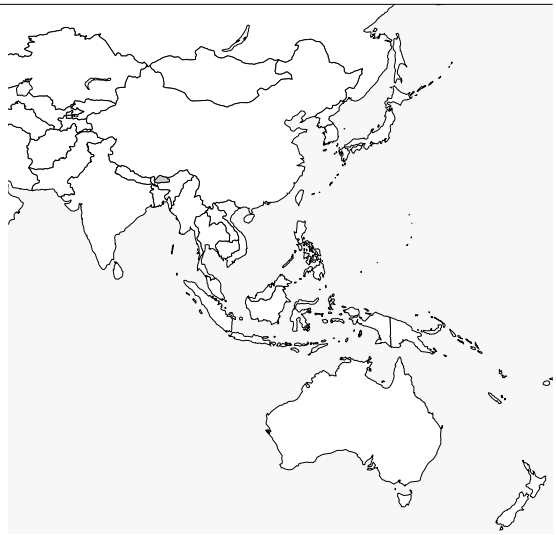
A new kind of brick, developed by local researchers, could save production costs, as well as protecting the country's environment from industrial pollution. The experts recommended that sand bricks could be produced in a short period by a hydraulic pressure machine at a cost of Taka 50,000 per machine where two sand bricks could be manufactured in two minutes. This was stated at a seminar organised by the Research Initiatives Bangladesh (RIB) in collaboration with the Bangladesh Council for Scientific and Industrial Research (BCSIR).

Sand brick is the result of a three-month long research in which it was found that the brick-making machine could be operated manually without the help of electricity. The production cost of sand bricks is low and it is likely to come between Taka 1.20 and Taka 1.40 per piece. It is possible to produce nearly 1000 pieces of sand bricks in eight hours at a cost of Taka 1077. Sand bricks could be used in the river and wetland areas to prevent river erosion. It could also be used for the construction of latrines in the remote villages to implement the government's target of achieving 100 percent sanitation by the year 2015.

Source: The Independent, 9 February 2006.

Bhutan

Dorji Penjore
Researcher
The Centre for Bhutan Studies



1. Another Conservation Award for the King of Bhutan

The World Wildlife Fund (WWF) conferred the 2006 J. Paul Getty Conservation Leadership Award to the King of Bhutan, His Majesty Jigme Singye Wangchuck. According to the WWF, the king's leadership has resulted "in the establishment of government policies and laws that have substantial positive impact on conservation and helped ensure environmental sustainability in Bhutan, and by example, globally as well."

His Majesty, in his acceptance letter, wrote that the "award belongs to the government and the people of Bhutan and not to any one individual, for we have all worked together to conserve our environment".

Her Royal Highness Ashi Sonam Dechan Wangchuck accepted the Award at a function hosted by the World Wildlife Fund (WWF) at the Smithsonian Centre in Washington D.C. on 17 October 2006. Accepting the Award, Her Royal Highness said, "the award is a source of great pride and encouragement for Bhutan and its people to continue their efforts towards environmental conservation."

The award carries a cash prize of US $ 200,000 to support fellowship programmes on conservation work. The award comes a year after His Majesty and the people of Bhutan were given the UNEP's Champions of the Earth Award.

This WWF-administered Award is one of the world's most prestigious conservation awards. This is Bhutan's second J. Paul Getty Award. In 1995 Sherubtse College got the Award for introducing environmental education.

Source: Kuensel, 19 August 2006

Her Royal Highness receives the award from the WWF President Carter S. Roberts

©Kuensel, 2006

2. Ugyen Wangchuck Environmental and Forestry Institute in 2008

By 2008 Bhutan's conservation effort will be boosted by the opening of Ugyen Wangchuck Environmental and Forestry Institute, the construction of which began in Lami Goempa. The 120 year old Lami Goempa Dzong (fortress) will be its main attraction.

In the initial years the institute will provide refresher and up-gradation courses for forest

This Royal Bengal tiger came prowling into an alpine village in Bhutan in November 2005, looking for domestic animals to hunt

officials who are currently trained abroad, in addition to diploma and certificate courses for forest guards and rangers to meet the shortage of skilled manpower in the conservation sector.

It will provide a student and faculty exchange programme by linking with Yale University in the US. Yale Professor William Burch, Jr., who has been working on the curriculum, said attention would be given to the villages and communities because of the 'spiritual linkage' between the people and their environment. Courses would also be offered on climate change, bio-diversity, and watershed management.

The long-term vision is to make it a competitive and credible regional institute with the capacity to train people both at the national and international level and enhance the role of Bhutan as the host to South Asian Association for Regional Cooperation's (SAARC) forestry centre.

The Macarthur Foundation is providing a financial assistance of about USD 1.5 million as seed money.

Source: Kuensel, 17 July 2006

3. Industries in Bhutan Complying with Environmental Norms

The National Environment Commission (NEC), which has completed an environmental compliance monitoring exercise, reported that most of 50 industries and factories along the southern belt were meeting the basic compliance requirements, with few lapses.

The NEC said the overall environmental awareness has improved.

The monitoring exercise covered all large, medium and small-scale industries in Phuentsholing, Samdrup Jongkhar and Pemagatsel. The monitoring will be done in other districts as well.

According to the NEC, mostly small-scale industries have not complied with the environmental terms and conditions, especially in the health and safety measures, and general housekeeping.

The Environment Assessment Act 2002 legally requires the NEC to submit a monitoring report to the government each year. Before that, environmental assessment of industries had been difficult with no legal backing and low awareness. In 2005, the NEC penalised over 70 industrial establishments for violating the regulations of the Act.

According to the NEC, its motive is not to penalise, but to rectify.

Source: Kuensel, 2 February 2006

4. Chemical Plant Waste Affects Children

An eleven-year-old boy was referred to hospital after coming into contact with chemical waste dumped by Bhutan Carbide and Chemicals Limited (BCCL) in Sampheling, Pasakha. The boy suffered third degree burns on both his legs, below the knee, when he picked up the waste to kill fish.

Sampheling, with about 50 to 60 residential

huts and shops and a population of about 300 people, is about two kilometers from the industrial hub of Pasakha.

Known as "carpet dust" to Sampheling residents, physical contact with the waste is causing injury, particularly to children who try to avoid contact. "The waste is so hot that it causes the skin to peel and inflicts severe burns," a resident said. "The burn is so severe that it is difficult for the patient to develop new skin because even that peels off." The BCCL acknowledged that since the company's inception in 1988, the waste was being dumped on-site due to lack of a proper waste disposal facility. It added it had not been a problem in the past due to the absence of many settlements. The government has prepared an integrated waste management plan for the Pasakha industrial estate.

This comes three months after National Environment Commission certified its basic compliance requirements.

Source: Kuensel, 26 April 2006

5. Bottle Crushing Unit Helps Landfills

The Bhutan Beverages Company Limited (BBCL), the company that produces bottled soft drinks, has set up a bottle-crushing unit in Thimphu. Bottles were bought or collected from restaurants, shops, local scrap-dealers, and the Thimphu City Corporation. The unit also buys cardboard boxes.

According to the BBCL, schools will be encouraged to collect pet bottles and incentives such as books and money will be provided since students are the highest consumers of bottled drinks like Coca-Cola. The company sells about 600,000 bottles of Coca-Cola in Thimphu alone. According to the company employees, it was the largest selling product in Bhutan holding about 90 percent of the fizzy drink market share.

The Royal Society for Protection of Nature (RSPN) reported that pet bottles and cardboard boxes were the bulk of the garbage at the Memelakha landfill. The amount of pet bottles and cardboard boxes in the landfill has now decreased

The BBCL plans to set up the unit in other districts.

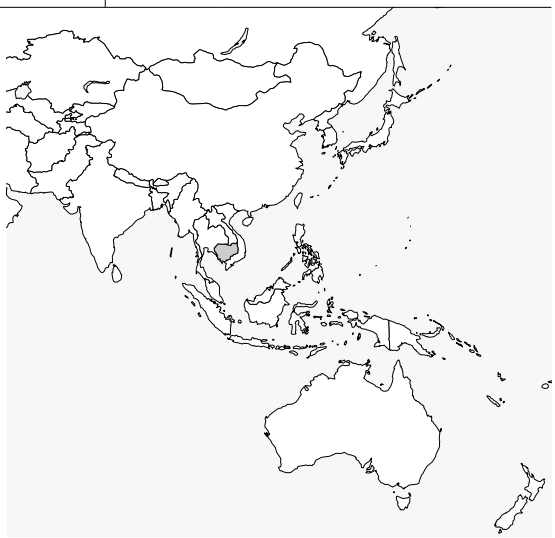
Source: Kuensel, 31 January 2006

A rare Blood pheasant, one of 260 birds spotted by the British Ornithologist Simon Thompson during his second bird watching trip to Bhutan in May this year

©Kuensel, 2006

Cambodia

Khieu Muth
Secretary of State
Ministry of Environment



1. Donor Meeting

On 1 November, 2006, the Ministry of Environment of the Royal Kingdom of Cambodia held a Donor Meeting with donor countries. During the meeting the Ministry of Environment submitted many project proposals including: Strengthening the Coastal Environmental Education Network in Coastal Zone Areas of Cambodia; Current Use of Coastal Resources and Community Livelihoods in Coastal Zone Area's REAM National Park of Sihanouk Ville; Training Project for Provincial and Municipal Officers on Coastal Environmental Planning and Management in Coastal Zone Areas of Cambodia; Project on Promoting the Youth Environmental Debate on Climate Change, Biodiversity, and Land Desertification; Project on Environmental Capacity Building for Primary School Teachers; Project on Capacity Building in GIS/RS Application in Natural Resources and Environmental Assessment and Management; Project on Biodiversity Management and Sustainable Livelihood Within the Protected Areas of Cambodia Neighboring with Laos and Vietnam; Project on Biodiversity Conservation of Protected Areas and Sustainable Use of Non-Timber Forest Products; Project on Community Protected Areas Capacity Building and Networking, Project on Biodiversity and Protected Areas Management, Project on Strengthening Capacity Networking of

Protected Areas; Project on Developing and Promoting Solid Wastes Management at the Community Level; Project on Capacity Development on Water Quality Management at Local Authority; Project on Integrated Waste Management Along the Mekong River; Project on Air Pollution Inventory; Project on Environmental Impact Assessment Process; Project on Establishment of Management System for Marine and Coastal Protected Areas (MCPA) and Improvement of Livelihood for Coastal Communities, and Strengthening of the Environmental Management Framework in the Coastal Zone. Two of these (1. Establishment of Management System for Marine and Coastal Protected Areas (MCPA) and Improvement of Livelihood for Coastal Communities; 2. Strengthening of the Environmental Management Framework in the Coastal Zone.) were recognised as priority project proposals.

For more details about the projects, please contact: moe@online.com.kh.

Attached herewith are the coastal resources pictures.

2. Memorandum of Understanding and the Agreement on the Cooperation and Common Research Programs

On 2 November 2006, the Ministry of Environment signed Memorandum of Understanding and the Agreement on the Cooperation and Common Research Programs with the Inter-University Research Institute Corporation National Institutes for the Humanities International Research Center for Japanese Studies of Japan.

The purpose of the agreement is to establish cooperation and conduct common research programmes entitled "Research on environmental history in Cambodia", including field work in environmental history, lake sediments research, and training of specialists. The purpose of the programme is the study of environmental change history for the development of a better food and water supply, and protection of a natural model for the future development of Cambodia.

The term of agreement is five years and it starts on the day, it was signed by the both sides, although the practical fulfillment of the Agreement starts after permission is granted for field work in Cambodia by the Ministry of Environment of the Kingdom of Cambodia.

3. Minutes of Meeting between Ministry of Environment of the Royal Government of Cambodia and Japanese International Cooperation Agency (JICA)

On 24 August 2006, the Ministry of Environment (MoE) of the Kingdom of Cambodia and Japanese International Cooperation Agency (JICA), Cambodia Office signed the Minutes of Meeting on Japanese Technical Cooperation under the JICA Partnership Program for Human Resource Development for Environmental Management.

It is intended to work out the details of activities and measures to be taken by Japanese International Cooperation Agency (JICA) and Ministry of Environment (MoE) of the Kingdom of Cambodia concerning the Human Resource Development for Environmental Management, which will be implemented in collaboration with Local Government of Kagawa Prefecture of Japan under the JICA Partnership Program.

The main activities of the agreement are the dispatch of three Cambodian Trainees to Japan from 2006-2008 (one trainee for the year 2006 for two months and two trainees for the years 2007-2008 for three months) and the dispatch of six Japanese experts to Cambodia from 2007-2009 (2 experts a year for two weeks).

4. Ratification of Convention, Protocol and Regional Agreement

In 2006, the Senate and National Assembly of the Royal Kingdom of Cambodia ratified the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal which is a treaty designed to reduce the movements of hazardous waste between nations and was adopted on 22 March 1989. Cambodia also ratified the 2001 Stockholm Convention which is an international legally binding agreement on Persistent Organic Pollutants, the 1985 Vienna Convention on the Protection of the Ozone Layer, the 1989 Montreal Protocol on Substances that Deplete the Ozone Layer which is an international treaty designed to protect the ozone layer by phasing out the production of a number of substances believed to be responsible for ozone depletion and its amendment. It also ratified the 2000 Cartagena Protocol on Biosafety to the Convention on Biological which seeks to protect biological diversity from the potential risks posed by living modified organisms resulting from modern biotechnology and the Association of South East Asian Nations (ASEAN) 2002 Agreement on Trans-boundary Haze Pollution from the forest fire. The integration of the Royal Government of Cambodia into the international community through such conventions, protocols, and agreements will enormously benefit the Cambodian people and also contribute to protecting the environment and human-being worldwide.

China

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1. A Milestone in the History of China's Environmental Protection: the Promulgation of the Decision to Implement Better Environmental Policies by the State Council

The Decision to Implement Better Environmental Policies by the State Council at the end of 2005 is an important guideline for the full utilisation of advanced technology to protect the environment. It offers scientific strategies and direction for environmental protection in this new era, and is a milestone in the history of China's environmental policies.

The Decision analyses in detail the issues and challenges that China faces in terms of environmental protection. Thus, it functions as a fundamental policy map which will guide sectors in charge of environmental protection in achieving the coordinated development of the economy, society, and environment for the next 5 to 15 years. The Decision lays out seven key objectives:

1:Water pollution prevention with the emphasis on safe drinking water and the management of designated river basins. 2. Environmental protection in urban areas with the emphasis on pollution control. 3. Promotion of air pollution control with the emphasis on reducing sulfur dioxide emissions. 4. Environmental protection in rural areas with the emphasis on preventing soil contamination. 5. Ecological conservation that will allow humans to coexist with nature. 6. Security in nuclear and radioactive environments. 7. Resolution of environmental problems with the emphasis on construction work.

In the first phase, the Decision places top priority on solving problems of soil contamination and waste pollution, the development of eco-agriculture, and improving the quality of farmers' lives and the conditions of farming villages. Furthermore, it stresses the vital need for the coordinated development of the socio-economy with protections for the environment, suggesting we must establish a long-term system for protecting the natural environment and provide better instructions on how to do so, taking advantage of advanced technology. The goal of the Decision is to improve the environments in designated areas as well as urban areas and to prevent further deterioration of the ecological environment by 2010. Ultimately, it aims to achieve significant results in the improvement of the environment and ecology by 2020.

2. The Control of Pollution Caused by Electronic Information Products Strengthened by the Chinese Government in Response to the European Union Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS)

The EU RoHS, which took effect on July 1, 2006, restricts the use of hazardous materials in electrical and electronic equipment sold in Europe: lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls, and polybrominated diphenyl ether. 200,000 types of home electric appliances and IT products, or 10 types according to a broader classification, are subject to the directive, and manufacturers of those products are affected. In compliance with the Waste Electrical & Electronic Equipment Directive, manufactures must incur the full cost of collecting waste electrical and electronic equipment and attain a target collection rate of such equipment set by the EU.

In China, the information industry is a pillar of the development of the economy. The control of pollution caused by IT products and the conservation of resources are crucial measures to strengthen a sustainable developmental strategy, protect the environment, and promote industrial conversion. China will take a further step and attempt to establish national and industrial standards for the control of pollution by these products, and improve pollution management by establishing regulations on various aspects including resource recycling and environment-friendly product design.

To this end seven government agencies: the Ministry of Information Industry, the National Development and Reform Commission, the Ministry of Commerce, the General Administration of Customs, the State Administration for Industry and Commerce, the Administration of Quality Supervision, Inspection and Quarantine, and the State Environmental Protection Administration have collaborated to promulgate the Administrative Measure on the Control of Pollution Caused by Electronic Information Products, or so-called the China RoHS, on February 28, 2006. The directive will come into effect on March 1, 2007.

Prior to its implementation the seven-agency committee calls for manufactures' efforts to control and reduce pollution at the stage of product development, designing, production, sales, and export by using alternative materials to toxic and hazardous substances or reducing the use of such substances. The committee will further strive to perfect a collaborative system for pollution control and to work on drawing up legislation to mandate recycling of electronic products. Its final goal is to establish a process for implementing relevant laws and regulations and to construct a legislative system for a recycling economy. The committee is currently working on getting passed a Recycling Economy Bill and the Management Regulations on Recycling and Treatment of Waste and Used Household Electrical and Electronic Products.

3. Enforcement of China's First Administrative Regulation on Water Volume Control, the Regulation of the Yellow River Water Control

The Yellow River, the nation's second largest river, is the most important water source in the northwestern and northern parts of China and thus critical in terms of sustainable socioeconomic development in the basin and relevant areas. However, the river's water volume tends to be low, and there are other problems such as significant yearly runoff variation, and uneven temporal and spatial distribution of runoff and water supply. The lower Yellow River dried up for a total of 21 years in the 27 years from 1972 to 1999, which adds up to 1091 days, severely affecting the socioeconomic development of the area. Thus,

China has drafted the Regulation of Yellow River Water Control (Decree 472 of the State Council) in an attempt to legalise and systemise effective measures, and set up a scientific mechanism for controlling water volume and minimising or eliminating the adverse impact of the depletion of the river, enforcing it on August 1, 2006.

The State Council emphasised the importance of managing the river and enforcing laws in order to achieve sustainable use of its water resources. The regulation has two major elements. First, it aims to construct a long-run system for managing water allocation, promote optimal distribution of the limited water resources, enhance efficient water use, balance supply and demand, and foster sound relations between upstream and downstream and left and right banks as well as regional and departmental relations. Furthermore, it aims to contribute to the safe, long-term development of citizens' lives by harmonising socioeconomic development and environmental protection along the river and mitigating and removing the adverse consequences arising from the depletion of the river.

Second, the regulation is the first water management and allocation ordinance in China, and urges the full use of advanced technology; therefore, it should serve as an instructive example for other basin communities. With a goal of building a resource-conserving, environment-friendly society, the regulation is of great importance in achieving the economisation, high efficiency, and sustainable use of the nation's water resources.

The Sanmenxia Dam on the Yellow River, taken by the author

4. China's Struggle with Environmental Hazards

An explosion at a China National Petroleum Company's facility in Jilin Province in November 2005 poured benzene compounds into the Songhua River and caused massive water pollution. In January 2006 the Xiangjiang River was polluted by an industrial cadmium spill. In August a chemical spill contaminated a tributary of the Songhua River in Jilin City, Jilin Province, causing severe pollution in the Jialing River.

Furthermore, in September the illegal discharge of arsenic compounds in Hunan Province poisoned drinking water for nearly 100,000 locals. The level of arsenic contained in the polluted water was 10 times higher than official standards. Consequently, quite a few local restaurants and several elementary schools were temporarily closed. At the beginning of September, there was a lead poisoning incident in Gansu Province, and the soil within a radius of 400 meters around a nonferrous smelting plant was polluted. 360 people in Huixian County were found to have excessive amounts of lead in their blood. 140 of the victims were children aged 14 or younger. The local government provided funds to treat those children and the smelter was forced to shutdown.

These pollution disasters drew domestic and international attention. Vice-Minister of the State Environmental Protection Administration, Wu Xiaoqing, reported at the China Business Summit 2006 that since the water pollution incident in the Songhua River in 2005, there have been more than 130 incidents of water contamination occurring on average every few days. Obsessed with GNP growth, most local governments have given little consideration to

A school child affected by arsenic contamination shows his teeth. By Xinhua News Agency

environmental protection and burdens imposed on local communities. The negligence and corruption of the governments and agencies involved in environmental protection could trigger grave environmental problems. There is no doubt that China has entered an era of environmental pollution.

Source: The State Environmental Protection Administration

5. The Issuance of an Emergency National Response Plan by the State Council: An Elementary Emergency Response Framework has been Established

On January 8, 2006 the State council issued the National Emergency Response Plan, which provides a framework for preventing and handling emergency incidents. It classifies various emergency situations and stipulates procedures for dealing with such situations under the direction of the State Council. Emergencies are divided into four categories: natural disasters, accidents, public health issues, and social safety issues. They are also ranked into I to IV levels, or from most serious to least serious, according to their character, severity, difficulty in controlling, and degree of influence. The plan is applicable to governments struggling to deal with natural calamities. When an emergency arises, a local government must report it to the State Council immediately. Then, based on its authority and duty the local government must now put a contingency plan into motion, take effective measures, and control the situation. When necessary, the State Council takes charge of the situation and supervises respective areas and divisions involved, by establishing a chain of command and forming a task force.

The State Council has already worked up special plans for the national government as well as agencies involved. At a provincial, regional, and municipal level, such emergency plans have been completed as well. Furthermore, each community has devised emergency countermeasures tailored to their own circumstances. China can now declare that a nationwide framework for emergency response has been established.

Source: Xinhua News Agency

Republic of Fiji Islands

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1. Implementation of Environmental Management Act (2005)

The much needed and eagerly awaited Act received presidential assent on 17 March 2005. However, the Act, and parts thereof came into effect at various dates after that. The objective of the Act is to protect natural resources, control and manage development and provide for waste management and pollution control. It is the slimmed down version of the Sustainable Development Bill, Fiji's previous attempt to introduce environmental legislation, which was eventually rejected as being too ambitious and costly. Although the Act is now drastically reduced in size it will still have a significant impact on the way business is done in Fiji in the future.

Development Activity defined by the Act varies widely and any activity or undertaking that involves building, depositing waste, removing natural resources (except fish), dredging, mining and drilling will be defined as a development activity for which a development proposal will need to be submitted to an approving authority

The Act sets out the different types of proposals and also the EIA processes to be followed for those differing proposals. This is defined in the Act as follows: for each development proposal, there is an impact on the environment, either in the context of the setting of the proposed development or in the context of the intensity of the proposed development's effect on the environment. Then a non-exhaustive list of matters that could be regarded as effecting the environment is set out.

Environmental Impact Assessment reports are now required for all development proposals subject to the EIA process. This also sets up a system of permits for the discharge, handling, production and activities that may have an adverse impact on human health or the environment. It is an offence to undertake a development activity without an approved EIA and a fine of $750,000 can be imposed.

It introduces fines of up to $250, 000 for first time offenders and $750,000 for subsequent offenders. There is also an offence of creating a pollution incident with willful or reckless disregard for which the maximum fine is $1,000,000 and companies can be fined up to five times that amount.

Fiji's landscape and pristine beaches
Source:http://www.traveljournals.net/pictures/90323.html

Restorative orders and stop work orders can also be issued by a court along with assets seizure and items used in the commission of the offence. The Act also introduces personal liability for directors; regardless of whether or not the company is convicted. Penalties against companies take priority over secured or preferred claims in bankruptcy actions.

The limitation of this Act as stipulated above is quite comprehensive as it tries to cover a whole list of environmental issues into a general legislation. Whilst it is the beginning of a long road, Fiji needs comprehensive Sustainable environmental and development legislation, to fully protect its immense natural resource base and pristine environment.

2. The Commissioning of Naboro Landfill

The long awaited new 130-acre Naboro Landfill was eventually commissioned in late 2005. This brought to an end the somewhat controversial old Lami dump which had been considered an environmental time-bomb. This project has been the result of years of mounting pressure from the environmental department, and the urgency to relocate from a dump that had reached its capacity several years ago.

The new landfill has been constructed at a cost of €8.5 million (over F$18 million) from the European Union's (EU) 8th European Development Fund (EDF). If properly managed, the new landfill will be operating at a higher level, in terms of environmental protection, than many sites in Europe. Regular checks will be carried out to monitor the landfill operator's results in this respect, and the contract foresees financial incentives where environmental standards are met or exceeded.

The Naboro landfill is better located than Lami dump, is professionally managed sanitary landfill, and utilises some of the best available technology in the dissemination of domestic waste in landfill situations. The landfill has been

New Naboro Landfill & Waste Management Centre
(Photo by Ravindra Pillay)

built to international standards, and is expected to have much lower environmental emissions than the Lami Dump. The greatest feature of the new landfill is its capacity, which caters for the areas of Suva, Nasinu and Nausori, encompassing about 250,000 people.

The new landfill uses a 'fishbone system' of perforated collection pipes where water will filter through clay and pebbles into the pipes for treatment. This is in contrast to the closed Lami dump which did not incorporate any such system, hence the environmental dangers of toxins and leachates running into the sea. The Lami Dump has been since compacted and sealed off with new soil layers to prevent outbreaks of fires from gas and methane emissions.

The landfill's life expectancy for phase 1 is expected to be 10 years, with future extensions plans and space available unlike the limitation of expansion faced at the Lami Dump location. It is also envisaged that for operational efficiency and cost effectiveness, transfer stations will be set up at strategic locations to enable domestic waste to be processed prior to transporting to Naboro Landfill.

The operation of Naboro Landfill is a major infrastructural development, considering the fact that economic development is growing and population emigration to urban centres is steadily increasing. Therefore it is vital that waste generated domestically, commercially and industrially during the construction and operation stages of various developments, which would contribute directly to pollution of land, freshwater, marine and atmospheric areas, be

Wailea Creek - 25 truckloads of rubbish were removed from the creek bed (Photo by Ravindra Pillay)

disposed of in an environmentally friendly manner.

3. Depletion of Marine Resources

Fiji is known to have one of the richest and most diverse marine ecosystems in the world. However, the continued overuse, abuse, and lack of knowledge, understanding, and appreciation of this vast natural resource has been at the forefront of deterioration of these resources.

There are two causes of alarm that sit high on the agenda when marine resources are spoken about. These are and includes:

i. The rate of deterioration that is evident in these ecosystems

ii. The lack of initiative on the part of lawmakers to come up with comprehensive and specific legislation in the area of sustainable environment.

Of lesser but equally important issue is the lack of appreciation that the benefactors have shown to this vast resources base. Coral harvesting, that mostly destroys the habitat of a large number of marine species, is exploited for reasons of tourism. In fact, many of these harvesters use very destructive methodology, such as dynamite etc. to uproot huge coral patches.

In high rainfall and industrial places, there are is a constant flow of commercial and industrial effluent into marine waterways. The number of oil spills that occur along the Suva Harbor area is unbelievable. The spills from our sugar mills, logging and timber processing /treatment plants, largely goes unabated. Recent issues of chemical spills in Qawa River in Vanua Levu on the second largest island of Fiji by a timber processing company, has killed fish and other marine species along the river and found its way to the sea.

The disposal of human waste along the coastal and low lying areas also poses considerable environmental and health problems. The releases by the wastewater treatment from its outdated treatment facilities has resulted in lower of levels of available oxygen levels in the Laucala Beach, and Suva Point areas. The biological and chemical Oxygen Demand, BOD and COD respectively, have a huge bearing on the health of marine ecosystem and species survival.

Apart from these, over-harvesting poses huge problems to species population. There is a distinct lack of policing by the authorities on this issue. Rarely do we see people reprimanded for harvesting undersized species, and this has significant bearing on the future food supplies. As abuses such as these can be seen openly in market areas, it can be concluded that authorities are completely incapable of carrying out their designated tasks.

There also exists a lack of research on the patterns of breeding and growing of species, as there does not exist a ban on harvesting for a particular marine species during their time of

Fiji's rich and diverse marine resources
Source: http://www.traveljournals.net/pictures/64214.html - coral picture

breeding or brooding. Actions such as these will ensure that species population is maintained, and the marine ecosystem and habitat remains diverse and vibrant.

4. Diesel Induced Air Pollution

Fiji does not have relevant authorities to monitor and control the degree and severity of fuel, specifically, diesel-induced air pollution. Recent fuel price hikes have seen affinity for diesel-operated vehicles which are very common in most commercial, industrial and marine vehicles, as well as taxis and machinery.

The local media have highlighted the increase in diesel-induced air pollution and the quality of diesel fuel that actually enters the country. It has been reported that fuel of an inferior quality has entered Fiji, and if this is true for Fiji, it would be true for other developing countries as well. It has been reported that diesel fuel with higher sulfur content is available for Fiji's market, and that in effect reduces the combustibility of the fuels and emits greater pollution than conventional fuel.

To understand the gravity of diesel fuel emissions, diesel engines emit nearly 40 toxic substances, smog-forming oxides of nitrogen and fine particulate matter, and they contribute to a laundry list of adverse environmental and health effects, including depletions of the ozone layer, and subsequent global warming issues, asthma, cardiovascular and respiratory problems, strokes, heart attacks, lung cancer and premature deaths. Of special concern are two main pollutants: fine particulate matter, which lodges deep in the lungs, and oxides of nitrogen (NOx), which are precursors to smog. NOx is a significant precursor in the formation of ground-level ozone, and these are emitted mostly by on road and non-road vehicles from all sources.

Various international agencies have started to work towards reducing air pollution, and changing to technology which can reduce the emission of most of these harmful pollutants in the air. Fiji, however, needs to educate itself on the dangers of these fuel-induced pollutants and make moves to reduce and eliminate these pollutions.

All heavy duty vehicles are diesel-powered in Fiji
(Photo by Ravindra Pillay)

India

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Executive Director
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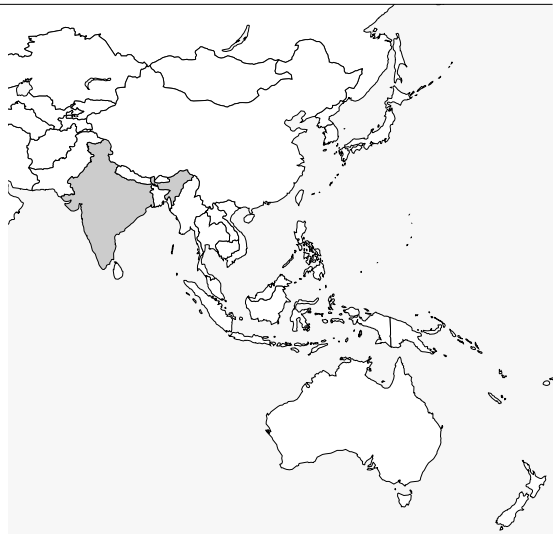

1. Wildlife (Protection) Amendment Bill 2006 Gets Parliamentary Nod

A new, tribal friendly version of the "Wildlife (Protection) Amendment Bill 2006" has been passed, which envisages protecting wildlife whilst at the same time incorporating tribal privileges.

The main features of the bill are:

- The core areas of sanctuaries are to be kept "inviolate without affecting the rights of the scheduled tribes and other such forest-dwellers".
- Save for " voluntary relocation", no scheduled tribes or other forest-dwellers "shall be resettled or have their rights adversely affected for the purpose of creating inviolate areas for tiger conservation".
- There are certain provisions for relocation from areas where human habitation causes "irreversible damage", or where "options of co-existence are not available". But the power to determine such cases is with the village committee and designated local expert panels and not with the Tiger Conservation Authority.
- The right to redraw the core buffer boundary is also with the village committee and designated local expert panels.
- The Tiger Conservation Authority and state steering committees will have representation from Tribal Affairs, Social Justice and Empowerment, and the National Commission for Scheduled Tribes.

Source: The Indian Express, August 26, 2006
www.zeenews.com, August 25, 2006

2. New Notification for Environmental Clearance: EIA Notification 2006

After the first EIA notification in 1994, new notification has come into force, which sets up new guidelines for the environmental clearance required by projects. Unlike previous notification it has this time come up with major amendments having received varied reactions from different groups. According to the new notification, new activities shall require prior environmental clearance from the concerned regulatory authority, which shall then be referred to the Central Government in the Ministry of Environment and Forests for matters falling under Category 'A' in the Schedule, and at State level to the State Environment Impact Assessment Authority (SEIAA) for matters falling under Category 'B' in the said Schedule.

There is a requirement for prior Environmental Clearance (EC) for the following categories:

(i) All new projects or activities listed in

the Schedule of this notification;

(ii) Expansion and modernization of existing projects or activities which will cross the threshold limits given in the Schedule after the expansion or modernization;

(iii) Any change in product-mix in an existing manufacturing unit included in the Schedule beyond the specified range.

Also, under the new guidelines, public hearings will now be replaced by a web posting of the EIA report, which will call for public comments.

Source: The Hindu, October 17, 2006
http://envfor.nic.in/

3. Indian Scientist Wins 2006 International Cosmos Prize from Expo '90 Commemorative Foundation, Japan

The International Cosmos Prize is an annual award presented by the Foundation to honour those who have, through their research, achieved excellence and are recognised as having contributed to a significant understanding of relationships among living organisms, the interdependence of life and the global environment, and the common nature integrating these inter-relationships. The international award consists of a medallion and a monetary prize of 40 million yen.

India's 'Elephant Man', Dr Raman Sukumar, chairman of the Centre for Ecological Sciences, Indian Institute of Science, Bangalore, has been awarded the 2006 International Cosmos Prize for his academic achievements in the fields of ecology and conservation biology in the Western Ghats.

Expo '90 Commemorative Foundation, based in Japan, on July 24, said "For its universal approach in preserving the natural environment and its efforts to conserve life amid the urbanisation that is taking place throughout the world, Dr Sukumar's work deserves the honour of the 2006 International Cosmos Prize, which aims for the 'harmonious coexistence of nature and mankind'." Dr Sukumar's research on the ecological relationship between humans and elephants, and the resolution of conflict between them, has been internationally recognised as pioneering work in the little-explored field of the co-existence of wildlife and humans. His work offers a detailed account of elephant-human interactions, including crop depredation by elephants in relation to their natural ecology, manslaughter by elephants, and habitat-manipulation by humans.

Dr Sukumar is the 14th (and only Indian) recipient of the International Cosmos Award. He has been presented with a number of other prestigious awards, including the Order of the Golden Ark, the Netherlands (1997), the Whitely Gold Award for International Nature Conservation (2003), and the T N Khoshoo Memorial Award for Conservation (2004).

Source: Hindustan Times , July 26, 2006
Press Trust of India , July 25, 2006
www.expo-cosmos.or.jp

4. Bt (*Bacillus thuringiensis*) Cotton Hybrid: Good Global Crop is Bad for Indian Farmers

A good cotton crop worldwide is more bad news for impoverished Indian farmers in a year in which the number of farmer suicides has topped that of previous years by a wide margin. There is little chance of farmers accepting the new, technologically advanced varieties that cost more unless they know they can achieve the right price for their crop in the end. There is no minimum guaranteed price but instead merely a minimum support price, with no promise to buy all the produce. In the case of tobacco, minimum guarantee prices work,

because industry and scientists are working together. There should be a statutory minimum guarantee price. Countless small and marginal farmers don't know who is deciding what and for whom. Genetically modified crops are not on the government's agenda. Unfortunately, GM crop research is in the hands of the private sector, and as a result the government can only facilitate its release, not control it. Farmers are the only losers in this case.

Source: Hindustan Times, November 1, 2006

5. E-waste : an Environmental Menace to India

A variety of hazardous electronic-waste entering India in charity and study material from abroad is posing a threat to the country's environment. E-waste comprises electronic goods ranging from personal computers to household appliances like TVs, refrigerators and cell phones, which contain 1,000 different substances and hazardous chemicals. There is a need for clarity in laws dealing with the waste that comes into India's ports. Large-scale unethical export of e-waste by industrialised nations is shifting the onus onto the local communities ill equipped to deal with the problem. The Maharashtra Pollution Control Board (MPCB) reports that about 10,000-12,000 tons (1 ton = 1000 kg) of e-waste are generated in Mumbai annually.

Source: Bureau Report,
http://www.zeenewcom/articles.asp

Indonesia

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1. Ensure Environmental Sustainability

In September 2000 the United Nation Millennium Summit agreed on a set of time-bound and measurable goals and targets for combating poverty, hunger, disease, illiteracy, environmental degradation and discrimination against women. They are called the Millennium Development Goals (MDGs). These goals were discussed in a symposium conducted by the Senate of the University on Indonesia on 24-25 July 2006 in Jakarta.

The MDGs to be achieved by the year 2015 are:

1. Halve extreme poverty and hunger;
2. Achieve universal primary education;
3. Empower women and promote equality between women and men;
4. Reduce mortality in children under five years old by two-thirds;
5. Reduce maternal mortality by three-quarters;
6. Reverse the spread of diseases especially HIV/AIDS and malaria;
7. Ensure environmental sustainability;
8. Create a global partnership for development, with targets for aid, trade and debt relief.

Environmental sustainability should be considered as a very fundamental quality of our behaviour and actions, which may sustain the continuity of the whole life system and the welfare of human and other living beings.

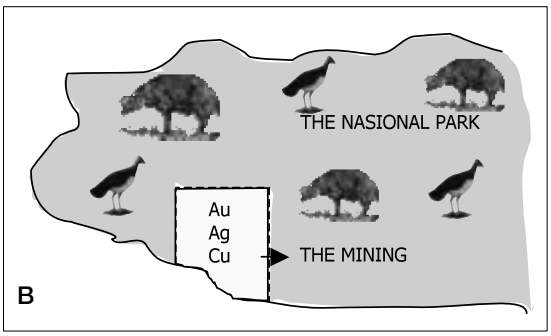
Appropriate environmental knowledge and understanding is obtained through environmental education. The acquired knowledge and understanding should be applied with wisdom to obtain valuable impacts to oneself and to the entire community. To achieve environmental sustainability, environmental education should be provided through all school levels up to the university graduate. Environmental management and sustainable development through successful education will avoid wasted resources and voraciousness, and ensure that there will be no illegal logging, forest fires, or any other activities that pollute land, water, and the atmosphere. There will be equal sharing of resources for all, toward a healthier and meaningful life.

Prof. S. Sadli, Prof. M. Soerjani and Prof. Emil Salim sharing the discussion of women's role, ensuring environmental sustainability and global partnership in the July symposium at University of Indonesia Jakarta (photos Soerjani 2006)

2. Gold Mining To Sustain Provincial Development

In 1995 a study team led by professor Soerjani was assigned by the Ministry of Mining and the Ministry of Forestry to study the uniqueness levels of flora and fauna existing in a National Park in North Sulawesi. A mining concession owned by a mining company must be evaluated since the mining area is located in an area of unique biodiversity called the Wallacea area, which has an overlap of biological profile influenced by Australian and Asian characters. The study team concluded that there are at least two important resources in the National Park; there is a mining resource of gold (Au), silver (Ag) and copper (Cu) that have a value of over billions dollars, as well as a unique flora (Ebenaceae, Sterculiaceae, Sapindaceae, etc) and fauna (Maleo Bird, Tarsius, Bubalus, Babyrousa, etc) which are all invaluable.

A. The Wallacea area, named after Dr. Alfred Wallace (1823–1913).



B. The National Park area where minerals are in existence prior to the mineral exploitation, the unique flora and fauna should be evacuated ex-situ to other similar National Parks in the Wallace area. (document right Soerjani 2006)

The study team suggested that the area development planning should be started through development feasibility, including the environmental impact analysis. This will be followed with the evacuation in-situ or ex-situ of the unique flora and fauna existing in the mining area. In addition, the local people are provided with skill training to allow them to be involved in the mining exploitation work, and the profit from the mining company should be shared with other sectors to sustain the area development through education, farming development, marine resource exploitation and the overall maintenance of the National Park.

3. The Eruption Of Hot—Mud and Flash Flooding

The hot-mud eruption and flooding in Sidoardjo, East Java, Indonesia started on 27 May, 2006. This hot-mud eruption is due to the drilling of oil and gas. Technically the drilling

A. An aerial photo of the village and some industries in Sidoardjo, East Java flooded with hot-mud floods (copied from www.detik.com, November 14, 2006)

B. The Kedungbendo village is buried in mud.

company should have installed a casing system. This operational standard procedure means that the electric drilling equipment must be complete with a drill cover at a certain depth to avoid leaks that may cause an eruption of mud. The mud itself is 30% solid and 70% liquid, and it has been gushing out 50,000 m^3 a day at present (approximately three month after the first eruption). The mud is flooding rice fields and other agriculture areas of approximately 200 ha as well as 1,685 units of settlements (see pictures).

The company responsible for this disaster is Lapindo Brantas Ltd. contracted by Pertamina Oil Company, under the supervision and official responsibility of the Ministry of Mining. The rehabilitation of the area also involved officials from the Ministry of Environment. The local government and the community team are chaired by the East Java Governor.

4. The Study Towards A Clean Jakarta City

Efforts to study towards the cleaning of the city of Jakarta have motivated various groups, institutions, foundations, schools, universities and NGOs. After a lengthy discussion, JICA Officials in Jakarta agreed to collaborate in the study of Jakarta cleaning with the Institute for Environmental Study and Development (IEED) and agreement was signed on 10 February, 2006.

Another collaboration has been held between Nagasaki University and IEED since 2000 in the study towards environmentally sustainability. On 29 August —3 September 2006, Professor T. Hayase from Nagasaki with a team of nine, including four students of the Environmental Study, Nagasaki University, visited Jakarta to discuss a programme of sustainable efforts to manage natural resources for the benefit of the farmers and fishermen. The students visited the open dumping site Bantar Gebang in Jakarta and observed students demonstrating how to

A. Discussion with Dr. Masafumi Yoshida and Prof. Hayase in the IEED office.
B. Group photo of the visitors together with IEED staff.
C. Visiting the Bantar Gebang open dumping sites in Jakarta.
D. Demonstration of composting city waste by Ir. Djamaludin the former Minister of Forestry (photo Soerjani 2006).

process agriculture and marine products to benefit the farmers' and fishermen's quality of life. The former Minister of Forestry demonstrated the practicality of the composting process of the waste resources from Jakarta's markets.

5. Environmental Book Launching

The recent publication of a book on THE LIVING ENVIRONMENT (Education, Environmental Management and Sustainable Development) (2006) written by M. Soerjani, A. Yuwono and D. Fardiaz was launched on 13 October 2006 at the Paramadina University, jointly organised with the Office of the Minister of Environment. The book publication was partly supported by JICA through Mr. Tetsuro Fujitsuka. The event was attended by Government Officials, Private Companies, University professors, doctoral degree students, and individuals who are committed to environmental matters. The book launching received an address by the Minister of Environment (conveyed by Mr. Isa Karmisa Ardiputra, one of the deputies to the Minister). Comments were received from the Paramadina University Rector and from the representative of UNDP.

The local newspaper commented that the book has messages beyond other environmental books, containing even spiritual messages. For example, at present human life on earth is neglecting the fact that the earth is a tiny part of the entity created by God in the universe. Therefore, human behaviours and activities should maintain the resilient system of the earth as part of the whole universe. The sustainable use of all resources should be based on optimal use of the value of time, energy and any physical resources. It should not create waste and should avoid extravagance.

6. Towards An Environmental & Economising — Based Society

Sustainable development must be implemented by an economising-based society. This concept is in response to the objective of the JICA mission from Japan visiting Jakarta on 7-12 November 2006. The mission of the JICA team is to discuss a proposed training course on the design of a recycled-based society. The Institute for Environmental Education and Development responded in the discussion with the JICA team chaired by Mr. Seiji TOMIYASU from Kyushu International Center with a paper entitled: The Recycling-Based Society through Environmental & Economizing — Based Community.

A. the launched book;
B. the author and the readers' comment; and
C. the audience at the book launching (photos by Soerjani 2006).

A. the proposed response of the IEED for the JICA team;
B. and C the discussion with the JICA team; and
D. a group photo of the team and the IEED host.
(copyright Soerjani 2006)

The main reasons of the IEED response are:

- That environmental resources created in Nature are enough for the basic needs of the entire human society;
- The resources should be used economically, avoiding a waste of resources and working against extravagance or voraciousness;
- The accumulated waste in cities comes from agricultural land, therefore reducing the farm waste means that we must motivate, encourage and facilitate farmers to process vegetable and fruit for added value. Vegetable are processed to become pickles, chilli sauce, papaya jams, banana crackers or cookies, while marine products should be processed into shredded fried fish, seaweed cookies and syrup (see photo A). The farmers could separate the non-consumable resource to be composted. The compost is for their own use or sold cheaply to nearby plantations (tea, coffee, etc.) for organic agricultural practices.

Japan

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Associate Professor
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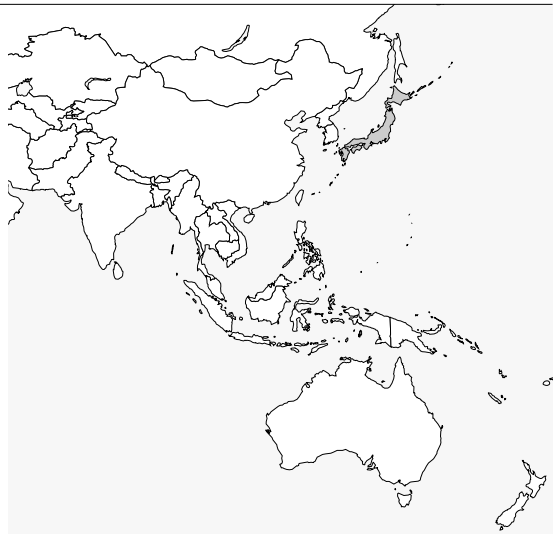

1. Revitalising "Mottainai"

One of the buzzwords of this year was "Mottainai" which is a traditional Japanese word meaning "what a waste". This word has appeared in the mass media including TV and newspapers over and over again. This is because Kenyan environmentalist Dr. Wangari Maathai, who was awarded the Nobel Peace Prize, has attempted to enter this word into the international lexicon. When she visited Japan for an event related to the Kyoto Protocol last year, she learned that this word carried connotations of urging resources to be consumed without waste and with respect and thanks. Thereafter this word has been revitalised as a key word for achieving the goal of "3R (Reduce, Reuse, and Recycle)" in Japanese society. Now Japanese business has begun a "Mottainai" campaign. A great variety of goods related to the campaign are on sale, and many titles of book concerning "Mottainai" have hit bookstores in Japan.

2. Impacts of Declining Birth Rate on the Environment

The declining birth rate is one of the most serious social issues in present-day Japan. As the government of Japan is strongly concerned about the issue, the Prime Minster has appointed a Minister for declining birth rate. The total fertility rate (TFR) of Japan peaked at 2.16 in 1971. Then, as a result of the continued

"Mottainai" Furoshiki (a type of traditional Japanese wrapping cloth)
Source: Governmental Report on the Sound Material-cycle Society of 2006

declining birth rate, the TFR hit a record low of 1.29 in 2004. Since last year, the total population of Japan has been decreasing. The working population is also predicted to begin falling soon. There is a fear that a population decrease will have an adverse effect on the Japanese economy. Nevertheless a declining birth rate may offer some potential benefits to the environment because of diminishing population pressures on the environment and natural resources. As an opposite view, the "Annual Governmental Report on the Environment of 2006", which deals with the themes of "population decline and the environment", emphasises the negative impacts of the population decrease on the environment. Even though the impacts of a declining birth rate are both positive and negative, the establishment of measures against a declining birth rate will be the key for realising a sustainable society in Japan.

Population statistics of Japan are available at the official site of the National Institute of Population and Social Security Research. (URL: http://www.ipss.go.jp/index-e.html)

3. Pet Keeping and Biodiversity Loss

In recent years, species of pets have diversified, as the number of pets has been rapidly increasing in Japan. The scale of the pet-related industry has also been expanding. At the same time, it is notable that the manners of pet owners have become worse. Television news shows often report various problems related to the bad manners of pet owners. In this regard, the revised Law concerning the Protection and Control of Animals went into effect this year in order to identify the legal responsibility of pet owners and to introduce a registration system of pet traders. Furthermore, the bad manners of pet ownership poses a serious threat to the biodiversity of Japan. Among those pets are some invasive alien species such as snakes, scorpions, and turtles. They are sometimes released by pet owners or escape outdoors by themselves. This causes serious trouble in many places. Beetles and stag beetles have become popular among children and this has lead to an increase in imports of these insects which can adversely affect indigenous species. It was also revealed that genetically modified killifish (so-called the luminous killifish) produced overseas were on sale in Japan contravening the Cartagena Protocol on Biosafety. While pet ownership has great benefits to human life, irresponsible pet ownership should not be tolerated.

4. 50 Years since the Government Officially Acknowledged Minamata Disease

Minamata disease, known as the starting point of environmental issues in Japan, is a neurological disorder caused by methylmercury poisoning. It was first discovered in 1956 around the Minamata Bay in Kumamoto Prefecture. By the end of March 2006, 2,955 Minamata Disease patients, who are entitle to receive compensation from the company responsible for the pollution, have been certified. However, government standardisation for this certification has been quite controversial. In response, the government began to financially assist with the medical expenses of approximately 11,000 patients who have signs and symptoms resembling Minamata disease. Minamata disease is one of the worst tragedies coming from the social trend of giving economic development the greatest priority after the World War II. Due to the lack of a precautionary approach, neither government nor business could curb the rise in the number of patients. We have to remember the lessons learned by the tragic experience of Minamata disease.

Detailed information on Minamata disease is available at the official site of the National Institute for Minamata Disease. (URL:

http://www.nimd.go.jp/english/index.html)

5. Revision of the Basic Environment Plan

In April of this year, the Cabinet of Japan decided upon the "Third Basic Environment Plan - The Way to a New Rich Lifestyle in a Sustainable Society". The plan sets out comprehensive and long-term government policies for environmental conservation under the Basic Environment Law. The revised plan sets six new directions for future environment policy development, specifically, "integrated improvements of the environment, the economy, and the society", "formation of sustainable national land and nature", "enrichment of R&D and measures considering uncertainty", "the new role of the national government, local governments, and citizens, and the promotion of their participation and collaboration", "strengthening of efforts with international strategies" and "formulation of policy measures from a long-term perspective". Furthermore, the revised plan includes policy programmes for 10 strategic fields to advance the efforts toward a sustainable society. The previous version of the plan did not sufficiently ensure its effective enforcement. However, the revised plan establishes numeric indicators for every programme and sets "comprehensive environmental indicators" for evaluation of its effectiveness.

Republic of Korea

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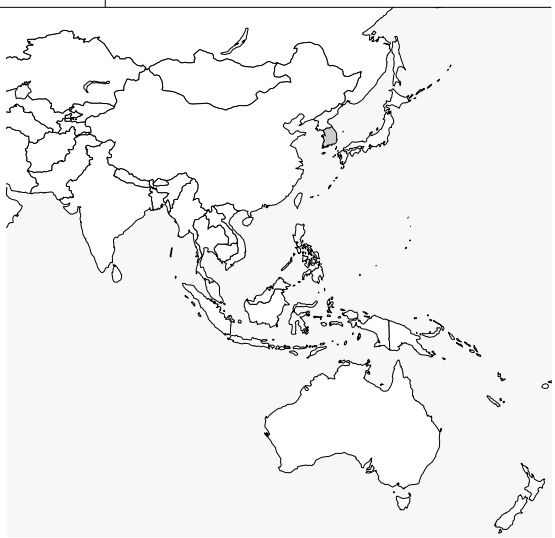

1. Establishment of Metropolitan Air Quality Database

Air pollution in the metropolitan area of Korea has been much worse than in major cities of advanced countries. To improve air quality, many efforts have been made by academia and industry, along with the government's special measures for metropolitan air quality. It is now necessary to manage research data in a more systematic way, and a database has been established to this end. Sun Woo Young-Jun, President of the Metropolitan Air Management Office (MAMO) said that with the Database of approx. 5,700 materials included in research papers and statistics reports, we can systematically manage diverse data and increase the usefulness of materials through data encryption, which contributes to the enhancement of the public service. The Database provides easy access and research capability for data on air quality management and policy, traffic pollution, air pollution reduction technology, odor/Volatile Organic Compounds (VOCs), and basic statistics of government agencies and local governments. Any materials not contained in the database can be found in links to the websites of relevant organisations. According to a staff member of the MAMO, the amount of data which the Office has collected since its inception in January 2005, reached 5,700. The Office aims to become a "reservoir of air quality data" by gathering and securing all materials on air environment in years to come.

Source: Ministry of Environment, Republic of Korea

2. Water Environment Management Master Plan Outline (proposed) — Clean Water, Eco River 2015 —

The Water Environment Management Master Plan proposed by the Ministry of Environment (MOE) presents the government's policy directions for the next 10 years (2006~2015). It aims to promote "ecologically healthy water

※Data by Category (5,685 cases, as of Aug. '06)

Category	No. of Cases	Category	No. of Cases
Air quality policy and management	2,152	Odour & VOCs	307
Current status and monitoring of air pollution	1,711	Air pollution reduction technology	214
Global environment	111	Measuring technology	156
Basic statistics	371	Indoor air quality	137
Traffic air pollution	251	Others	275

environment to ensure high quality water" which breaks away from a policy that has been geared almost solely toward existing point sources of conventional pollutants which cause deteriorating water quality, including BOD. The plan presents programmes that encompass the management of water quality in small streams, estuaries and on the coast, in addition to the upper areas of water supply sources and mainstream of rivers that have been accorded greater priority to date. It also enables systematic management by changing the management unit from 194 rivers and streams into 4 major river basins, 159 mid-level basins, and 813 unit basins. This master plan will serve as a guideline for the execution of water quality preservation plans which must be integrated and implemented by the regional environmental offices, cities, guns and gus nationwide. The mater plan presents policy directions for eight areas, including the promotion of "ecologically healthy water environment". The plan mirrors the transformed conditions following the promotion of "comprehensive measures for the water quality in the four major river basins" while accommodating the public's need for a healthy water environment as revealed in a recent public opinion poll. Constant expansion of environmental infrastructures by the government contributed to a notable reduction of point sources. However, non-point pollution from roads, urban areas and rural areas are increasingly affecting the water quality. A recent opinion poll (November, 2005) conducted over the telephone, with respect to the government's policy on Water Environment Management in the next 10 years, revealed that 61% of respondents believe it is necessary to restore high value ecologically sensitive streams and protect water quality against harmful substances. To meet the expectations of citizens, the MOE aims to promote "aquatic ecosystem restoration projects" and "water quality-based toxic control projects for public waters" in a systematic manner. Implementation of these projects will enable the MOE to closely link the concept of its Water Environment Management programmes with existing aquatic ecosystems. The highest priority and attention will be aligned toward to the above-mentioned projects for the next 10 years.

Source: MOE and KEI, 2006. Water Environment Management Master Plan Outline (proposed). KEPB 3(4)

3. Strategic Environmental Assessment (SEA) System to be Introduced in June

The Ministry of Environment said on 1 June, 2006 that its Strategic Environmental Assessment system started in a bid to minimise environmental conflicts arising from big state projects. The ministry hopes the SEA system

provides a reliable method for resolving disputes, while keeping high-profile state projects such as the Mt. Sapae and Cheonseong tunnel projects from being discontinued. The purpose of the SEA is to ensure that environmental repercussions of certain plans and programmes are identified and assessed during their preparation and before their adoption. The public and environmental authorities can give their opinions and all results are integrated and taken into account in the course of the planning procedure. Under the SEA system, 83 major administrative projects such as roads, railways and dams require the formation of panels to accommodate the opinions of affected residents and environmental groups. It also requires explanatory sessions and the submission of plans for public inspection, starting at the planning stages. Since August 2000, the ministry has implemented the Pre-Environmental Review System (PERS). Although similar to the SEA, it had limited success in preventing environmental controversies because of its failure to cover all administrative plans associated with development projects and lack of opinion filtering devices, the ministry reported.

Source: Korea.net, 3 June, 2006

4. Ministry to Conduct Health Evaluation Programme to Combat Environmental Diseases

The Ministry of Environment will conduct a health impact evaluation programme this year for people susceptible to environmental contamination such as children, women shut-ins, and those living in abandoned mining towns and industrial complexes. Making public its major policy objectives for 2006, the ministry said it will conduct surveys to gather facts about the incidence of environmental diseases by region and stratum to formulate systematic preventive measures. A survey on 2,700 children under age 10 in nine urban and rural areas will include medical checkups on asthma and atopy between May 2006 and April 2007. Data collected by the National Health Insurance Corporation show that as of 2003, 14 percent of Korean children and 23 percent of pre-schoolers suffer from asthma and atopy. The ministry will also try to establish possible connections between exposures to environmental contamination and birth defects like deformities for some 1,000 women confined to their homes, babies and infants, and track incidences of atopic and asthma cases for children under age 5 between this year and 2010. Six abandoned mining towns in North and South Gyeongsang and Gangwon provinces will undergo health impact evaluation surveys this year to detect any heavy metals in the blood of residents there. The ministry plans to embark on a similar survey of the area surrounding Gwangyang Bay, South Jeolla Province, on a long-term basis up to 20 years in addition to the Ulsan and Sihwa-Banwol industrial complexes.

Source: : Korea.net, 15 February, 2006

Lao PDR

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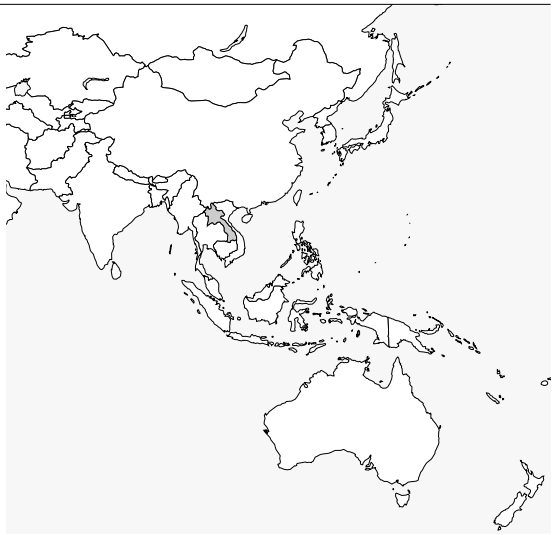
Environment Promotion Division
Science, Technology and Environment Agency



1. The Lao PDR Launches Integrated Spatial Planning

The Science, Technology and Environment Agency (STEA) working in close cooperation with the Committee for Planning and Investment (CPI) — both under the Prime Minister — has launched a programme for the development and introduction of Integrated Spatial Planning in the Lao PDR. The programme is supported by the Swedish Government through the Strengthening Environmental Management Phase II Project in STEA.

Lao PDR is faced with the daunting task of developing strong environmental management and ensuring that social, economic and environmental dimensions are integrated to support improvements in the livelihoods of the people, as well as to protect and enhance the environment and ensure sound development of the industrial and agricultural sectors and infrastructure.

As a developing country, Lao PDR has a multitude of strategies, plans and projects under preparation and implementation. Therefore, there is an even stronger need to ensure proper integration and coordination of environmental, economic and social issues. The recently prepared 6th National Socio Economic Development Plan 2006-2010 for Lao PDR is an ambitious and visionary plan with a clear focus on poverty reduction within the framework of sustainable development. Sustainable socioeconomic development as set forth in the plan requires strong and focused environmental planning and management and the main challenge will be the development and

introduction of processes and tools to ensure that development and environment are well integrated.

In terms of integration, STEA and CPI play a key role; STEA is entrusted with the mandate to ensure integration and coordination of environment and development plans and CPI is the main agency responsible for socioeconomic planning and is a one-stop-service organ for investment projects.

However, the execution of these roles is filled with challenges and constraints, and STEA and CPI need to develop and build the necessary capacity to manage and overcome these challenges and constraints.

The Programme for development and introduction of Integrated Spatial Planning was launched in July 2006 through a one-week training course for the secretariats of the National Environment Committee and the Provincial Environment Committees. The training course was facilitated by International experts and professional environmental planners and took the participants through cases from around the world. The participants also had the opportunity to exercise and develop their skills and understanding in Integrated Spatial Planning through specially designed training cases based on real data and information from two provinces in Lao PDR.

The launch of the programme was followed-up by a workshop on Planning for Development, Investment and Environment conducted in Vientiane on 30-31 August 2006.

The long-term aim of the programme is to develop and introduce Integrated Spatial Planning as a regulatory and environmental management tool specifically designed to ensure integration of environmental concerns into private and public investment planning. There are three main aspects: i) Technical tools; ii) Planning processes and Procedures, and iii) Legal and Regulatory Measures.

As an innovative part of the programme, Strategic Environmental Assessment will be build into the planning process and the analysis and assessments will be supported by a so-called web mapping system. Access to reliable and updated information is a core element in good environmental planning and management and a web mapping system has been designed and is now under implementation. Web mapping is a spatial information system that links maps and map attributes with databases. The system works on web technology and can be uploaded to the Internet or used as a stand-alone system.

The next phase in the programme is a full scale pilot project in Oudomxay Province on developing an Integrated Spatial Plan. This will be a cornerstone in the gradual introduction of integrated spatial planning in Lao PDR and will serve as a model for other provinces in the country.

The Oudomxay Integrated Spatial Planning Pilot Project will be launched in December 2006 and run for 4-5 months. It is designed to investigate, test and build capacity in four main aspects: 1) Understanding and appreciation of Integrated Spatial Planning, 2) Technical tools such as Strategic Environmental Assessment, web mapping and GIS, 3) Planning process and procedures, and 4) Legal measures.

Integrated Spatial Planning is about strategic planning for sustainable utilisation of our surroundings or space and involves establishing a spatial framework for land use, protection and enhancement of nature and environment, location of future residential and industrial areas and location and type of large investment projects. It is the experience from all around the World that to have good environmental management, you need integrated planning. Integrated Spatial Planning is a prerequisite for good and sound environmental management.

An Integrated Spatial Plan is based on a vision and strategy for the area in question and the plan puts the development vision of the area on a map and assigns specific measures and regulations to each particular area or zone.

The core part of an integrated spatial plan is a set of planning maps that show and indicate what kind of land use, activities, operations and

constructions are preferred/not preferred or allowed/not allowed in certain areas. Through a set of Strategy Statements, the Integrated Spatial Plan guides public and private investments and government policies from all sectors and interests in one shared desired direction. A spatial plan is not an action plan as we normally know it. A spatial plan is a regulatory instrument to integrate and balance competing or conflicting interests. The measures determined in the plan are designed specifically to promote the desired development or to avoid and move away from undesired development.

Malaysia

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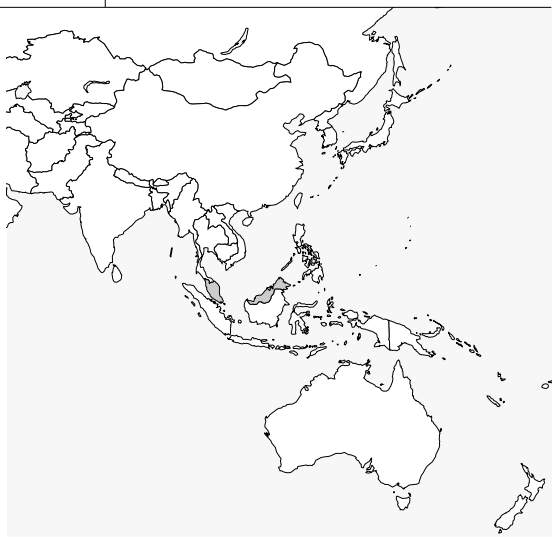


1. Advances in Sustainable Energy

Years of research and development in the palm oil industry, further boosted by the advance of biotechnology, have resulted in a blend of processed palm oil and petroleum diesel, a 'clean and renewable' bio-fuel deemed the answer to depletion of energy reserves. Biotechnology is poised to be the next engine of growth, with the industry taking advantage of the country's strong foundation in agro-bio and natural resources from rainforests. Already ten bio-diesel plants are being built, to be followed by twelve more; and out of the ten, three are joint ventures between the Malaysian Palm Oil Board (MPOB) and three firms. Even local government has joined the fray as Kuala Lumpur City Hall offered their vehicles, late March, as 'guinea pigs' for an MPOB pilot project to test palm bio-fuel.

Other developments through the year include a proposed RM10 mil. bio-diesel and glycerine purification refinery in Pahang, promising bio-diesel use in Sarawak, a Clean Development Mechanism (CDM) project certified to reduce emissions from palm oil mills, collaboration with foreign companies e.g. from Japan, and provision of 'eco-friendly' mats (derived from oil palm waste) for the 2008 Beijing Olympics. Encouraged by the Prime Minister's call (at an Oil & Gas conference mid-year) to invest in renewable energy, entrepreneurs big and small are making inroads into production of alternative fuels e.g. sugar-cane, and environment-friendly transportation e.g. a solar-powered scooter, projected for commercial production next year. The use of biomass and cellulose as fuels of the future, is also being looked into. In London, a Malaysian-made environment-friendly bicycle, the A-Bike, foldable and handy for urban transport, was also announced mid-July, to be on sale via the Internet, priced at less than GB£200 (RM 1,352).

2. Return of the Haze

The Haze came back with a vengeance this year to nearly equal the severity of the 1997 episode. Premonitions began as early as March when smoke from Riau, Indonesia, was detected by the local weather authorities; and a call was made to Indonesia even then to ratify the ASEAN Agreement on Transboundary Pollution (AATP) of June 2002. Around mid-year, states to the north, prone to the southwesterly winds were hit first, as hot spots grew in Sumatra, Kalimantan and North Borneo. Soon the haze spread to Klang Valley, where the capital Kuala Lumpur (KL) is situated, with three areas near it declared unhealthy as Air Pollution Index (API) readings of more than 100 were reached. Parts of Thailand, and later Singapore, were also affected. By mid August, unhealthy air was choking Sarawak, which had to deal with an outbreak of hand, foot and

mouth disease (HFMD) at the same time.

The situation prevailed through September and October, bringing with it the attendant disruption of transportation (flights, boat travel) due to low visibility, increase in respiratory and eye infections, and slowdown in trade and other economic activities. Singapore which hit unhealthy API levels by early October, started an initiative to hold meetings with ASEAN Environment Ministers. ISIS Malaysia participated in an NGO Dialogue on the Haze on 12 October, organised by a Singapore think-tank. At about the same time, a memorandum was handed to the Indonesian Embassy by the United Malay National Organization (UMNO) Youth Wing, which called upon Indonesia to implement the Hanoi Action Plan of 1998 as well as ratify the AATP. At a mid- October meeting in Pekanbaru, Indonesia, an ASEAN grouping comprising Singapore, Malaysia, Thailand, Indonesia and Brunei resolved to put off discussing fire-fighting cooperation until Indonesia ratifies the AATP. Only by October end did the skies clear up in Malaysia, and on 10 November, a Regional Ministerial Sub-Committee sat for the first time in Cebu, Philippines to formulate a clear policy, and agreed in essence to "adopt a fire-prone district", the elaboration of which will be made clear in due course.

3. Biodiversity Conservation

News on wildlife was noticeably prolific this year, with elephants, turtles and primates being given particularly frequent coverage. Late January, drafting of new legislation to protect 1,200 — 1,500 pachyderms left in the wild was announced, which would see stiffer penalties in an amendment to the Act, to be tabled in Parliament in June as the Wildlife and Conservation Bill 2006. During the sinking of 70 reef balls as artificial reefs near Redang by the Marine Parks Department in mid March, the harmful effects of tourism were recognised, and in early April the state government of Trengganu initiated a buy-back scheme for Leatherback turtle eggs whereby eggs from Thailand were purchased to be incubated here. In August the Marine Parks Department's intention to include restriction of tourists as one measure of the Marine Parks' policy was made known.

Further inland, facilities of the Biodiversity Institute, set up in Lanchang, Pahang two years ago, were to be upgraded to maintain a database of the country's flora and fauna. The Forest Research Institute of Malaysia (FRIM), collaborating with Marine Parks, Wildlife and Forestry departments, as well as universities, was picked as the leading coordinator for the database project. In Sabah, the first photo and first videotape of the Sumatran Rhinoceros in the wild were recorded, in June and September respectively. This was part of the 'Rhino rescue' project launched early this year. Also in Sabah, attempts are underway to recognise the Maliau Basin and the Lanjak Entimau Orang Utan sanctuary as World Heritage sites. In September the Sabah state government ordered a scaling down of a development project on Sipadan island, a renowned diving haven, from the proposed RM5 million clubhouse, to provision of basic facilities e.g. rest huts, sewerage system, showers, toilets and staff quarters, which will not exceed RM2 million.

Elsewhere, an Orchid Conservatory was to be set up on Gunung Ledang (formerly Mt Ophir) by the Johor state government. In July,

A Borneo Pygmy Elephant Rescue operation
(WWF-Malaysia/Engelbert Dausip)

Malaysia was selected as one of 15 tiger conservation landscapes in South East Asia, with Taman Negara identified as an area of Global Priority for conservation. Early August saw a boost for research on the 'dugong' when a private company pledged RM130,000 for the University of Malaya's Maritime Research Centre. In December, a book on 'Careers in Biodiversity and Environmental Management', targeting, in particular, career-seeking students, was launched, featuring profiles of a selected group of individuals whose occupations relate to biodiversity and conservation. The book is a product of smart partnership (SP) between private, public sectors and NGOs, including ISIS Malaysia, a member of the SP's Steering Group on Biodiversity.

4. Solid Waste Management

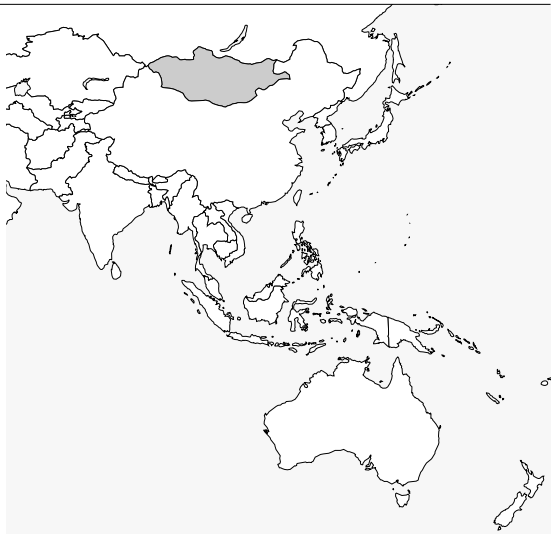
The year began with residents of Broga crying foul over a proposed incinerator siting in their midsts (17 January), then two months later, outcry at a proposed landfill on Carey Island, which threatens not only the surrounding mangroves but indigenous population, the Mah Meri. Events escalated into a full-blown nation-wide re-evaluation of open landfills, resulting in the Cabinet's considering to close down landfills, first in Selangor's water catchment areas (15 March), then eventually nationwide (29 April). There were issues of violating EIA conditions at the Bt Tagar landfill, and its failure to construct leachate treatment facilities which may have caused piped water to stink. This was followed by its notorious 'stand off' with transporters of waste, diverted from newly-closed dumpsites, circa 21 April; when the latter were denied entry for 'no prior notice'.

A Cabinet Committee headed by the Deputy Prime Minister, met on 28 April and decided to close 16 open landfills which were too near water intake points, sited all over the country. These would be replaced by sanitary landfills. Immediate action was also to be taken on 33 open dumpsites which had been closed but still posed a health threat. At the same time, the Ministry of Housing and Local Government (MOHLG) was directed to look into proposals for new landfill sites as well as submit a report on its assessment of the Refuse-derived- Fuel (RDF) plant in Semenyih. From June onwards, news focused on rubber recycling, a consequence of the nation's 'rubber revival'; whereby various entrepreneurs have started attempts at turning rubber discards e.g. tyres, into new goods, e.g. flooring for playgrounds and indoor recreational rooms. In Langkawi, a cement plant has started using 50 tonnes of scrap tyres daily as fuel for its kilns, since January this year.

Reviving a system that was initiated several years ago, MOHLG launched in September a Plastic Coding System, which would facilitate easier recycling of plastics at source (households); and called on Malaysians to make recycling part of our culture, to target a minimum recycling rate of 22% by 2020. Simultaneously the Ministry of Energy, Water and Communications encouraged companies providing power from their wastes to expand and sell their renewable energy to Tenaga Nasional Berhad (TNB), the national energy supplier. By October, MOHLG began mulling over moves to include a pay-as-you-throw scheme within the soon-to-be introduced Solid Waste Management Bill, which will cover almost everything to do with garbage disposal, including recycling.

Mongolia

Ayush Namkhai
Director- General of Special Protected Area Administration Department,
Ministry of Nature and the Environment



1. Additions and Amendments Made to Environmental Protection Law

Considering that alongside global warming and desertification there are also increased cases of illegally exploiting mineral resources, some additions and amendments were made to the Law on Environmental protection by the Mongolian Parliament in December 2005.

These additions and amendments include legislative frameworks for the involvement of local communities/residents in the cause of protection of natural resources, for social issues associated with state environmental inspectors and environmentalists, for any state benefits and allowances, including long and stable service bonuses, for those who have been injured and damaged whilst struggling against use of illegally natural resources.

People are now entitled to establish and unite in communities with the purpose of jointly safeguarding the natural resources of their locality with the support of volunteer environmentalists. If any case of illegal use of natural resources is revealed, any proceeds become state revenues, and the inspectors and environmentalists involved rewarded with up to 15% of the proceeds.

The area for which an environmentalist is to be responsible has been decreased by as much as 1.5 times relieving the environmentalists' work loads and providing proper opportunities to enhance their capacity.

Source: State News, 46, 7 December, 2005

2. Regulations Strengthening the Environmental Protection and Rehabilitation Provisions

In 1997 the Law on Mineral Resources was enacted by the Mongolian Parliament. It is more focused than the previous one on environmental protection and rehabilitation issues and strengthens the provisions concerning their regulations.

For instance, any holder of special licenses is obliged to carry out environmental protection and rehabilitation measures during mineral resources exploration and operation activities. As a guarantee that these measures will be carried out, 50% of the environmental protection costs shall be deposited in a special bank account established by the Governor, of the local soum for the operation period which has been established by the state administrative central body in charge of environmental issues. If the special license holder fails to carry out environmental protection and rehabilitation measures, the MNE will be responsible for rehabilitation and restoration efforts to be carried out by specialised organisations at the cost of the above bond and in case any additional expenses are to be incurred they shall be reimbursed incontestably by the license holder.

The state administrative central body in charge of environmental issues will make a decision to revoke a license if its holder fails to fulfill its environmental rehabilitation liabilities according to the local administrative organisation's proposals.

As for special license holders making investments in Mongolia for the amounts exceeding US$50 millions, investment contracts may be entered into to ensure sustainability for its activities. A government member in charge of environmental issues is obliged to take part in making such contracts.

With the fulfillment of this law the environmental protection and rehabilitation efforts are expected to be greatly improved.

Source: State News, 30, 16 August, 2006

3. Year of Rehabilitation Efforts Declared

Economic entities and organisations operating in the mining industry have not fulfilled their liabilities concerning the environmental protection and rehabilitation. As a consequence, fertile soil layers are being destroyed, livestock rangelands shrinking, rivers and water bodies being polluted, all of which negatively affects the ecological system's balance established over many thousands of years.

According to surveys conducted concerning the activities of 331 enterprises in Mongolia's mining industry, a 13,718.5 ha area has been devastated and eroded due to mining development, and proper rehabilitation and restoration efforts are made only with respect to 2,553.2 ha or 18% of it. An area abandoned without performing rehabilitation efforts has reached 11,200.0 ha. All this has resulted in certain changes in the environment.

In this connection the year 2006 was declared by the MNE of Mongolia as the year of rehabilitation; inspections and examinations were arranged jointly with the MIT, SSIA involving totally about 100 enterprises, and the current state of mineral resources development and operation has been scrutinised. The organisations carrying out rehabilitation and restoration efforts at levels which meet appropriate requirements are provided with certifications issued from the SSIA and appropriate tasks are assigned to implement rehabilitation and restoration measures on an area of over 3,000 ha or one-third of the damaged land abandoned without rehabilitation, enforcing due control and supervision.

Source: Newspaper "Zuunii Medee", No.40, 24 Feb., 2006

4. Dutch Assistance for Environment of Mongolia

The Netherlands Minister for Development Co-operation Mrs. Agnes van Ardenne visited Mongolia from 3 to 5 September. During her visit, the Minister will appeal for larger Mongolian involvement in poverty alleviation, sustainable development (notably in the field of environment), and the fight against corruption.

The Minister visited the capital Ulaanbaatar and the Hustai Nuruu National Park, in which over the last few years, the Przewalski horse has been reintroduced successfully with Dutch assistance. In Ulaanbaatar, Mrs. Van Ardenne met with President Mr. N.Enkhbayar, Minister of finance Mr. N.Bayartsaikhan, and the Minister of Natural and the Environment Mr. I.Erdenebaatar.

The Netherlands maintains a long-term development relationship with Mongolia since 1998 and co-operation focuses especially on the environment, among other things redressing desertification, preserving biodiversity, and making safe drinking water available.

Dutch assistance for democratic Mongolia will almost double to 10 million euros annually from 2007 onwards. A part of this amount, approximately 2 million euros annually, will be

spent on measures against desertification and preservation of one of the last areas of virgin nature in the world.

Source: Ministry of Foreign Affairs Press Release, 4 September, 2006

5. Conservation and Management of the Rare and Endangered Species of the Great Gobi Improved

The Gobi bear, also known as "Mazaalai" by Mongolians, is a critically endangered species. The wild camel, an endangered species of the Great Gobi, Mongolia is found in the Trans Altai Gobi. These animals are not only rare in Mongolia but also in the world. Habitat, conservation and management of the Gobi bear and wild camel has been improved as a result of the implementation of the "Conservation of the Great Gobi Its Umbrella Species Project" funded by the UNDP/GEF and carried out by Ministry of Nature and Environment.

Systematic research and monitoring, effective water and pasture management, increased public awareness and community participation in biodiversity and ecosystem conservation led to substantial outcomes on Gobi bear and wild camel conservation and management. The International Workshop on Conservation and Management of the Wild Bactrian Camel drafted a long-term conservation plan for wild camel conservation and management by mutually sharing knowledge and experiences on national and international levels. The workshop's final statement can be used to identify and secure long-term funding sources for sustainability of wild bactrian camel protected areas in China and Mongolia.

Rescue and study stations and a small fodder-making factory for Gobi bear are expected to be built in the historic habitat of the species using the Government allocated fund. Further management measurements for the Gobi bear are expected through better understanding of its biology and ecology as well as by extending international cooperation.

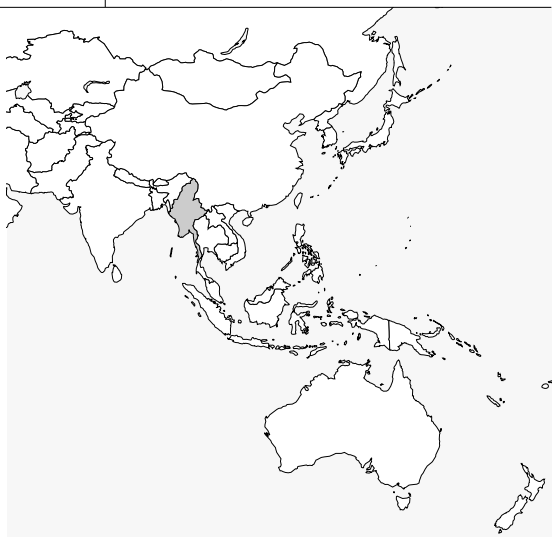
Source: "Report of the Great Gobi Project", 4 November, 2006

Gobi bear *(Ursus arctos gobiensis)*
Copyright ©Photo by Amgalan L

Wild camels *(Camelus bactrianus ferus)*
Copyright ©Photo by Dovchindorj G

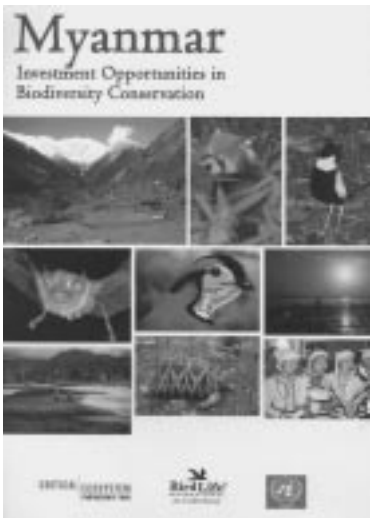
Myanmar

U Tin Than
Myanmar Program Coordinator
Regional/Sub-regional Conservation
WWF Greater Mekong, Thailand Country Program



1. Myanmar: Investment Opportunities in Biodiversity Conservation

A document on the outcome of two workshops held in Myanmar in 2003 and 2004 appeared as a report/book with various photographs of different natural ecosystems, landscapes, and endangered and native species of Myanmar in January 2006. This document is not only attractive to the general public and to any organisation which stands up for the conservation of natural habitats and rare species, but it is also instructive with comprehensive information on conservation values of the country and how to start work with geographic, taxonomic, and thematic priorities for conservation in Myanmar. This kind of report on biodiversity conservation issues in Myanmar has never been known before. This work has been done by various experts in this region and with the participation of many stakeholders from NGOs, INGOs, and government departments. It can also be used as a conservation action plan for Myanmar, while the formal Biodiversity Action Plan of Myanmar has just begun to be developed with GEF funding. Although major threats to biodiversity such as wildlife trade, intensive timber extraction, and conversion of natural habitats to other land-uses and infrastructure development exist in Myanmar, this report gives guidance to see the opportunities and to undertake possible measures for protecting important species, best examples of and most threatened ecosystems, and priority corridors. It also encourages the international concerned parties to start conservation in Myanmar now and warns that the time available is short before irreversible harm is done. This report should be read by the authorities of donor countries/organisations and the host country.



Source: BANCA, UNDP Myanmar, CEPF, and BirdLife International

2. Diplomacy Helps Curb Illegal Timber Extraction in Kachin State

All forest lands in Myanmar are under state

ownership and timber harvesting practices are said to be based on sustainable yield forest management through which the Forest Department allows businesses to cut down only trees which are marked with the prescribed girth limits of Annual Allowable Cut (AAC). However, the intensive timber extraction in the northern Kachin State of Myanmar for illegal export to China is well known and has led to world outcry. Global Witness has been at the frontline of raising this issue as expected timber extraction levels will be around 150,000 m^3 per year and it warns that globally important forest ecosystems can be destroyed in a short time. The government of Myanmar has also been aware of the loss of forest and the illegal activities of intensive logging in the insurgent area of Kachin State and of the smuggling of timber to the Chinese province of Yunan, crossing the border through newly emerging trade routes. The Minister of Forestry, Brigadier General Thein Aung, told the 12th Annual Conference of the Myanmar Timber Businessmen Association of his efforts and successes in getting cooperation from the Chinese government in stopping illegal timber extraction through diplomacy. Now a logging ban has been imposed in this border area by the Chinese government. Negotiating to prevent the illegal logging on the other side of the country is a risky task for the Myanmar timber companies. Twelve timber workers and some elephants from a Myanmar company were killed and two trucks were robbed by the timber smuggling gangs in Kachin State at the border area last year. Though illegal timber extraction has been common in border areas, an informal estimate indicates that the annual income from timber and forest products of Myanmar is more than US$ 2.3 billion.

Source: Living Colour Magazine, February 2006

3. The Worst Floods in Recent Memory Swept through Central Myanmar

This year flooding in Central Myanmar was the worst in this area for the last 80 years. Flood water started in northern Shan State and cascaded down Irrawaddy valley area of Sagine, Magwe, and Mandalay Divisions through Shweli and Dodhtawaddy rivers with a water level higher than 10m in some parts. The high and torrential waters inundated roads, bridges, towns, villages, and agricultural fields in the huge central plain of Irrawaddy. As a result, dozens of people were killed, many were missing, and hundreds were forced to flee to higher ground. Many houses and huts in rural places were carried away and cattle were killed in the fields by the flood. Transportation was cut off between Upper and Lower Myanmar. Many agriculture fields and products were destroyed, as high water levels and wide areas of flooded water remained for a couple of days, before they fell below the danger level.

Mandalay Division was hit most severely and it was worst along the Dodhtawaddy river basin. More than 200 villages were under water due to a break in the embankment at the Zawgyi River bank in Kyauksae Township. Water level in Mandalay Division reached as high as eight feet (2.4 meters). More than 3000 homes and 900 acres (364 hectares) of farmland were inundated. The floods cut off Mandalay's airport from the rest of the city and caused problems for travel agencies in facilitating tourists to reach their destination. Two trains were derailed when water poured across the tracks — one near Bagan and one between Mandalay and Bagan.

Although normal small foods usually occur in the rainy season in these areas every year, this year's floods in mid-October were the worst in recent memory.

Meteorologists blamed the heavy rain which was higher than normal for October in northern Shan State area due to an unusually high

frequency of storms this year. Some also suspected the effects of deforestation and dam building for such a high level of destruction. Since there has been intensive logging in northern Shan State and eastern Kachin State near China-Myanmar border in recent years, the northeastern hilly region of Myanmar lacks adequate forest cover which leaves the ground less able to absorb excess water. Some pointed out the importance of disaster management and preparedness to prevent flooding.

Sources: The Myanmar Times, 16-22 October 2006 and 7 Day News Journal, 26 October 2006

4. Marine Turtles of Myanmar Struggle Against Extinction

Five species of marine turtle: olive ridley, loggerhead, green, hawksbill, and leatherback are known to nest in the 2,830 km long coastline of Myanmar. However, the latter two species are considered extremely rare now. U Myint, a zoologist from Yangon University said, "Thousands of females used to come ashore to the Myanmar coast to lay eggs annually in the past, but now about only 150 females can reach the nesting sites here."

It was learnt that 1.6 million green turtle eggs were harvested annually in the early 1910s. Maxwell (1911) estimated a nesting population of 5,000 green and 3,750 loggerhead turtles. Smith (1931) mentioned an annual harvest of 1.5 million olive ridley eggs in the Irrawady Division. In 1985, in a single area of the coastline within 15 km of Daminseik area near the town of Tavoy, Teninthary Division, 850 breeding turtles of five different species were recorded nesting there. However, the data from the Fisheries Department in 2003 indicates a total number of nests in the Irrawady Division as only 100 olive riddle and 300 green turtles. Now only a few areas are known to be nesting banks for marine turtles in Myanmar.

A National Workshop on Marine Turtle Conservation and Management was held at the headquarters of the Myanmar Fisheries Federation in Insein Township on 6 November. Many of the participants pointed out the coastal fishing and collection of eggs for source of food and income as the cause of decline. The Fisheries Department's effort for conservation was commended while the need for increased public awareness and assistance and cooperation from international conservation organisations was recognised.

As Myanmar has many islands and sandy beaches that serve as suitable habitats for the sea turtles nesting and hatching, action must be taken promptly to do surveys and conservation work before they disappear forever.

Source: The Myanmar Times, 20 - 26 November 2006

5. Development vs. Environment: Paper and Pulp Factory (Tharbaung)

The successful establishment of the biggest pulp factory in Myanmar near the remote town of Tharbaung in Irrawady Division has only recently been known to the public, due to a visit to the factory by the highest government authority on 27 November 2006. The presence of this pulp mill cannot have been known to many people before, as it is located in a distant place on the banks of the Ngawan River near the southernmost edge of the Rakhine Yoma mountain range where the largest bamboo forest in mainland southeast Asia exists. The Ngawan River is used both for rafting bamboo from Rakhine Yoma in its upper reaches, and also for carrying the factory's pulp down to the gulf for export to China. This factory was built by a Chinese company and can produce 200 tons of bleached pulp per day. The main raw materials used are bamboo, salt, and limestone. A 50-ton newsprint factory has also been built in the nearby area. From the government's point of view, the founding of the factory will boost regional development by creating job

Bamboos are extracting and rafting for Chinese Pulp Mill at Tharboung

Chinese-built and Chinese-invested Pulp Mill and harbour near the mill

opportunities, increasing the skills of local people to produce paper, and reducing dependence on imports.

From the environmentalists' point of view, this factory has largely been built due to investment from a Chinese company and the pulp is going to be exported to China, as the paper market demand is so high there. The bamboo forest cover of this 450 km-long mountain range has pure stands of a bamboo species (Kayin-wa, *Mellocanna bambusoides*) stretching over an area of about 8,000 km^2 with an estimated growing stock of 21 million metric tons. However, bamboo extraction is the greatest threat to the existence of this unique range of elephant habitat where about 200 wild elephants live together with many endangered species of mammals, birds, and some native species of reptiles and butterflies share the same ecosystem. If bamboo is cut down in an unsustainable way through rapid uprooting to fulfill the immediate demand of the factory, the habitat of the area would be destroyed, just as the previous diptropcarp forest cover of whole Gwa-Pass area has disappeared in the last nine

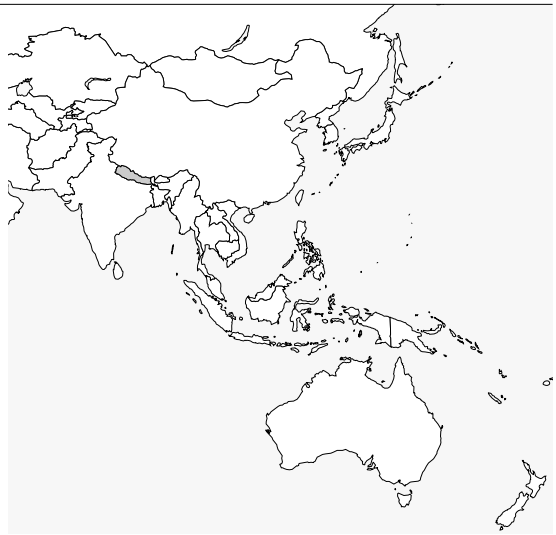
Cooperative effort of China and Myanmar in building the Pulp Mill

years due to the extraction of timber by the Dagone and Mayflower companies. This mountain range is an internationally important eco-region with fauna and flora of eastern Himalayan origin. Though an elephant sanctuary has already been established there, the buffer zone has not yet been recognised. The toxic waste from the factories is also a danger to the river system, its aquatic life, and the livelihoods of people who depend on it.

Source: New Light of Myanmar, 26 and 27 November 2006

Nepal

Phool Chandra Shrestha
Freelance Consultant



1. Government All Set to Privatise National Parks

The government is all set to "privatise" the management of National Parks and Wildlife Reserves for a certain period. An ordinance was issued recently to amend the National Park and Wildlife Conservation Act, 1973. Previous laws allowed private organisations to manage only the conservation areas. The government may ask for a proposal from any capable organisation, which is formed by the law, to take over the management of conservation areas, national parks and hunting reserves.

According to an expert in wildlife law, the amendment has been made in line with the government's policy to "privatise" the management of national parks and wildlife reserves. The government had formulated the policy in 2003 and the same year the Ministry of Forest and Soil Conservation had issued a 'letter of intent' to study the feasibility of the handover of the management to private organisations.

King Mahendra Trust for Nature Conservation (KMTNC) now seems to be a potential organisation to take over the management of the parks as it had shown keen interest to take over the management of the Rara and Shivapuri National parks. Officials say that handing over the National parks' management to private organisations will make the management efficient and help the government earn a regular income as it will cut back the current manpower.

Source: The Himalayan, 7 February, 2006

2. Drug Ban Gives Vultures a Fighting Chance

Wildlife experts say the government ban on import and production of Diclofenac, a drug used for treatment of livestock, is a milestone in the protection of critically endangered vultures in Nepal. Department of Drug Administration (DDA) banned the import and production of Diclofenac in June this year in the wake of scientific revelation that the drug is highly lethal for scavengers, especially vultures.

Diclofenac causes kidney failure and mortality in vultures. Vultures come into contact with diclofenac when they feed on the carcasses of treated animals. In contrast extensive safety testing by the scientists in the UK, South Africa and India has shown that Meloxicam is safe to vultures and other scavenging birds. The use of diclofenac has caused vulture numbers to collapse in Nepal, and scientists from Bird Conservation Nepal (BCN) estimate that more than 90% of the population has been lost in less than 10 years.

Medivet, a veterinary pharmaceutical in Nepal has started production of Melox, a drug which contains Meloxicam to replace Diclofenac. The introduction of Meloxicam and Nepal's decision to deregister Diclofenac, now gives vultures a fighting chance for survival.

Source: The Kathmandu Post, 29 July, 2006 / The Rising Nepal, 29 July, 2006

3. 'Bio Gas' to Save Villagers from Wildlife

A village near the tourist town of Saurahain Chitwan National Park has lately been changed into a 'bio gas village'. The effort was made to relieve locals from the need to enter Chitwan National Park for firewood, and protect them from falling prey to wild animals.

The indigenous Tharu people at local Badreni Village traditionally depend on the national park for firewood. A large number of villagers have been injured and some even killed by wild animals attacking them in the park every year. Earlier there was no alternative except to go to the national park, under the constant threat of being killed by wild animals.

Of the eighty-one houses in the village, over sixty households now have bio-gas plants. Some 400 people have directly benefited by the alternative fuel for cooking. Biogas plant provides a sustainable energy supply to the rural people. Over five dozens bio-gas plants have been installed in the village this year alone. Some 378 additional plants have been installed at various villages adjoining the park. It costs Rs. 22,000 to install one bio gas plant. The amount was jointly provided by the government, local Mrig Kunja Users' Group and Baghmara Community Forest Users' Group.

Source: The Kathmandu Post, 3 September, 2006

4. Country's First Snake Farm

Snake farming has become the latest attraction in the central Terai, Bara District in Nepal. After the government implemented wildlife domestication, breeding and research policy 2003, Development Vision Nepal (DVN) — a non-government organisation — began commercially farming snakes in Jeetpur, Bara district since last June. This is probably the first commercial snake farm in the country.

Snake venom, meat and skin have a huge demand in the international market. DVN's Director Ishwor Neupane says that the productions are exported to many European and Asian countries and Australia. Neupane also opines that if the government comes out with a favourable policy for snake farming, anti-snake venom could be produced in the country and exported elsewhere. According to a survey, Nepal imports anti-snake venom worth around 10 million rupees from India every year. Also, around 200 people die in Nepal each year due to snakebites. Unavailability of anti-snake venom has always been a major problem in rural areas.

Currently, DVN has been operating 10 snake collection centres in Jeetpur, Dumarbana and Phattepur Village Development Committees of the district. Seven of the centres collect female snakes while the rest collect male snakes.

Source: The Kathmandu Post, 22 September, 2006

5. Freshwater Dolphins Facing Extinction Threat

A rare species of river dolphins, habituating certain Terai rivers in the country, is facing extinction. A report on the status, distribution and conservation threats of the Ganges River dolphins in the Karnali River was released at a regional meeting of conservation and management of river dolphins in Asia.

The report says that the Geruwa River had the minimum population of such dolphins as discovered during a survey in medium and low water seasons. A maximum of 12 and a minimum of nine dolphins were counted in the Mohana River, a feeder stream of Karnali river during three surveys conducted in high, average and low water seasons during the monsoons.

According to the report, habitat alteration by

floods, intensive fishing and past development interventions like the Chisapani bridge construction, the motorised ferry at Kothaghat, the Rajapur irrigation rehabilitation project and an increase in the intensity of agricultural practices in the area have caused a threat to the freshwater mammals.

A report in 1986 indicated that there were as many as 23 dolphins in Karnali. Similarly, the dolphin population in other rivers of Nepal such as the Narayani and Koshi rivers is also decreasing.

Source: The Himalayan, 27 May, 2006

New Zealand

Peter Urich and Peter Kouwenhoven,
Senior Research Fellows
and Liza Koushy
The International Global Change Institute (IGCI)
The University of Waikato

1. Who Owns the Foreshore and Seabed?

In April 2006, Rodolfo Stavenhagen, the Special Rapporteur on the Situation of Human Rights and Fundamental Freedoms of Indigenous Peoples for the United Nations Economic and Social Council, reported on his 'Mission to New Zealand', pursuant to the standing invitation of the Government of New Zealand to United Nations special procedures.

The relations between the Maori, the indigenous people of New Zealand, and the Government are based on the Treaty of Waitangi signed in 1840. As a result of land sales and breaches of the Treaty by the Crown, the Maori lost most of their land, resources, self-governance and cultural identity. A new approach since 1975 has led to numerous settlements of Maori land claims and the enactment of new legislation.

The Maori, who possess a rich and vibrant cultural tradition, represent around 15 per cent of a total population of about four million. While most of the Maori now live in urban centres, they maintain a close spiritual link with the land and the sea, especially in the areas where their *iwi* (tribes) are based.

The Government is committed to reducing the existing inequalities between Maori and non-Maori and to ensure that the country's development is shared by all groups in New Zealand society and is applying various strategies to reduce the persistent inequalities regarding several social indicators such as health, education, housing, employment and income.

Despite the progress made, the Maori are impatient with the pace of redress for breaches of the Treaty of Waitangi. Of particular concern to them is the 'Foreshore and Seabed Act', which extinguishes customary Maori property rights to the coastal areas and provides a statutory process for the recognition of customary or aboriginal titles.

2. Biosecurity Update from New Zealand

The microscopic alga, *Didymosphenia geminata,* didymo, has gained a high public profile as an aquatic invasive, found in 2004 in the South Island of New Zealand. In September 2006 an assessment of long-term management options was to be presented to the Cabinet for consideration. The expected present figure for its total impacts over 2004/05-2011/12 is $157.599 million.

On 19 October, 2006, the new National Pest Plant Accord (NPPA) was launched by the Minister for Biosecurity, Jim Anderton. Biosecurity New Zealand (BNZ), regional councils, the Department of Conservation and the Nursery and Garden Industry Association worked together to agree on a list of 114 weeds.

The Accord, first developed in 2001, identifies the most serious existing weeds in New Zealand, and how industry and government agencies will work together to prevent their sale, propagation and distribution. The updated Accord list contains 51 new species, and all species in four genera, while fifteen species have been removed from the list, as most of these plants are managed through other mechanisms. Implementation arrangements for the NPPA are improved, and include the introduction of national standards and training for compliance staff. The nursery and garden industry is also playing a more active role to assist compliance.

3. New Drinking Water Standards?

The Government has approved a national environmental standard for human drinking water sources under the Resource Management Act (RMA) 1991. The standard is intended to reduce the risk of contaminating drinking water sources. It will do this by requiring regional councils to consider the effects of activities on drinking water sources in their decision making.

The standard will require regional councils to ensure that effects on drinking water sources are considered in decisions on resource consents and regional plans. The exact wording of the standard will be finalised in legal drafting. Specifically, councils will be required to:

- Decline discharge or water permits that are likely to result in community drinking water becoming unsafe for consumption following existing treatment
- Be satisfied that permitted activities in regional plans will not result in community drinking water supplies being unsafe for consumption following existing treatment
- Place conditions on relevant resource consents requiring notification of drinking water suppliers if significant unintended events occur that may adversely affect sources of human drinking water.

4. Improved Environmental Management through Taxation Policy

Businesses that choose to clean up contaminated land now receive an immediate tax deduction. The Ministry for the Environment is currently developing a proposal for a national environmental standard for the clean-up of contaminated land. When available, this standard can help businesses and landowners when they make decisions on the clean-up of contaminated land.

Businesses can choose to direct some of their tax payments into a new voluntary site restoration fund. They can then call upon the fund to help pay for future site restoration and monitoring, thus reducing the overall cost to the business and encouraging site clean-up.

An immediate tax deduction is now available for costs incurred in investigating and testing options to avoid, remedy or mitigate the discharge of contaminants, and for environmental monitoring.

Tax deductions for improvements that prevent or mitigate the discharge of contaminants are now spread over the life of the resource consent (or 35 years, whichever is less). Examples of improvements might include earthworks to reduce the effect of contaminants, or planting trees to reduce the impact of contaminants on a stream.

There are already specific provisions in the tax legislation that deal with agricultural environmental expenditure. Farmers now also have the benefit of qualifying for deductions under the general environmental expenditure rules. This enables tax deductions for a broader range of environmental expenditure, such as site restoration and large-scale riparian planting.

Pakistan

Mushtaq Ahmed Memon
Programme Officer, UNEP-DTIE-IETC

1. Pakistan at 2nd UNEP GPA Intergovernmental Review Meeting

UNEP GPA organised IGR-2 in Beijing from 16 to 20 October. The meeting was attended by quite a large number of ministers and high officials from various countries across the globe. Newly appointed Executive Director of UNEP, Achim Steiner suggested that instead of the traditional way of ministerial statements, there should be group discussions among ministers from different countries and regions. All the participants were divided into 8 groups and each group nominated one minister as its Chair. Pakistan was appointed to chair Table 5 at this roundtable and to present the summary of concerns and recommendations on the following day. H.E. Syed Faisal Saleh Hayat, Minister of Environment from Pakistan, facilitated the discussions. He presented the summary of the discussions on the following day, which were well taken by everyone including ED of UNEP. The Minister suggested that after the tragic earthquake in Pakistan, there is a need to carry out reconstruction in line with environmental concerns. He proposed that there should be a forum, where we can exchange information and support the projects on environmentally sound reconstruction of disaster-hit areas. The Minister also proposed that it is time for the mainstreaming of environmental issues within national and local governments, as the Ministry of Environment, unlike traditional ministries, is

Minister for Environment (Pakistan) with Delegates
Source: Author

UNEP Executive Director (centre)
Source: Author

dependent on other sectors to improve the environmental situation in the respective countries. He also mentioned that there is an urgent need to address land-based pollution sources, including water pollution and solid waste. IGR-2 was successfully concluded after the adoption of Beijing Declaration.

Sources: Earth Negotiations Bulletin (IISD) 20 October 2006 and Author

2. Heavy Rains — A Curse or a Blessing?

This year, there were heavy torrential rains which brought misery as well as happiness in Sindh, the southern province of Pakistan. Many people lost their lives and their homes due to heavy floods caused by rain, especially in Badin and Hyderabad districts. Due to insufficient drainage system, the flooding situation continued for many days leading to an outbreak of epidemic diseases. On the other hand, not very far from Badin and Hyderabad, rain brings happiness for the people of the famous Thar desert. Due to low rainfall over the last few years and due to the unavailability of infrastructure to collect and store water from the Indus river, the people of Thar, whose livelihood depends on the cattle and local agriculture, left their homes in the search of food. These heavy rains turned the desert into a paradise and most of the people returned to their homes to live their traditional happy life. Many local tourists also visited to enjoy the scenic view of this green desert, where peacocks dance during the rainy season and camels happily cover long distances. The Indus, which has lost its connection with sea due to high water demand upstream, stated flowing at its full capacity. This helped people downstream to return to grow crops. The famous fish of the Indus, the Palo, which travels upstream from the Arabian sea, again started its journey. The lesson we always receive and then forget during heavy rains is that we should have sufficient environmental infrastructure to avoid flooding in cities and to convey and store water in Thar so we can always turn this curse into a blessing for everyone.

Heavy rain also brings happiness in deserted and water-stressed areas
Source: Author

Sources: Daily "Dawn" 10 September 2006 and Author

3. Issues on Marine Pollution

Pakistan is among those countries where oil pollution is recorded at severe levels, says a United Nations report released here on Wednesday (4 October). The other port countries facing the same problem include Bangladesh, Indonesia, Malaysia and Nigeria. The report says that untreated sewage pouring into the world's seas and oceans is polluting their water and coastlines and endangering the health and welfare of the people and animals that inhabit them. As well as the growing

problem of sewage, oceans are also suffering from rising levels of nutrients such as run-off from agricultural land, triggering toxic algal blooms that deprive the water of oxygen. There is also destruction of coastal ecosystems such as mangroves and a rising tide of ocean litter, says the U.N. Environment Programme's State of the Marine Environment report. An estimated 80 per cent of marine pollution originates from the land and this could rise significantly by 2050 if, as expected, coastal populations double in just over 40 years time and action to combat pollution is not accelerated, Executive Director of UNEP Achim Steiner said.

Pakistan's coastline also faces the challenge of continuous oil spills. A few years ago, a major oil spill was caused by a Tasman oil tanker and the cleanup operations are still not finished. Unfortunately, this year, an oil barge Orion-1 capsized near Karachi Port and there were fears of an oil spill if the salvage operations were not immediately planned and implemented. This reminds us of the urgency of disaster management plans with effective institutional and financial support.

Sources: Daily "Dawn" 5 and 11 October 2006

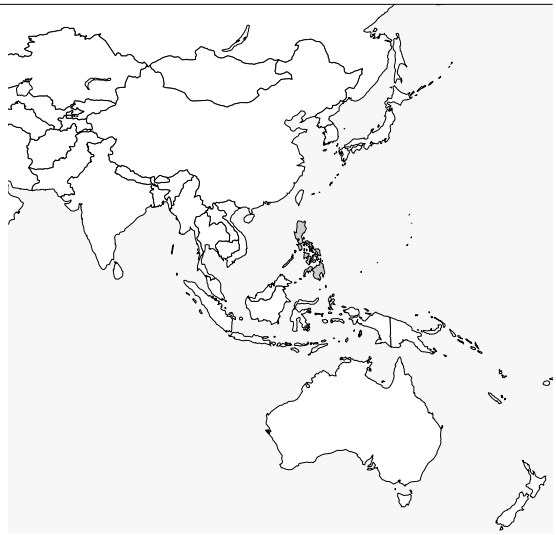
4. Strategies to Avert "Pollution Crisis"

Media sources, including the BBC, reported on the "Pollution Crisis" as air and water pollution levels are at their worst levels. Based on the Pakistan Economic Survey, the news broke out that dust and smoke particles are "generally twice the world average" and "five times" higher than the developed world. This pollution crisis was further complicated by water scarcity. The report, released by a Principle Economic Advisor, says, "In the cities, widespread use of low quality fuel, combined with a dramatic expansion in the number of vehicles on the roads, has led to significant air pollution problems." The government has been encouraging the use of vehicles powered by the less-polluting compressed natural gas (CNG). At present, CNG vehicles in Pakistan are estimated at just under one million, making Pakistan's CNG fleet the third largest in the world after Argentina and Brazil. According to the survey, the annual per capita water availability dropped to 1,105 cubic metres - just above the 1,000 cubic metre threshold level. A large part of the water scarcity problem has to do with increasing levels of pollution in drinking and agricultural water supplies. This year in particular, thousands of people across Pakistan have reported falling ill after drinking polluted water. Ineffective enforcement of laws regulating industrial effluents has allowed a large number of factories to dump their toxic effluents in main water bodies. Pakistan's government has proposed meeting water shortages by building hundreds of local water purification plants. The government plans to build more than 6,500 water purification plants across the country over the next few years.

Source: BBC News 5 June 2006 (news.bbc.co.uk)

The Philippines

Merlin M. Magallona
Professor
University of the Philippines College of Law



1. "Green Philippine Highways" Project Launched

As a project of the National Government, the Department of Environment and Natural Resources (DENR) launched a massive tree planting activity along the country's major highways. Known as the "Green Philippine Highways" project, it was planned to cover a total of 3,489 kilometres, requiring some 500,000 gmelina and mahogany seedlings to be planted on both sides of highways across Luzon, Visayas and Mindanao, the main islands of the Philippine archipelago. The DENR announced that the project was intended "to promote the image of every Filipino as a planter of trees and make communities that link these highways become custodians of the environment". The implementation of the greening-the-highways plan involved coordination with provincial, city and municipal government units.

The project had been publicised as a show-case of public-private sector partnership. Participating groups included the major business enterprises, civil-society organisations, religious societies and schools.

Following the launching of the project on 25 August, the head of the DENR, Secretary Angelo Reyes, told the press that its implementation exceeded targets. Actual figures released by the project's operation centre, according to Reyes, showed that by 31 August 802,514 trees were planted, exceeding the target of 500,000. Actually covered by the tree-planting activity were some 3,900 kilometres of highways, far exceeding the target of less than 3,500 kilometres.

The DENR press statement took pride in the claim that the great number of trees planted as achieved by the project had beaten India's record of simultaneous planting 300,587 trees in 2005. "The monumental feat at the launching of the GPH [Greening Philippine Highways]", read the DENR statement, "could mean another entry for the country in the *Guinness Book of Records.*" Secretary Reyes underscored the larger significance of the event when he said: "People from all walks of life and belonging to various sectors demonstrated their concern for the environment".

Sources: Philippine Daily Inquirer, 22 July, 2006, p. A16; 16 August, 2006, p. 2; 5 September, 2006, p. A14; Philippine Star, 29 July, 2006, p. A23; 5 September, 2006, p. 2.

2. Guimaras Island Oil Spill: The Worst in the Country's History

The most disastrous oil spill in the country's history occurred on 13 August this year when the oil tanker *M/T Solar I,* navigating in the rough sea 24 nautical miles from Guimaras island-province in Western Visayas, sank to a depth of about 900 metres. The 998-ton tanker

carried to the seabed its cargo of 2 million litres of bunker fuel in 13,000 barrels on charter by Petron Corporation for delivery to Southern Mindanao. *Solar* belongs to Sunshine Maritime Development Corporation whose capital stock is reportedly controlled by Japanese stockholders.

After four days, the Philippine Coast Guard estimated that about 200,000 litres of bunker fuel had spilled into the sea from the cargo tanks of *Solar*. Lt. Commander Joseph Coyme, the Coast Guard spokesman, told the press that "over 10,000 litres of spilled oil is already considered major .... An amount like this is a national emergency." The Coast Guard also estimated that about 1.8 million litres of fuel were still inside the vessel's cargo tanks. Greenpeace Southeast Asia described the disaster as an "ecological time bomb that may cause long-term and possibly permanent damage to the environment and livelihoods of people." The provincial government of Guimaras declared a state of calamity.

The report of the Regional Disaster Coordinating Council estimated that as of 1 September, the oil spill had displaced 6,156 families or 30,531 persons in the coastal villages heaviest hit by oil slick. It had destroyed or heavily damaged 12 hectares of sea grass, 30 hectares of corals, 431.5 hectares of mangroves, 15.8 square kilometres of coral reef and 823.5 hectares of fishponds. It had seriously affected 220 kilometres of coastline. Dr. Lydia Depra-Ramos, health regional director and other officials told the press that more than 700 coastal villagers suffered from "oil spill-related diseases and symptoms" caused by direct contact with oil slick and inhalation of fumes from oil. The Task Force Solar I Oil Spill of the Department of Environment and Natural Resources (DENR) disclosed in its report that the Department's 1,143.45-hectare Taklong Marine Reservation in Nueva Valencia, Guimaras was affected by the oil spill. This reservation includes 209 hectares of sea grass and 100 hectares of coral reef. The provincial government of Guimaras released its own report on 26 October, in which it pointed out that more than half or 52 of the 98 *barangays* (villages) in Guimaras province were directly hit by the oil spill with oil sludges in their coastal waters or along the shore. The remaining 46 villages were indirectly affected. Directly affected by the oil spill were 46 percent of the province's population of 151,194. Displaced were 2,439 fishermen on account of the effects of the oil spill on their fish catch, seaweed and milk fish production.

Sources: Philippine Daily Inquirer, 15 August, 2006, pp. A1, A4; 16 August, 2006, pp. A1, A8; 17 August, 2006, pp. A1, A6; 18 August, 2006, pp. A1, A10; 19 August, 2006, pp. A1, A5; 20 August, 2006, pp. A1, A8, A10; 21 August, 2006, pp. A1, A12; 22 August, 2006, pp. A1, A8; 23 August, 2006, pp. A1, A8, A9; 28 August, 2006, p. A1, A8; 5 September, 2006, p. 14; 6 September, 2006, pp. A1, A7; 7 September, 2006, A1, A9; 10 September, 2006, p. A3, A12; 11 September, 2006, p. A17; 19 September, 2006, pp. A1, A8; 25 September, 2006, pp. A1, A6; 25 October, 2006, pp. A1, A22; 27 October, 2006, p. A17; 30 October, 2006, p. A2; Philippine Star, 15 August, 2006, p. A23; 16 August, 2006, p. 8; 17 August, 2006, pp. 1, 4; 19 August, 2006, p. 4; 20 August, 2006, pp. 1, 4; 22 August, 2006, pp. 1, 17. Daily Tribune, 17 August, 2006, p. 3; 19 August, 2006, p. 3; 20 August, 2006, pp. 1, 3.

3. Japan-Philippines Economic Partnership Treaty Under Attack

The Japan-Philippines Economic Partnership Agreement (JPEPA) signed by Prime Minister Junichiro Koizumi and President Gloria Macapagal-Arroyo in Helsinki on 9 September, 2006, came under attack with the claim by environmentalists that it would allow the entry of toxic and hazardous waste from Japan.

The target is the provision of JPEPA which includes trading in articles "which can no

longer perform their original purpose ... nor are capable of being restored or repaired and which are fit only for disposal or for the recovery of parts or raw materials", as related to zero tariff for certain types of wastes such as ash and residue containing arsenic, mercury and thallium; pharmaceutical waste; residual products of chemical industries; clinical waste; municipal waste; waste from hydraulic fluid and brake fluid; and halogenated chlorofluorocarbon, among the more than 100 "environmentally sensitive" products that are not subject to tax upon entry.

In an interview by the *Philippine Daily Inquirer,* the country's leading daily newspaper, the chief negotiator for the Philippines in the trade talks with Japan, Senior Trade Undersecretary Thomas A. Aquino, admitted that waste, "even the hazardous and toxic one", is included in the JPEPA. He explained, however, that "there are also laws that define regulations and prohibitions on the trade in waste". Thus in effect the Philippines "would allow only trade in regulated — and not prohibited — waste allowed under Philippine laws and international agreements that the country is a party to."

In a briefing paper on the trade items in question, the Department of Environment and Natural Resources (DENR) stated that 141 of these items are "environmentally sensitive products deemed potentially hazardous to health and the environment if not handled properly". Press reports indicated that the DENR tried but failed to stop government negotiators on JPEPA from including toxic and hazardous wastes in the agreement. Former DENR Secretary, Michael T. Defensor, stressed DENR's opposition in a letter to the Department of Trade and Industry, the lead agency in the trade negotiation with Japan.

In the meantime, the ongoing controversy had gathered wider public opposition against the ratification of JPEPA by the Philippine Senate. Archbishop Angel Lagdameo, president of the influential Catholics Bishops Conference of the Philippines, shared the apprehension of the environmental civil-society organisations that JPEPA would turn the Philippines into Japan's dump for toxic waste. In its issue of 29 October, the *Philippine Daily Inquirer* ran an editorial entitled "Unequal Exchange", which declared that "In exchange for providing life-saving professionals, like doctors and nurses, the Philippines would be getting death-dealing substances from Japan", which is likely "to happen once the two countries implement the Japan-Philippines Economic Partnership Agreement (JPEPA)".

On 30 October, the Japanese Embassy in the Philippines issued a statement of clarification on the issue of trade in hazardous and toxic waste. Expressing the hope for JPEPA to come into force at the "earliest possible date", the statement explained that the "Government of Japan ... has been enforcing strict export/import control, which does not allow any export of toxic and hazardous wastes to another country, including the Philippines, unless the government of such a country approves such export .... Japan ... will prevent any illegal export of toxic and hazardous wastes to the Philippines".

Representing President Macapagal-Arroyo, Executive Secretary Eduardo Ermita told the press in a chance interview, "I think it is about time that we take a look at it". In a meeting with environmentalists on 29 October, Ermita gave the assurance that he would order a review of JPEPA before it is transmitted to the Senate for concurrence. Later, President Macapagal-Arroyo told members of Congress that she would endorse JPEPA to the Senate for concurrence.

Sources: Philippine Daily Inquirer, 25 October, 2006, pp. A1, A23; 26 October, 2006, pp. A1, A10, A13; 29 October, 2006, pp. A4, A12; 1 November, 2006, pp. A1, A4; 2 November, 2006, pp. A1, A6, A10; 3 November, 2006, pp. A1, A17; 8 November, 2006, p. A4; Philippine Star, 27 October, 2006, p. 11; Daily Tribune, 26 October, 2006, p. 1; 1 December, 2006, pp. 1, 2.

4. Landmark Biofuel Law Enacted

Final approval by Congress of the landmark Biofuels Act of 2006 was assured when the Bicameral Committee composed of representatives of the House of Representatives and the Senate adopted the measure in the early hours of 24 November this year. Certified by the Office of the President as a priority legislation, it would be signed into law by President Gloria Macapagal-Arroyo before the end of 2006.

The Biofuels Act requires the use of biofuels by blending five percent of bioethanol with gasoline within two years from its effectivity, and one percent biodiesel with diesel within three months from that time. This percentage requirement would be increased by the year 2010 to 10 percent bioethanol and two percent biodiesel in the blend with gasoline.

The use of alternative sources of energy under the new law includes compressed or liquefied natural gas, liquefied petroleum gas, hydrogen, electricity, and any liquid at least 85 percent of the volume of which consists of methanol, ethanol, or mythyl ester such as coco-diesel.

Ethanol was of particular interest to legislators as an alternative energy resource in the expectation of increased investment in the agricultural sector and in the resulting "cleaner air for the Philippines". Ethanol is produced from crops such as corn, wheat, sugarcane, grain sorghum and other feedstock. It is high in oxygen content and results in cleaner combustion when blended with unleaded gasoline, thereby reducing tailpipe emissions. Ethanol is known to reduce carbon monoxide and other toxic emissions by 20 to 30 percent.

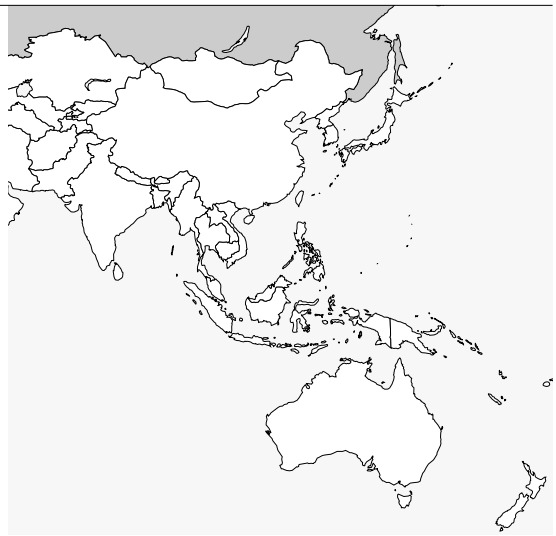
Effective implementation of the Biofuels Act, as indicated in congressional proceedings, would reduce dependence on imported fossil fuel and contribute to the protection of public health and the environment by reduction of pollution caused by emission from thousands of motor vehicles.

The new law provides for tax exemption, financial assistance and other incentives to encourage investments in biofuels.

Sources: Philippine Daily Inquirer, 8 November, 2006, p. B6; 27 November, 2006, p. B5; Philippine Star, 24 November, 2006, pp. 1, 8; 25 November, 2006, p. 4; 26 November, 2006, p. B2; 4 December, 2006, p. C1.

Russian Federation

Anatoly Lebedev
Bureau for Regional Outreach Campaigns (BROC)



1. Forest Code in Political Casino

Privatisation of all the possible natural resources is a primitive mechanistic way for the current Russian administration to stimulate the country's economic prosperity, as well as its entrance to WTO. However there are many reasonable analysts in Russia who understand the highly destructive impact of this approach on national economics and the environment. As a result, there have been thousands of vital warnings against the governmental mode of resource privatisation. Warnings particularly against the hidden privatisation of the forests by the new Forest Code, continued to reach the presidential administration and government during the whole of 2006. Regional governments and legislatures, academic and NGO kept focusing on the danger of giving up forest tenure from state control and restricting public access to any kind of private property. This deep contradiction between the government and the rest of the country has blocked the process of adopting the new Forest code until November, which is trying to hide the essence of forest lands' privatisation by sophisticated tricks, even though there was a consensus-based alternative already drafted by a working group in the State Duma with scientific and NGO participation. The destiny of inserting this core legal document, affecting millions of people, to the practice seems to be subject to political gambling, depending on whose voice will be stronger and which influence on the president administration more efficient.

Source: NGO BROC

2. Sakhalin Environment under State Scrutiny

In October, the 2006 State Environmental Supervision Service (Rosprirodnadzor) came to Sakhalin with a large group of independent experts and media to inspect environmental violations, which, according to the General Prosecutor and local NGO "Environmental Watch", were conducted by "Sakhalin Energy" Consortium during the implemention second stage of it's "Sakhalin-2" project. These violations of Shell, Mitsubishi and Mitsui Consortium occurred at the time of the creation of an oil-gas pipeline from the northern Sakhalin offshore wells to the southern plant for liquefaction of the natural gas. According to the New York Times, this unusual alliance of government and local green parties "is the latest move in an intensifying battle between the Kremlin and the world's major oil companies. Another offshore operator, Exxon is clashing with the Kremlin over whether it can send out its first exports of oil from the $17 billion Sakhalin 1 project. The Kremlin has said Exxon does not have the right environmental licenses. Analysts say Russia is using environmental

regulation to weaken the negotiating positions of the largest foreign investors, in the same way it used the tax code to weaken Yukos, the largest private company in Russia. Yukos went bankrupt when the government selectively enforced certain tax rules". Analysts claim that the aim of this campaign is to force foreign companies to accept Russian state companies as majority partners in their projects, possibly for no compensation.

Sources: NGO BROC, The New York Times

3. Construction Code against Impact Assessment

Under the presidential programme "Available apartment", a new draft law setting out changes in the Russian Construction Code has been submitted to the State Duma. Those changes, according to Greenpeace experts, tend to block a core environmental protection tool — impact assessment and expertise. The authors say that the draft law aims "to cancel idle administrative barriers to increasing the volume of living construction, and to develop schemes to involve new lands in construction". However the most serious suggested changes concern the basic law on Environmental impact assessment and expertise. The authors suggest that all documents on land tenure, industrial and living construction be excluded from the list of obligatory subjects of expertise. They plan to shift environmental control to the functions of construction supervision. That will mean that civil society will lose the last lever to protect constitutional public rights on the healthy environment, since no environmental and social barriers will remain in the way of industrial development wherever officials and businesses would like to operate. According to Greenpeace experts, the absence of state environmental control will open the way for construction customers to completely ignore environmental safety needs and reasons, which unavoidably will cause a growing number of technical disasters. Remarkably, it has been suggested that a reminder on environmental expertise be cancelled from the other environmentally concerned laws — on the Continental Shelf, on Exclusive Economic Zone, on Industrial Safety.

Sources: NGO BROC, Greenpeace Russia

4. G8 and It's Environmental Backup

Since early 2006, Russian environmental NGOs began to prepare their own agenda for the G-8 summit in St. Petersburg, designated for July and devoted to energy safety. With regards to the Russian chairmanship at the summit, there was a broad NGO campaign in Russia aiming to properly present the key environmental issues to the presidential team at the event. Finally, the president accepted the appeal of the NGO community and met a leading group of activists in Moscow in July to discuss their topics and approaches. Thanks to the efforts of Russian Greenpeace and WWF to draw increased attention to alternative energy and energy efficiency, and to halt the promotion of nuclear and oil dependent energy, president Putin and the final documents of the summit decided to pay equal attention to this, focusing on the sustainable supply of oil products and on nuclear power development. Russian environmentalists were happy to get an opportunity to bring a set of key issues directly to the president, who seems to be the only real decision-maker in the country. The campaigns director of WWF-Russia Eugeni Shvartz succeeded in explaining to Putin the importance of the total ban on oil drilling on and transfer through indigenous lands, the creation of oil spill liquidating funds in supplying countries, covered by the oil extracting companies, and of including basic ecosystem services into the set of environmental impacts to be compensated by the culprit.

Source: NGO BROC

5. Public Hearings Become a Serious Tool

Since the early 21st century when industrial pressure on the intact environment began to grow intensively, NGO activists found that the key to environmentally reasonable industrial behaviour was to hold public hearings. Provided by the core legislation and impact assessment rules, this practice had previously been ignored, and suddenly activated by many organisations in the areas of intense logging, mining and construction. In the Far East, public hearings were organised in 2004 for the forest leasers, and became an important step to consensus building between public, administrative and commercial interests. Since the promotion of the Siberia-Pacific oil pipeline project began in 2004, all the serious environmental NGOs of this vast region were ready to push for the oil transfer company "Transneft" to provide hearings in tens of municipalities across the whole area. Obviously, most of the thoughts and suggestions expressed by the people and fixed in protocols were ignored by the company, as they required a total ban on crude oil exports and insisted on first developing oil processing locally to meet Russian needs. However the experience was important, and now businesses, trying to avoid lawsuits from green parties, announce public hearings at the very early stages of the project. In accordance with the rules, the public would like to learn more about the economic parameters of each project to be aware of their indirect impacts, even though the company might prefer to hide this data for as long as possible. In this way the contradiction continues.

Source: NGO BROC

Sakhalin Energy destroyed salmon creeks by constructing the Sakhalin oil pipeline. By D.Lisitzyn

Oil pipeline construction by Sakhalin Energy, violated a set of laws. By D. Lisitzyn

Illegal logging site on restricted pine nut zone in Primorye, stopped by NGO appeal. By J.Newell

Another illegal site, waiting for inspection and new Forest Code. Primorye. By J. Newell

Singapore

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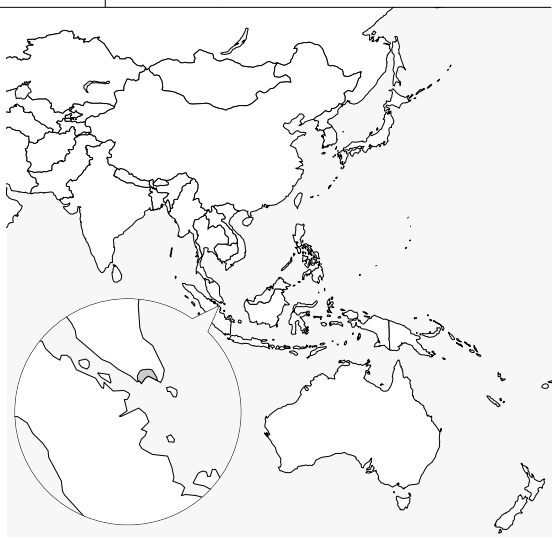


1. Endangered Species (Import and Export) Act 2006

The Endangered Species (Import and Export Act) 2006 (Act 5) repealed its predecessor Act Cap 92 A. The Act made certain significant amendments pursuant to the "ASEAN Statement on CITES" 2004.

At the Thirteenth Meeting of the Conference of the Parties (COP) to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)[1], held from 2 — 14 October 2004, in Bangkok, ASEAN issued an ASEAN Statement on CITES to strengthen cooperation and coordination in the compliance and enforcement of CITES.

Subsequently, an ASEAN Regional Action Plan on Trade in Wild Fauna and Flora (2005-2010) was adopted and the ASEAN Wildlife Law Enforcement Network (ASEAN-WEN) was launched on 1 December 2005 in Bangkok. It underlies the importance of regional cooperation and coordination in assisting national enforcement agencies to coordinate their work among ASEAN—WEN members against illegal wildlife trade.

Singapore amended the Endangered Species (Import and Export) Act 2006, pursuant to the ASEAN "Statement". The penalties are now more severe. Under Article 4 a person who imports, exports or re-exports any scheduled species without a permit for each such species can be imprisoned up to 2 years, from the previous one year. The maximum fine for illegal trafficking of endangered species is increased from S$5,000 to S$50,000. The fine applies to each animal or plant with a maximum of S$500,000. The offence is now based on "*each* such scheduled species" (section 5 (3)) and not on per species as previously enacted — the fine is $10,000 for each such species (but not to exceed in the aggregate $100,000) or imprisonment for a term not exceeding 12 months or both.

2. Environment and Water Industry (EWI) Development Council

The Public Utilities Board's (PUB) newly formed Environment and Water Industry (EWI) Development Council has raised the status of the water industry in Singapore enhanced its international role as a water hub for business, investment, research and technology. *Water Wally,* the PUB mascot won the International Water Association's Marketing and Communications Award 2006 for Best Promoted Water Protection Activity or Programme.

Its publication, *WaterNet* is specially targeted at the "3P" (People, Private, Public sectors) partners and customers.

1 CITES - http://www.cites.org/, accessed on 7 December 2006.

Source: http://www.pub.gov.sg/home/WaterNet.aspx

In *The Straits Times*, 23 August 2006, it was reported that "Singapore was singled out as having a highly workable and efficient model for other countries to learn from by Professor Asit Biswas, a respected water expert who advises 18 governments on how to manage their water resources.... What he found — Singapore's water that is "unaccounted for" (the difference between the amount produced for use and the amount people end up paying for) is about 5 per cent. This is the world's lowest."

3. National Parks Board, and National Biodiversity Reference Centre (NBRC)

On World Biodiversity Day, 22 May 2006, the National Parks Board established NBRC which serves as the focal point for biodiversity conservation. It serves as Singapore's Clearing-house Mechanism for the Convention on Biological Diversity[2], which it ratified in 1995.[3] The functions of NBRC as set out are as follows:[4]

- Formulate, implement and coordinate strategies, policies and guidelines on biodiversity conservation
- Formulate, implement and co-ordinate research and monitoring programmes on biodiversity
- Strengthen, standardise and maintain reliable biodiversity databases for informed decision-making as well as providing relevant biodiversity data in support of Research & Development
- Function as a one-stop centre for information portal to enable access to local biodiversity information. Establish the Clearing-house Mechanism (CHM) to promote exchange of biodiversity information and programmes of the Convention on Biological Diversity (CBD)
- Provide feedback and advice on issues pertaining to flora and fauna biodiversity conservation, including advice on biodiversity conservation in international agreements
- Process and monitor developments affecting biodiversity by specifying terms of reference for Biodiversity Impact Assessment, evaluation reports and monitoring compliance of mitigating measures
- Operate as a one-stop station for research application permit
- Serve as the Secretariat for the Conserving Nature Committee of the Singapore Green Plan 2012
- Implement regional and international initiatives as Singapore's focal point for, *inter alia,* ASEAN Working Group for Nature Conservation and Biodiversity (AWGNCB) and CBD
- Synergise and maintain partnerships and strategic alliances with relevant agencies, interest groups and volunteers for collaboration of long-term conservation efforts and strengthening information-sharing efforts

NBRC supports the NParks stewardship as the Scientific Authority in nature conservation in Singapore. It will further enhance and bring the City in a Garden to a higher and more sophisticated level. As the focal point for Singapore for the ASEAN Working Group on Nature Conservation and Biodiversity (AWGNCB), ASEANET (The Southeast Asian partnership for taxonomy)[5] and ASEAN Regional Centre on Biodiversity Conservation

2 <http://www.biodiv.org/ >, accessed 7 December 2006.
3 Singapore was a signatory to the Convention in 1993, and ratified it on 21 December 1995.
4 <http://www.nbrcnparks.org/>, accessed 7 December 2006.
5 <http://www.aseanet.org/>, accessed 7 December 2006.

(*now known as* ASEAN Centre for Biodiversity *or* ACB),[6] it links Singapore not only to the regional but also international levels.

4. Flu Pandemic Guide (March 2006)

Singapore distributed the Guide to every household. The objective is to help the citizens understand the threat of a flu pandemic and what steps can be taken. It provides information on how Singapore is preparing for a flu pandemic. The Ministry of Health (MOH) has developed a Flu Pandemic Readiness and Response Plan to protect the health of Singaporeans and visitors.

The plan aims to:

- Maintain essential services in Singapore to minimise social and economic disruption;
- Provide treatment for identified flu cases;

The guide also covers precautions to take in business and work places and also in handling pet birds, dead pet birds, sick pet birds and dead birds found in public places.

Flu Pandemic Guide
(available in English , Chinese, Malay and Tamil)

Source: http://www.flu.gov.sg

5. Recurrence of Indonesian Haze

Since October 2006, The Indonesia Haze has recurred and is affecting some of its neighbours including Singapore. Indonesia has not as yet ratified the ASEAN Agreement on Transboundary Haze Pollution, 2002.[7]

Under the Agreement, each state agrees to undertake individual and joint action to assess the origin, causes, nature and extent of land and/or forest fires and the resulting haze.

Article 7 of the Agreement requires each Party to take appropriate measures to monitor all fire prone areas. Parties must also develop strategies and identify, manage and control risks to human health and also national emergency response by developing legislative, administrative and financial resources to mobilise equipment, materials and human resources.

An ASEAN Co-ordinating Centre for Transboundary Haze Pollution Control is established under Article 5 to monitor, assess, prevent and to put in place national emergency plans. Each Party must designate one or more bodies to function as National Monitoring Centres, to undertake monitoring and to communicate to the Centre. In the event of emergency, each Party must initiate immediate action to control or to put out the fires.

The Haze Agreement entered into force in November 2003 after 7 member countries ratified it. A three day meeting has just been held in Cebu. Five ASEAN countries including Singapore, agreed to contribute to a fund to seek solutions to the problem. Singpore and Indonesia pledged to contribute US$50,000 (S$78,000) each. Singapore also announced it would team up with a province in Sumatra to fight haze-producing fires there. The move

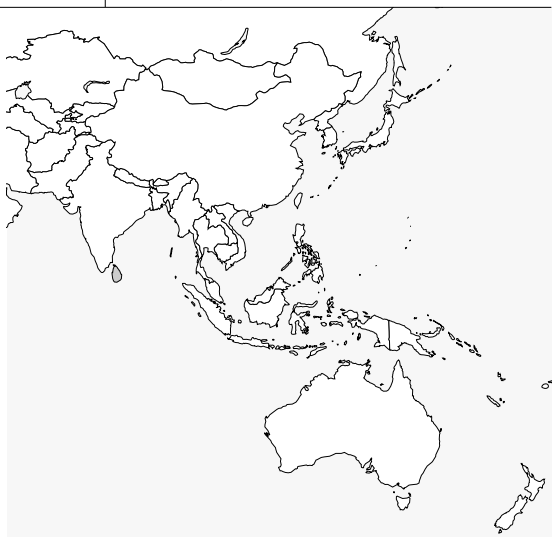
6 <http://www.arcbc.org/>, accessed 7 December 2006.
7 <http://www.aseansec.org/agr_haze.pdf >, accessed 7 December 2006

followed an agreement by ASEAN environment ministers with Jakarta's proposal to adopt one or more fire-prone districts/regencies for enhancing capacity to deal with land and forest fires.[8]

8 *The Sunday Times*, 12 November 2006.

Sri Lanka

Nalaka Gunawardene
Director and Chief Executive Officer
TVE Asia Pacific



1. Ecological and Human Costs of the Renewed Armed Conflict

The biggest and most depressing news of 2006 was how Sri Lanka once again slipped back into the civil war which has ravaged the island nation for the past 25 years. Even though the 2002 Ceasefire Agreement between the Sri Lankan government and the separatist Liberation Tigers of Tamil Eelam (LTTE) was officially still in force, it no longer prevented the combatant parties from resuming hostilities. During the year, over 3,000 persons were killed — most of them unarmed civilians — and tens of thousands became internally displaced.

A full scale assessment of the ecological cost of the conflict has never been done, but media reports and anecdotal evidence indicate it to be high. Both combatant parties have cleared vast extents of forest in the island's north and east provinces. The environmental impacts of aerial bombing by Sri Lanka Air Force are not known.

Meanwhile, large numbers of landmines buried in conflict areas pose a major threat. Mine clearing, undertaken by the UN and humanitarian groups following the ceasefire, have made some areas safe again. But even as mines injure or kill dozens of humans and animals every year, Sri Lanka stubbornly refuses to sign the Ottawa Mine Ban Convention.

References:

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2. War on Polythene: on again, off again?

One piece of encouraging news in 2006 was the government's resolve to reduce the use of polythene. Effective January 2007, the use of polythenes thinner than 20 microns will be banned.

Non-biodegradable polythene types used in Sri Lanka accumulate when discarded, clogging drains and worsening floods during the rainy season. Their excessive use and indiscriminate disposal have posed new challenges for solid waste management.

The Minister of Environment has said that the new ban will apply to polythene use in public decorations, funerals and other displays. Both municipal and police authorities are to 'strictly enforce the ban and punish offenders'.

It remains to be seen how this would be implemented among 20 million Sri Lankans, many highly dependent on polythene for domestic, commercial and industrial uses. The biggest use of polythene — for product wrapping in shops and supermarkets — needs a permanent solution: environmentalists are promoting the use of paper or cloth bags as a

substitute. Biodegradable polythenes can be another option.

Meanwhile, the government has to find alternative employment for an estimated 30,000 persons employed by over 300 plastic industries engaged in polythene production. It was their lobbying that had previous bans stalled or reversed.

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http://www.themorningleader.lk/20061122/focus.html

http://southasianmedia.net/cnn.cfm?id=347851&category=Environment&Country=SRI%20LANKA

http://www.sundaytimes.lk/061126/FinancialTimes/ft341.html

3. Vehicle Exhausts Continue Their Killing Spree

Air quality has emerged as a major environmental concern. As Sri Lanka lacks large scale manufacturing or mining industries, the main sources of air pollution are vehicle exhausts. According to the government's Registrar of Motor Vehicles, some two million vehicles are in regular use in Sri Lanka — of these, one third is not up to stipulated standards but remain undetected. Belching buses and lorries are a common sight, making up most of the unroadworthy vehicles.

Fuel quality improvements have been achieved. Sri Lanka phased out the use of leaded petrol in mid 2002, and has also taken measures to market diesel with lower sulphur content. But the proper maintenance of vehicles is proving more difficult.

With the vehicle fleet increasing by nearly a quarter of a million every year, officials are struggling to enforce existing laws and regulations to keep vehicle exhausts within permitted standards.

References:

http://www.airmacsl.org/

http://www.themorningleader.lk/20060412/focus.html

4. Regenerating Nature's Coastal Defences

The Tsunami of December 2004 highlighted the protective role played by coral reefs, mangroves and sand dunes. In coastal locations where these 'greenbelts' were still intact, the damage was found to be considerably less. This has inspired governmental and non-governmental organisations to renew their

A diver visits an underwater coral nursery in Rumassala reef, southern Sri Lanka, where a small group is replanting coral species - Photo courtesy Nature Conservation Group

A man working at a mangrove nursery in Paanama in eastern Sri Lanka, where mangroves and sand dunes buffered the village from Tsunami impact - Photo courtesy TVE Asia Pacific

efforts to conserve and manage 'Nature's shock-absorbers'.

Particular attention is being given to mangroves, which help stabilise shorelines and prevent cyclones, hurricanes, sea erosion activity — and even tsunamis — from devastating the coast. In addition, mangroves are a source of food, fodder, building materials and natural medicines, and provide breeding grounds for fish.

Sri Lanka has around 6,000 to 7,000 ha of mangrove forests left, which are under stress from tourism development, shrimp farming and population pressures. Both the government's Coast Conservation Department and environmental NGOs have intensified efforts to save remaining mangroves as well as to plant/replant degraded mangroves.

Conservation organisations now advocate allowing local people to harvest some benefits on a sustainable basis, while enlisting community support to maintain and improve mangroves. As documented in TVE Asia Pacific's new regional TV series *The Greenbelt Reports,* this is the only practical and pragmatic way forward in South and Southeast Asia where coastal greenbelts are under siege.

References:

http://www.iucn.org/places/srilanka/iucnnew/Tsunami%20Projects.htm

http://www.tveap.org/news/0812greenbelt.html

Thailand

Tittaya Waranusantikule
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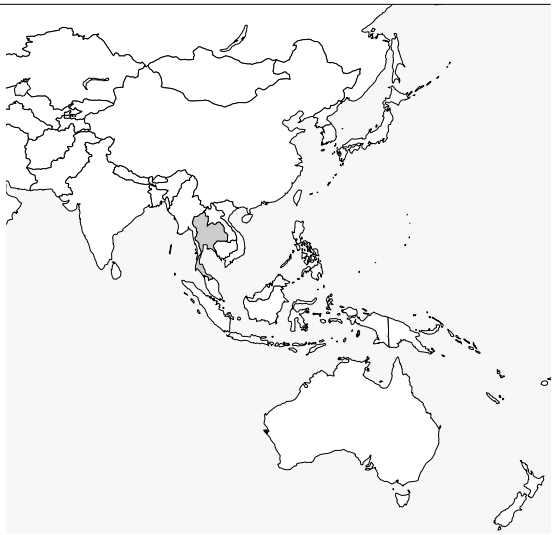


1. Suvarnabhumi Airport to Curb Noise Pollution

After Suvarnabhumi Airport commenced commercial services in September 2006, involved parties have been urged to solve aircraft noise problems affecting communities in the vicinity of the airport.

Measures to reduce noise levels at the Suvarnabhumi Airport submitted to the Cabinet include noise restrictions for all aircrafts using the airport to ban those violating noise limit levels set by the International Civil Aviation Organization (ICAO); changes of flight patterns to ease noise; and compensation for people affected by aircraft noise. The Government has preliminarily set aside a budget of 390 million baht to assist suffering people, while the recent study led to the figure of over 7 billion baht.

Moreover, the Airports of Thailand (AOT) has also been asked to implement long-term measures to monitor health problems of residents near the airport and to install noise-measuring equipment.

Reference:

Pollution Control Department [http://www.pcd.go.th]

Bangkok Post, 22/10/2006

Bangkok Post, 07/10/2006

2. Producers Joint Force for Fluorescent Lamp Management Scheme

Pollution Control Department (PCD) has set up waste fluorescent lamp management system for the country through a partnership programme of public and private sectors.

The recent study of PCD showed that approximately 41 million waste fluorescent lamps were generated throughout the country in 2004. Despite the efforts of local municipalities to encourage the public to separate hazardous waste from general waste, it is found that a great number of waste fluorescent lamps are discarded with general waste or left without proper disposal or recycling.

Accordingly, PCD has established a guideline for waste fluorescent lamp management and seeks cooperation with Bangkok Metropolitan Administration (BMA) and municipalities to collect waste lamps from buildings and large facilities registered to the PCD website and send them to lamp manufacturers participating in the project (Phillips and Toshiba) for proper recycling or disposal.

Reference:

Pollution Control Department [http://www.pcd.go.th]

3. Flood Crisis in Northern and Central Thailand

Flooding has hit 46 provinces in Thailand, with more than 600,000 households and 2.4 million people affected. The Government is closely monitoring the situation, and it has also provided immediate assistance to flood victims in order to ease their hardships, while rehabilitation is also planned.

According to a preliminary survey, damage from the flood crisis during the period was estimated at over 305 million baht, excluding people¹s property. To provide assistance to the flood victims, ad hoc relief centers have been established down to district level with three stages of operation, consisting of preparation, operation, and rehabilitation. The operation proceeded smoothly with cooperation from all governmental agencies concerned.

Reference:
Public Relations Department
[http://thailand.prd.go.th]

4. Regional Cooperation on Tsunami Early Warning Arrangements

The tsunami early warning system in the Indian Ocean and the western part of Southeast Asia has been established under the Regional Cooperation on Tsunami Early Warning Arrangements.

In January, the Ministerial Meeting on Regional Cooperation on Tsunami Early Warning Arrangements took place in Phuket with the participation from ministers from the 10 ASEAN countries, countries affected by the 26 December tsunami disaster, as well as other countries in the Asia-Pacific and international organisations.

The meeting provided an opportunity for the participants to exchange views on the establishment of the regional early warning system in the aftermath of the 26 December tsunami catastrophe. Thailand earlier proposed that the Asian Disaster Preparedness Center, located in Bangkok, be enlarged and utilised as a focal point to develop such a regional early warning system.

Reference:
Public Relations Department
[http://thailand.prd.go.th]

5. Incentives for VSPP Projects

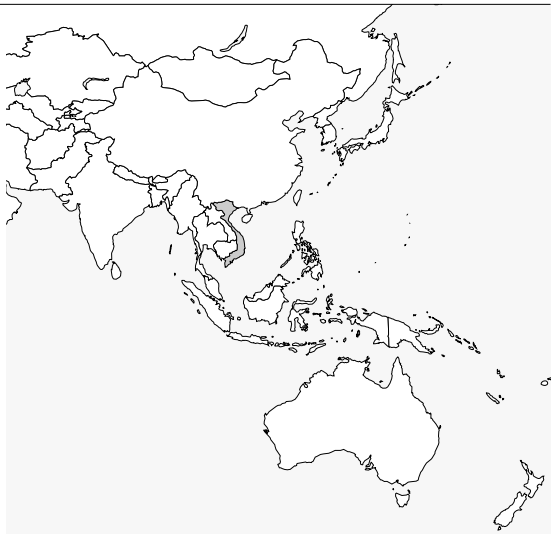
The Ministry of Energy is offering incentives to very small power projects (VSPPs) to sell their output to the national grid.

Authorities want to purchase up to 10 Megawatts of electricity from VSPPs with renewable power, cogeneration and combined heat and power (CHP) plants by subsidising prices for seven years. The government will offer different subsidising prices depending on the type of fuel, for example, 0.30 baht per unit (kilowatt/hour) on top of the purchase price for biomass power, 0.80 baht extra for hydropower plants smaller than 50 kilowatts, 0.40 baht for hydropower plants of 50-200 kilowatts, 2.50 baht per unit for waste or wind power generation, and eight baht per unit for solar power.

Reference:
Energy for Environment Foundation
[http://www.efe.or.th]

Vietnam

Pham Huu Nghi
Professor and Editor-in-Chief
Institute of State and Law
Vietnam Academy of Social Sciences



1. Vietnam Launches Campaign to Make the World Cleaner

The Ministry of Natural Resources and Environment on 22 September launched a national campaign in the coastal Sam Son town, central Thanh Hoa province, to raise public awareness about environmental protection. The 2006 "Make the World Cleaner" campaign, with the theme of "Anti-Desertification", was held in coordination with the Australian Embassy in Vietnam and the Thanh Hoa provincial People's Committee. Addressing the launching ceremony, the Vice Minister of Natural Resources and Environment Pham Khoi Nguyen called on local authorities, branches, social organisations and individuals to carry out practical steps to contribute to the cause of global environment protection. On the first day of the campaign, thousands of young people and students took part in cleaning activities and urged others to join in the campaign.

Source: Ministry of Natural Resources and Environment

2. Rare Bat Species Discovered in Vietnam

A group of scientists from the Institute for Natural Ecology and Resources cooperated with experts from the UK, Iceland, Germany, Malaysia, and Thailand to make a survey of bats at the national parks of Cat Ba and Cuc Phuong

The species of grey-nosed bat

in August and September under the sponsorship of the Darwin Initiative Foundation and the BP Conservation Programme. Through the survey, scientists discovered a species of large grey-nosed bat in the two above national parks. This is the first time this species of bat has been found in Vietnam. This species of bat, called *Hipposideros grandis,* was found for the first time in 1936 in the Akulnti area of Myanmar. Before being found in Vietnam, the bat had only been found in Thailand and Myanmar. According to the survey, the big grey-nosed bat species is living in Vietnam in large numbers. They often live with the small-nosed bat (*Hipposideros alongensis*).

Source: Natural Resources and Environment Newspaper, 25 March, 2006

3. Decree 23 Opens Forests to Overseas Interests

Under the decree, the government permits overseas Vietnamese, foreign individuals and organisations to hire planted forest serving their production purposes. The government will also consider permitting businesses to lease natural forest for eco-tourism and production. The decree states that forest leasing must be conducted through an auction of forest use rights and forest ownership. In the case where only one individual or one organisation wants to lease land, an auction is unnecessary. Local officials must define specifically the characteristics of the forest for lease and those characteristics must be noted in the contract. The limit for leases is 50 years. For those with a business cycle exceeding 50 years and forests in poor regions, the contract must not exceed 70 years.

The government has asked the Ministry of Agriculture and Rural Development to work with the Ministry of Natural Resources and Environment and the People's Committees at all levels to implement the measure.

Source: Government Office

4. Aquatic Environment Warning System to be Built in Northern Region

The Ministry of Fisheries has decided to invest about VND69 billion (US$4.3 million) in building an aquatic environment warning system in the north in order to facilitate sustainable aquaculture development. The proposed Centre for Environment Monitoring and Warning and Preventing Aquatic Epidemics will include a network linking the headquarters, which will be built in Bac Ninh province, four regional stations and 46 measuring posts throughout the northern region. The project, which will be implemented by the Institute for Aquaculture Research No.1, aims to provide updated information on the environment and epidemic diseases threatening the aquaculture industry. The centre will also help provide data for the industry's development strategy, thereby contributing to sustainable development in aquaculture and an environment and epidemic control programme in key farming areas.

Source: Vietnam News Agency

Epilogue

The *Top News on the Environment in Asia* celebrates its ninth year of publication this year. With reports from twenty-three countries and three organisations, this year's edition represents the largest number of news reports collected since our first publication in 1998. We are also delighted to be able to include the first contributions from Fiji and Myanmar. We have gathered a wealth of news on environmental trends as reported in articles on various countries' environmental issues and their efforts.

The year 2006 marked the 50th anniversary since the Japanese Government officially acknowledged Minamata disease, which was the starting point of environmental issues in Japan. By coincidence, this year we received a large number of reports on serious water pollution such as frequent water pollution in China, oil spills in the Philippines and the suffering of local residents due to industrial wastewater in Pakistan. Reports on waste also increased this year with waste management becoming an important issue in Asian cities due to buoyant economic growth and rapid urbanisation. Whilst poor waste management was revealed in reports from Bangladesh and Bhutan, there were also reports on the bilateral efforts to balance the economic activities and environmental conservation. Thailand and Malaysia mentioned activities for recycling and the Asia 3R Conference was organised in Japan where "Mottainai" became a buzzword. Through these reports, we could once again recognise the importance of 3Rs (reduce, reuse, recycle) in Asia.

The environmental issues facing the Asian countries today are wide-ranging with common regional trends or characteristics. These reports are essential for us to better understand the global environmental issues and formulate measures. Nowadays, Asia is in extreme crisis with declining environmental quality driven by rapid environmental development. Since such trends may be accelerating, the further promotion of cooperation is expected beyond national borders in addition to the efforts by countries or relevant organisations. This coincides with the IGES appeal in its latest publication *Sustainable Asia 2005 and Beyond — In the pursuit of innovative policies* that the immediate cooperative actions of Asia based on long-term views are urgently required to construct a sustainable Asia.

Top News on the Environment in Asia will continue to make the most of IGES research network to pick up on a wide range of news on Asian environmental issues and policies and disseminate them as a valuable source of local information.

Previous Articles of Top News on the Environment in Asia

Contents of the 1998 Top News on the Environment in Asia

[China] Ren Yong, Institute for Global Environmental Strategies (IGES)

1. Enactment of the State Council Ordinance Concerning Environmental Management for Construction Projects
2. Promotion of National Environmental Protection Agency (NEPA)
3. The Yangtse River Flood Caused by Abnormal Climate Conditions, but Worsened by Ecological Destruction in the Middle and Upper Reaches

[India] Maithili Iyer, Institute for Global Environmental Strategies (IGES)

1. Biodiversity Bill to be Discussed in the Winter Session of the Parliament
2. High Court Issues Notice to Manage Fly-ash Disposal
3. Proposed Ban on New Diesel Vehicles in the National Capital Region (NCR)

[Indonesia] Mohamad Soerjani, Institute for Environmental Education and Development (IEED)

1. Efforts to Socialise the New Environmental Management Law in Indonesia
2. Sustainable Development: Principles and Implementations
3. The Indonesian Biodiversity Foundation
4. New Eco-tourism Development, Depok, Indonesia

[Japan] Yohei Harashima, Institute for Global Environmental Strategies (IGES)

1. Enactment of the Law for the Promotion of Measures to Tackle Global Warming
2. The Emerging Environmental Pollution Caused by Exogenous Endocrine Disrupting Chemicals
3. Preparatory-Phase (Activities) of Acid Deposition Monitoring Network in East Asia (EANET)
4. Establishment of the Institute for Global Environmental Strategies (IGES)

[Korea] Tae Yong Jung, National Institute for Environmental Studies (NIES)

1. Posting Toxic Chemicals Control Act and Regulations
2. Reforming of Green-belt (Development Restriction Area)
3. First Ever Ecological Survey Planned on DMZ

[The Philippines] Merlin M. Magallona, University of the Philippines (UP)

1. Environmental Policy in the Philippine Fisheries Code of 1998
2. Environmental and Natural Resources Officers for Philippine Cities

[Singapore] Chia Lin Sien, Institute of Southeast Asian Studies (ISEAS)

1. New Measures to Combat Maritime Pollution
2. Singapore Ratifies International Maritime Conventions
3. Study on Energy Efficiency
4. The Haze Continues

[Thailand] Tongroj Onchan, Thailand Environment Institute (TEI)

1. Salween Logging Scandal
2. Forest Encroachment and the Right of People to Live in Thailand's Dwindling Forest
3. The Effects of El Nino and the Worst Forest Fires
4. Thai-Burmese Gas Pipeline Project
5. Inland Prawn Farming

Contents of the 1999 Top News on the Environment in Asia

[Cambodia] Kol Vathana, International and Public Cooperation, Ministry of Environment (MoE)

1. Participation in the Second Regional Forum for Southeast Asia of the IUCN World Commission for Protected Areas
2. Workshop on "Awareness of the Ramsar Convention on Wetlands of International Importance"
3. "Management of Forests and Elimination of Illegal Forest Activity" Begins
4. Workshops on Development of Local Forests
5. Drafting of a "Sub-Decree on the 23 Protected Areas Management in Cambodia"

[China] Zhou Xin, Policy Research Center for Environment and Economy of State Environmental Protection Administration (PRCEE)

1. Twentieth Anniversary of the Enactment of "The Environmental Protection Law of the People's Republic of China"
2. Highlighting Pollution Control: Evident Results Achieved
3. Increase of Investment in Environmental Protection
4. Ecological Conservation in the Yangtze and Yellow River Basins

[India] Maithili Iyer, Tata Energy and Resources Institute

1. Supreme Court Tightens Emissions Standards in Delhi
2. Ministerial Directive to Use Fly Ash for Construction Purposes
3. Negotiations for a Biosafety Protocol

[Indonesia] Mohamad Soerjani, National Research Council

1. Provincial Autonomy in Regional Development
2. Profile of the Environmental Minister
3. Sustainable Development and Provincial Autonomy
4. Environmental Impact Analysis New Regulations 1999
5. Timber Plantation

[Japan] Yohei Harashima, Institute for Global Environmental Strategies (IGES)

1. Crested Ibis Hatching
2. Accident at the Conversion Building in the Nuclear Fuel Processing Plant
3. Law Concerning Special Measures for Dioxin Contamination
4. First Tripartite Environmental Ministers Meeting among China, Japan, and Korea
5. IGES Hosts the 1999 Open Meeting of the Human Dimensions of the Global Environmental Change Research Community

[Korea] Seung Woo Kim, Korea Environment Institute (KEI)

1. Reforming of the Greenbelt Policy
2. The Dong-gang Controversy
3. New Plan to Improve Nakdong River Water Quality
4. New System to Regulate the Use of Disposable Products
5. Nuclear Radiation Leak Accident

[Malaysia] Wan Portia Hamzah and Norhayati Mustapha, Institute of Strategic and International Studies (ISIS) Malaysia

1. National Coastal Zone Policy
2. The Dugong - A Creature Threatened?
3. Hope for Biodiversity
4. The Sungai Selangor Dam
5. Pesticide Danger in Rivers?
6. Climate Change Scenario
7. Decisive Action on Toxic and Hazardous Waste

[Mongolia] Ayush Namkhai, Development and Environment Center (DEC)

1. Draft Law on the Fauna of Mongolia
2. Natural Disaster Mitigation Country Programme
3. Programme for Protection of the Air
4. Regulation for Issuing Permits to Import, Sell and Use Ozone-Depleting Substances
5. Natural Disaster (Drought)

[Nepal] Bishnu Bhandari, Institute for Global Environmental Strategies (IGES)

1. Nepal Establishing a Trust Fund for Biodiversity Conservation
2. Vikarm Tempo Banned in Kathmandu
3. Forest Fire in the Himalayan Region
4. Drought in the Himalayas

[The Philippines] Merlin M. Magallona, University of the Philippines (UP)

1. A New Comprehensive Clean Air Law
2. Garbage Crisis ID Metropolitan Manila
3. Policy of Sustainable Forest Management

[Singapore] Chia Lin Sien, Institute of Southeast Asian Studies (ISEAS)

1. Policy Statements by Minister of the Environment, Singapore
2. The Deep Tunnel Sewerage System (DTSS)
3. Join the OPRC Conventions and Accepts Annex V of MARPOL 73/78
4. Annual Oil-spill Exercise
5. Suspension of Import of Live Pigs and a New License for Selling Chilled Pork

[Thailand] Tongroj Onchan, Thailand Environment Institute (TEI)

1. Anchovy Causes National Conflict
2. A Conservation Angle From Zemin's State Visit
3. A Controversial Movie "The Beach"
4. Confusion over Public Land Encroachment near Sri Nakharin Dam
5. Protest against the Coal-fired Power Plant Project

[Vietnam] Pham Huu Nghi, Institute of State and Law, National Center for Social and Humanities

1. Launching of Environmental Protection Policy
2. Hoi An and My Son to Become World Heritages
3. Worst Floods in Forty Years

[Southeast Asia] Chia Lin Sien, Institute of Southeast Asian Studies (ISEAS)

1. UNEP Commissions Review of Marine Pollution of East Asian Countries
2. Tenth Meeting of the ASEAN Senior Officials on the Environment, Bangkok
3. Regional Consultative Workshop on the East Asian Seas (EAS) Programme to Discuss Issues Concerning Liability and Compensation for Oil Spill Damage and Clean-up Claims
4. An Update on the Regional Haze Situation in Southeast Asia
5. Nipah Virus Epidemic in Peninsular Malaysia

Contents of the 2000 Top News on the Environment in Asia

[The Asia-Pacific Region]
Masakazu Ichimura, United Nations Economic and Social Commission for Asia and the Pacific (UN/ESCAP)

1. Ministerial Conference on Environment and Development in Asia and the Pacific (MCED) 2000
2. State of the Environment in Asia and the Pacific 2000
3. Regional Action Programme (RAP) for Environmentally Sound and Sustainable Development in Asia and the Pacific 2001-2005
4. Kitakyushu Initiative for a Clean Environment
5. Environmental Cooperation in North-East Asia

[The Asia-Pacific Region]
S. Tahir Qadri, Asian Development Bank (ADB)

1. Impact of Forest Fires on the Association of South East Asian Nations (ASEAN)

[Bangladesh] Khandaker Mainuddin, Bangladesh Centre for Advanced Studies (BCAS)

1. Devastating Flood Hit South-West Region of Bangladesh
2. Sound Waste Management; an Immediate Necessity for Dhaka City
3. Suspended Particulate Matters Remain High in the Air of Dhaka City
4. Red List on Endangered Wildlife

[Cambodia] Khieu Muth, Ministry of Environment, Cambodia

1. Floods in Cambodia
2. National Greenhouse Gas Inventory for 1994
3. New Sub-Decree of Air Pollution
4. Coastal and Marine Problems

[China] Zhou Xin, Policy Research Center for Environment and Economy (PRCEE), The State Environmental Protection Administration (SEPA)

1. The Second Revision of the Law of Air Pollution Prevention and Control
2. Great Efforts Taken to Realize the Target of "One Control and Double Attainments"
3. Beijing Initiates the "Green Olympic Action Plan"
4. Sandstorms Hit Beijing and Tianjing Municipalities

[India] Prasad Vaidya, The Weidt Group

1. India Joins the GLOBE Program
2. Draft Rules for Recycling/Management of Lead Acid Batteries
3. Supreme Court Clears Sardar Sarovar on the Marmada River
4. State Governments Fund Participatory Water Harvesting Programs

[Indonesia] Mohamad Soerjani, Institute for Environmental Education and Development

1. National Conference on Natural Resource Management
2. Indonesian Sectoral Agenda 21
3. Environmental Toxicology, Pollution Control and Management
4. National Flora and Fauna Loving Day, 2000
5. Caring for the Future

[Japan] Yohei Harashima, Takushoku University

1. The Basic Law for Establishing a Recycling-based Society
2. Regulation of Exhaust Gases from Diesel Vehicles in the Tokyo Metropolitan Area
3. ESCAP Ministerial Conference on Environment and Development
4. G8 Environment Ministers' Meeting
5. Illegal Transfer of Hazardous Wastes to the Philippines

[Korea] Hoi-Seong Jeong, Korea Environment Institute

1. The Illegal Toxic Discharge of the Eighth US Army
2. The Suspension of the Planned Construction of Yongwol Multi-Purpose Dam
3. The Establishment of the Presidential Commission on Sustainable Development (PCSD)
4. Environmental Impacts Investigation on the Saemankeum Reclamation Project

[Lao PDR] Viengsavanh Duangsavanh, Technology and Environment Agency

1. The Environment as Public Responsibility
2. Local Environmental Management
3. Environmental Impact Assessment
4. Public Involvement in Nam Theun 2 Hydro-Power Project
5. Press Release on Climate Change

[Malaysia] Norhayati Mustapha, Institute of Strategic and International Studies (ISIS)

1. Timely Review of Highland Development
2. Foiled Toxic Waste Shipment
3. Climate Change Update
4. Millennium Tree Planting
5. Beach Clean-up
6. Recycling Launch

[Mongolia] Ayush Namkhai, Development and Environment Center; Dondogiin Enkhbayar, Ministry for Nature and Environment

1. Law on Tourism
2. Law on Banning the Import, Export and Trans-boundary Movement of Hazardous Waste, and Concerning its Export
3. National Action Programme on Climate Change
4. Natural Disaster
5. Establishment of the "ECO ASIA" Institute

[Nepal] Phool Chandra Shrestha, Freelance Consultant Bishnu B. Bhandari, Institute for Global Environmental Strategies (IGES)

1. Nepal's "Gift to the Earth"
2. Restoration of the Churia Foothills as a Biological Corridor
3. Nepal Rhino Count 2000
4. Grassroots Conservation Initiatives in Rural Nepal
5. Ban on Old Vehicles in Cities in 2001

[The Philippines] Merlin M. Magallona, University of the Philippines

1. Garbage Avalanche Killed More Than 200 People
2. Hazardous Waste Shipment Sent Back to Japan
3. Lawyers Demand Compensation for Victims of Toxic Waste Contamination in Former U.S Military Bases
4. Oil Spill by Singaporean Tanker

[The Russian Far East] Alexander Sheingauz, Economic Research Institute

1. New Administration for the Use of Natural Resources
2. Voluntary Forest Certification Begins
3. New Protected Area Is Established in Amurskaya Oblast
4. International Workshop on Sustainable Forest Management
5. New Method of Oil Waste Utilization

[Singapore] Chia Lin Sien, Institute of South East Asian Studies

1. Sewage Contamination of Water Supply in Public Buildings
2. Review of Long-Range Comprehensive Concept Plan
3. Waste Collection in Singapore
4. Chemical Spill Stops Fishing and Swimming
5. Deep Tunnel Sewerage System (DTSS): First Tender For Changi Wastewater Treatment Plant
6. Virus Outbreak of Hand, Foot and Mouth Disease (HFMD)

[Thailand] Tongroj Onchan, The Mekong Environment Resource Institute (MERI) and Thailand Environment Institute (TEI)

1. Protest against Thai-Malaysian Natural Gas Pipeline
2. The Violent Pak Moon Dam Protest at the Government House
3. The Car Free Day Campaign
4. Costly Dike Causes Water Pollution
5. Mishandling of Radioactive Waste

[Vietnam] Pham Huu Nghi, Deputy Director of State and Law Journal, Institute of State and Law, National Center for Social Science and Humanities

1. Sanctuary for the Ho Guom Turtle
2. Large Flood in Cuu Long River Delta, South Vietnam
3. Effects of the Ho Chi Minh Highway Project on Cuc Phuong National Garden

Contents of the 2001 Top News on the Environment in Asia

[The Asia-Pacific Region]
Tim Higham, United Nations Environment Programme, Regional Office for Asia and the Pacific (UNEP-ROAP)

1. The Asia-Pacific Regional 'Platform' for WSSD
2. Asia-Pacific Civil Society Perspective on WSSD Heard
3. Strengthening Regional Capacity for Environmental Law and Conventions
4. Japanese Company Helps Empower UNEP Education, Awareness and Training Work
5. Industry Outreach and Networking

[The Asia-Pacific Region]
Lester R. Brown, Earth Policy Institute (EPI)

1. Dust Bowl Threatening China's Future

[The Asia-Pacific Region]
Institute for Global Environmental Strategies (IGES)

1. ECO ASIA 2001
2. Regional Preparation for the WSSD (Johannesburg Summit)
3. COP 7
4. Illegal Logging in Indonesia
5. New Bill on Managing the Three Largest Rivers in South Korea
6. Korean Environmental Education Act in the Offing
7. Developments on Environmental Management Accounting in Asia

[Australia] Gerard Early, Approvals and Legislation, Environment Australia

1. Environmental Law Reform
2. Extension of the Natural Heritage Trust
3. National Action Plan on Salinity and Water Quality
4. Sydney Harbour Federation Trust
5. Australia's Virtual Herbarium

[Bangladesh] Khandaker Mainuddin and Dwijen Mallick, Bangladesh Centre for Advanced Studies (BCAS)

1. Buriganga, the Most Polluted River in Bangladesh
2. Arsenic Contamination in Groundwater poses Serious Health Threat
3. Banning of Polythene Bags is high on the Agenda of the Government of Bangladesh
4. Bio-diversity Conservation Programme Launched in the Sundarbans

[Cambodia] Khieu Muth, Ministry of Environment

1. Survey in Lomphat Wildlife Sanctury
2. Regional Platform on Sustainable Development for Asia and the Pacific
3. The 6th Informal ASEAN Ministerial Meeting on the Environment (15-16 MAY 2001)
4. Japanese Royal Couple in Cambodia

[China] Zhou Xin, Policy Research Center for Environment and Economy (PRCEE), The State Environmental Protection Administration (SEPA)

1. New Restrictions on Automobile Manufacture and Emissions
2. Beijing Strengthening Environmental Protection to Realize "Green Olympic"
3. The Law of Desertification Prevention and Control
4. Air Quality Forecast in 47 Key Environmental Protection Cities

[India] Prasad Vaidya, The Weidt Group, USA; Maithili Iyer, Lawrence Berkeley National Laboratories, USA

1. Ban on Plastic Bags Widens
2. State Governments Follow through on Rainwater Harvesting
3. Energy Conservation Act
4. Protection of Plant Varieties and Farmers' Rights Bill

[Indonesia] Mohamad Soerjani, Institute for Environmental Education and Development (IEED), Member of the National Research Council Indonesia

1. "Clean Ciliwung River Campaign," Jakarta
2. Integrated Chemical Management and Safety
3. National Workshop on Environmental Education
4. Novel Approach to Organic Waste Composting
5. Environmental Policy Revitalization

[Japan] Yohei Harashima, Takushoku University

1. Controversy on Ratifying the Kyoto Protocol
2. Reconsidering the Land Reclamation Project at the Isahaya Bay
3. Enforcement of the Law for Recycling of Home Appliances
4. Inauguration of the Ministry of the Environment

[Korea] Jeong-Gue Park, Korea Environment Institute (KEI)

1. Environmental Efforts Driven by the 2002 FIFA World Cup Hosted by Korea and Japan
2. Conservation of the Tumen River
3. Eco-Technopia 21
4. Saemankeum Reclamation Project

[Lao PDR] Soukata Vichit, Science Technology and Environment Agency (STEA)

1. Integration of Environmental Concerns into Socio-Economic Development Plans
2. The First State of Environment Report
3. The First Sectoral EIA Regulation
4. EIA for Gold Mine
5. Program to Improve Environmental and Social Management

[Malaysia] Wan Portia Hamzah and Norhayati Mustapha, Institute of Strategic and International Studies (ISIS)

1. Focus on Wetlands
2. Natural Heritage of Belum to Remain
3. EIA for All Projects
4. Prestigious Award for Malaysians Committed to Turtle Conservation
5. Transfrontier Protected Areas

[Mongolia] Ayush Namkhai, Development and Environment Center; Dondogiin Enkhbayar, Ministry for Nature and Environment

1. Air Pollution in the Capital
2. Amendments Made to the Law on Environmental Impact Assessment
3. Determination of List, Estimation of Size and Percentage of Payments and Charges
4. Pasture Overgrazing Increases
5. Census of Argali Sheep (Ovis Ammon) Population
6. Drought for Three Years Running

[Nepal] Phool Chandra Shrestha, Freelance Consultant

1. Kumrose Community Forest Earns from Eco-tourism
2. Arsenic Contamination in Groundwater
3. Lake Phewa Plan Adds Woes
4. Leasehold Forestry in 16 More Districts
5. National Policy on Wetland Management

[New Zealand] Jacquelyn Harman; Neil Ericksen, The International Global Change Institute (IGCI), The University of Waikato

1. New Zealand Takes Steps Towards Ratifying the Kyoto Protocol
2. Moratorium on Field Trials of Genetically Modified Organisms Lifted
3. Ten Years Under the Resource Management Act (1991)

[The Philippines] Merlin M. Magallona, University of the Philippines

1. Garbage Crisis and the Semirara Controversy
2. President Estrada Calls Military to Assist in Garbage Disposal
3. Smoking Ban Starts June 2001
4. Congressional Measure for Wildlife Resources Conservation Signed into Law

[The Russian Far East]
Alexander Sheingauz, Economic Research Institute

1. New Russian Target Program on Ecology and Natural Resources
2. New GEF Project on Ecosystem Conservation in Khabarovskiy Krai
3. International Conference on Sustainable Forest Management
4. Exhaustion of Fish Reserves in the Sea of Okhotsk
5. A Surge of Poaching in Ussuri Taiga

[Singapore] Koh Kheng-Lian, Asia-Pacific Centre for Environmental Law (APCEL), Faculty of Law National University of Singapore

1. Industrial Water ("NEWater")
2. Convention on Persistent Organic Pollutants, 2001
3. Resources Conservation & Waste Minimization
4. Draft Singapore Green Plan 2012
5. Capacity Building in Environmental Management

[Thailand] Tongroj Onchan, The Mekong Environment and Resource Institute (MERI)

1. Phetchabun Flash-Floods and Mudslides: Death Toll

Climbs to More Than 120 People
2. Ban on Inland Prawn Farming
3. GM Food Will Be Labeled
4. Bangkok Faces Garbage Crisis

[Vietnam] Pham Huu Nghi, Institute of State and Law, National Center for Social Science and Humanities

1. The Project to Improve and Purify the Environment of the Tolich, Lu, and Set Rivers in the Capital City of Hanoi
2. The Oil Overflow Incident On the Sea of Vungtau
3. The National Seminar on Abidance with and Enforcement of Environmental Laws

Contents of the 2002 Top News on the Environment in Asia

[The Asia-Pacific Region]
Tim Higham, United Nations Environment Programme, Regional Office for Asia and the Pacific (UNEP-ROAP)

1. Asian Brown Cloud Study
2. ASEAN Haze Agreement Signed
3. UNEP Project to Harness the Potential of ICT for Environmental Protection
4. Sweden Supports UNEP Initiative to Reduce Greenhouse Gas Emissions
5. Japan Company-Funded UNEP Project Empowers Education

[The Asia-Pacific Region]
Lester R. Brown, Earth Policy Institute (EPI)

1. Water Deficits Growing in Many Countries

[The Asia-Pacific Region]
Institute for Global Environmental Strategies (IGES)

1. The Second Global Environment Facility (GEF) Assembly
2. APFED's Message to the World Summit on Sustainable Development (WSSD)
3. The Eighth Session of the Conference of the Parties (COP8) to the United Nations Framework Convention on Climate Change (UNFCCC)
4. New "Bio Carbon Fund" Launched by World Bank
5. Yellow Dust-Storm over the Skies of Northeast Asian Cities
6. Ramsar Convention on Wetlands Held
7. The Second China-Korea-Japan Tripartite Roundtable on Environment Industries

[Australia] Gerard Early, Approvals and Legislation, Environment Australia

1. State of the Environment
2. Natural Resource Management
3. Sustainable Schools
4. Australia and Japan Unite to Protect Migratory Birds
5. World's Biggest Marine Reserve

[Bangladesh] Khandaker Mainuddin, Bangladesh Centre for Advanced Studies (BCAS)

1. Workshop on Capacity Building for Preparation of National Adaptation Programmes of Action (NAPA)
2. Total Ban on Two-Stroke Autorickshaws in Dhaka City
3. Noise Pollution Caused Environmental and Health Problems in Dhaka City
4. Citizens and Environmental Groups Demand Protection of Rivers and Water Bodies

[Cambodia] Khieu Muth, Ministry of Environment

1. 1st Greater Mekong Sub-Region (GMS) Program Summit
2. The 8th ASEAN summit
3. Training Workshop on Climate Change Issues

[China] Zhou Xin, Policy Research Center for Environment and Economy (PRCEE), The State Environmental Protection Administration (SEPA)

1. The Fifth National Conference on Environmental Protection
2. The Law of Environmental Impact Assessment
3. Anti-Desertification Combating in China
4. The Second Assembly of Global Environment Facility in Beijing

[India] Kirit S. Parikh, Indira Gandhi Institute of Development Research, Integrated Research and Action for Development

1. Civil Society Groups Get Action on Air Pollution in Delhi
2. Supreme Court Protects Tribals' Right
3. India Ratifies the Kyoto Protocol and Hosts COP8
4. Parliament Passes Bio-Diversity Act
5. International Recognition for Indian Environmentalists

[India] R Uma, Tata Energy Research Institute (TERI)

1. India Moves to Eliminate the POPs
2. Regional Workshop on Household Energy Indoor Air Pollution and Health
3. Asian Brown Cloud
4. Auto Fuel Policy
5. The Eighth Session of the Conference of Parties (COP8) to the United Nations Framework Convention on Climate Change (UNFCCC)

[Indonesia] Mohamad Soerjani, Institute for Environmental Education and Development (IEED), Indonesian National Research Council

1. Indonesia at the World Summit on Sustainable Development
2. Sustainable Development Plan of Action on Women and Children
3. The Earth Charter
4. Cooperation with Environmental Counseling Association in Nagasaki (ECAN)
5. The International Center for Research in Agroforestry (ICRAF): Teaching Materials

[Japan] Yohei Harashima, Takushoku University

1. Conclusion of the Kyoto Protocol and the World Summit on Sustainable Development (WSSD)
2. Trouble at Nuclear Plants
3. New National Strategy on Biological Diversity
4. Food Safety Scandals

[Korea] Jeong-Gue Park, Korea Environment Institute (KEI)

1. Cheonggyecheon Restoration Project
2. Comprehensive Measures for Water Supply Special Act of the Four Major Rivers and Establish the Water Pollution Prevention Plan
3. Seoul Metropolitan Air Quality Improvement

[Lao PDR] Somsanouk Phonnakhoth, Science Technology and Environment Agency (STEA)

1. Keys Environmental Issues in Lao PDR
2. 1st ASEAN+3 Environment Ministers Meeting
3. Lao Environmental Fund
4. Environmental Education and Awareness Programme
5. Climate Change Actions Further Developed

[Malaysia] Norhayati Mustapha and Wan Portia Hamzah, Bureau of Environment, Science and Technology (BEST), Institute of Strategic and International Studies (ISIS)

1. Tora! Tora!
2. People Power Succeeds in Re-locating Incinerator
3. Genetic Engineering

4. Participation of Local Communities in Wetland Conservation

[Mongolia] Ayush Namkhai, Development and Environment Center; Dondogiin Enkhbayar, Ministry for Nature and Environment

1. Renewed Law on Land
2. Dangerous Forest Fires and Forest Pests
3. Regional Project on Yellow Dust-Storm
4. Polar Researchers Jubilee

[Nepal] Phool Chandra Shrestha, Freelance Consultant

1. Melting Ice on Everest
2. Land Degradation Combat Plan Underway
3. Tons of Expired Pesticides Stored
4. Plan to Make Daman Second Botanical Garden
5. Medical Waste Contributes to Pollution

[New Zealand] Jacquelyn Harman; Neil Ericksen, The International Global Change Institute (IGCI), The University of Waikato Sustainable Development in New Zealand

1. A Sustainable Development Strategy for New Zealand
2. Monitoring Sustainable Development in New Zealand
3. An Evaluation of Progress on Ecological Sustainable Development

[The Philippines] Merlin M. Magallona, University of the Philippines

1. World Bank Report on Air Pollution
2. Malampaya Project Won Award in World Summit on Sustainable Development
3. Philippines Ranks Low in Environmental Survey
4. Legislative Attempt Failed to Suspend Implementation of Clean Air Act
5. Destruction of Coral Reef Continues Unabated

[The Russian Far East]
Anatoly Lebedev, Bureau of Regional Outreach Campaigns (BROC)

1. Russian Taiga Has Lost Much of Its Wilderness
2. Certification in Forestry Does Not Mean Environmental Sustainability
3. Russia is Sinking under Nuclear Waste and Spent Fuel
4. Payment for Waste Disposal into Environment Shifted to the Budget
5. Forest Strategy as a Way to Hide Illegal Timber

[Singapore] Koh Kheng-Lian, Asia-Pacific Centre for Environmental Law (APCEL), Faculty of Law, National University of Singapore

1. National Environment Agency (NEA)
2. The Singapore Green Plan 2012: Beyond Clean and Green Towards Environmental Sustainability
3. Environment Recycling
4. Capacity Building

[Thailand] Tongroj Onchan, The Mekong Environment and Resource Institute (MERI)

1. The Establishment of the Ministry of Natural Resources and Environment
2. The Smoking Ban
3. Labeling of Genetically Modified Foods
4. Flooding in the North and the Northeast

[Vietnam] Pham Huu Nghi, Institute of State and Law, National Center for Social Science and Humanities

1. Establishment of the Ministry of Natural Resources and Environment
2. Establishment of Vietnam Environment Protection Fund
3. U Minh Thuong Forest is Burnt
4. Limits on the Number of Motorbikes to Re-establish the Traffic Order and Reduce Environment Pollution in Hanoi and Ho Chi Minh City

Contents of the 2003 Top News on the Environment in Asia

[The Asia-Pacific Region]
Tim Higham, United Nations Environment Programme, Regional Office for Asia and the Pacific (UNEP/ROAP)

1. Afghanistan Conflict Environmental Damage Chronicled
2. Northeast Asia Dust and Sand Storms Project Initiated
3. South Asia State of the Environment Reports Target Policy Makers and Youth
4. ASEAN Fire Haze Agreement Takes Effect
5. Chinese Minister Xie Wins UNEP Sasakawa Environment Prize

[The Asia-Pacific Region]
Lester R. Brown, Earth Policy Institute (EPI)

China Losing War with Advancing Deserts

[The Asia-Pacific Region]
Institute for Global Environmental Strategies (IGES)

1. The Kyoto Protocol
2. South Asian Regional Conference on Transition towards Sustainable Development
3. Second Meeting of the Kitakyushu Initiative Network
4. The Second and Third Meetings of the Promotion of Asia Forest Partnership (AFP)
5. Enactment of the "Environmental Education Promotion Law"
6. UNEP FI 2003 Global Roundtable in Tokyo
7. The Third World Water Forum (WWF3)
8. The International Conference on Environmentally Sustainable Transport

[Australia] Gerard Early, Australian Government Department of the Environment

1. More Protection for the Great Barrier Reef
2. New Heritage Legislation
3. First Marine Plan under Australia's Oceans Policy
4. Sustainable Cities Initiative

[Bangladesh] Khandaker Mainuddin, Bangladesh Centre for Advanced Studies (BCAS)

1. UNDP will Support Cleaner and Environment Friendly Ship-Breaking
2. Conference on Sanitation Held in Dhaka
3. Laws to Regulate the Operation of Brick-kilns
4. Relocation of Tannery Cluster from Dhaka City to New Industrial Estate
5. Integrated Action Plan to Save the River Buriganga

[Cambodia] Khieu Muth, Ministry of Environment

1. ASEAN Environment Year 2003 (AEY)
2. The 1st Ecotone Seminar Phase II and The 3rd Meeting of Southeast Asian Biosphere Reserve Network (SeaBRnet)
3. Cambodia Protected Area Law

[China] Zhou Xin, Policy Research Center for Environment and Economy (PRCEE), The State Environmental Protection Administration of China (SEPA)

1. China Won 2003 Outstanding National Units Ozone Award
2. Information Disclosure of Corporate Environmental Performance
3. China Council for International Cooperation on

Environment and Development

[India] Kirit S. Parikh, Indira Gandhi Institute of Development Research, Integrated Research and Action for Development

1. Civil Society Vigilance Helps Arrest Threats to Taj Mahal
2. Pesticides Residue in Bottled Water and Soft Drinks
3. ISO 14000 Rating for Industrial Townships
4. Capacity Building in Environmental Economics
5. Volvo Environment Prize 2003 for Ecologist and Environmental Activist Dr. Madhav Gadgil

[Indonesia] Mohamad Soerjani, Institute for Environmental Education and Development (IEED), Member of the National Research Council, Indonesia

1. Community Empowerment of Farmers and Fishermen
2. Agroforestry
3. The Eight National Science Congress 2003
4. Jakarta Declaration on Clean Development Mechanism
5. Challenges and Opportunities to Develop Sustainable Development

[Japan] Yohei Harashima, Faculty of International Development, Takushoku University

1. Controversy on Tax against Global Warming
2. New Regulation on Exhaust Gases from Diesel-Powered Vehicles
3. Troubles at Refuse Derived Fuel (RDF) Power Plants
4. The 3rd World Water Forum
5. Enactment of the Law for Promotion of Environmental Education

[Korea] Sang-il Hwang, Korea Environment Institute (KEI)

1. Conservation and Convenience Conflict at Mt. Bukhan
2. Schools Boycotted to Protest Nuclear Dump Site
3. A Typhoon Hits Regions of South Korea
4. Five Oil Companies Agree on Protecting Soil Near Gas Stations and Depots

[Lao PDR] Ketkeo Salichanh, Department of Environment, Science Technology and Environment Agency, Prime Minister's Office

1. The Inaugural Meeting of the National Environment Committee (NEC)
2. Provincial Environmental Action Plan and Strategy
3. National Biodiversity Strategy and Action Plan
4. National Strategy on Environment Education and Awareness

[Malaysia] Norhayati Mustapha, the Bureau of Environment Science and Technology (BEST), Institute of Strategic and International Studies (ISIS)

1. Good News for the Seas
2. Tough Actions Follow Highlands Damage
3. Ramsar Recognizes Johor Wetlands
4. Breakthrough in Water Resource Management

[Mongolia] Ayush Namkhai, Department of Environment and Sustainable Development, Ministry of Nature and the Environment

1. Household and Industrial Waste Law Enacted
2. Fourth Asia-Pacific Forum for Environment and Development
3. The Basin of Uvs Lake Placed on the World Natural Heritage List
4. 2004 Declared as Year of Water
5. No Land Reclamation Carried Out
6. Distribution and Reserves of Mongolian Khulan Horse

[Nepal] Phool Chandra Shrestha, Freelance Consultant

1. Four Ramsar Sites
2. Fertiliser from Capital's Waste from Next Year
3. Environment Issues Well Considered in Kali Gandaki 'A' Project
4. Biogas Plants Effective Carbon Dioxide Controllers
5. Nepal Needs Green Projects

[New Zealand] Claire Gibson; Neil Ericksen, The International Global Change Institute (IGCI), The University of Waikato

1. Agricultural Emissions Research Levy
2. Water Quality of Rotorua Lakes
3. Moratorium on Genetic Modification
4. Do Good Environmental Plans Make a Difference?

[The Philippines] Merlin M. Magallona, Institute of International Legal Studies, University of the Philippines

1. Thousands of Passenger Motorcycle Drivers in Protest against Clean Air Law
2. Drivers of Passenger Vehicles Inflicted with Tuberculosis Due to Air Pollution
3. Potable Water Sources Drying Up in Cebu Province
4. Environmental Clearance Application through Internet
5. Asian Development Bank Official Critical of Clean Air Law Implementation

[The Russian Far East]
Anatoly Lebedev, Non Governmental Organisation - Bureau for Regional Outreach Campaigns (BROC)

1. Oil Pipeline Development Plans and Governmental Strategy
2. "Nuclear Deputies" to Be Excluded from the Next Congress
3. Environmentally Exhaustive Fishing Quota Bidding Abolished
4. New Forestry Code

[Singapore] Koh Kheng Lian, Asia-Pacific Centre for Environmental Law (APCEL)

1. The United States of America and Singapore Free Trade Agreement, 2003 (USSFTA)
2. Singapore Infectious Diseases Act, Chapter 137
3. Malaysia-Singapore Reclamation Case and Marine Environment
4. Capacity Building

[Thailand] Tongroj Onchan, The Mekong Environment and Resource Institute (MERI)

1. Gasohol: The Bio-Fuel for Cleaner Air
2. The Potash-Mining Project in Udon Thani
3. The New Salween Logging Scandal
4. The Thai-Malaysian Gas Pipeline Disputes

[Vietnam] Pham Huu Nghi, The Institute of State and Law, National Center for Social Sciences and Humanities

1. Phong Nha-Ke Bang National Park Wins World Heritage Listing
2. Symposium on: "Environmental Protection and Sustainable Development in Viet Nam"
3. Vietnamese Scientist Awarded Blue Planet Prize
4. Oil-Shipwreck on Saigon River

Contents of the 2004 Top News on the Environment in Asia

5. Community Forests Aim to Reduce Poverty
6. Supreme Court Tells Government to Probe Risks of Polythene Use

[New Zealand] Neil Ericksen and Claire Gibson, The International Global Change Institute (IGCI), The University of Waikato

1. Review of Flood Risk Management
2. Changes to the Resource Management Act
3. New National Environmental Standards
4. Fiordland Marine Area Created

[Pakistan] Mushtaq Ahmed Memon, Institute for Global Environmental Strategies

1. Decision on Kalabagh Dam is in Sight!
2. Arsenic Monitoring and Mitigation Project for Clean Drinking Water
3. Karachi Mayor Calls on Kitakyushu Mayor for Environmental Cooperation
4. IUCN Environmental Media Award 2004 for Asia Goes to Pakistan
5. National Workshop on the Improvement of Urban Air Quality

[The Philippines] Merlin M. Magallona, Institute of International Legal Studies, University of the Philippines Law Centre

1. Storms, Landslides, Death, and Deforestation
2. Clean Water Act of 2004 Takes Effect
3. Office of Environmental Ombudsman Created
4. Farmers Protest Cutting of Trees in Building Road
5. Bath-Sharing to Conserve Water

[Russia] Anatoly Lebedev, Non Government Environmental Organisation, Bureau for Regional Outreach Campaigns (BROC)

1. Oil Pipeline Development Plans and Governmental Tricks
2. New Structure – New Problems
3. Illegal Logging as Community Based Timber Industry
4. Russia Will Get Green Party

[Singapore] Koh Kheng-Lian, Asia-Pacific Centre for Environmental Law (APCEL)

1. Ministry of Environment and Water Resources (MEWR)
2. Restructuring of National Environment Agency
3. Animals and Birds (Care and Use of Animals for Scientific Purposes) Rules 2004 (No. S 668)
4. SARS: Chua Mui Hoong, Defining Moment: How Singapore Beat SARS
5. Capacity Building in Environment

[Sri Lanka] Nalaka Gunawardene, TVE Asia Pacific

1. Tsunami Deals a Massive Blow to Coastal Sri Lanka
2. New Measures to Ensure Better Air Quality
3. Sri Lanka's Amphibians under Threat

[Vietnam] Pham Huu Nghi, Institute of State and Law, Vietnamese Academy of Social Sciences

1. Orientations for Improving Environmental Standards
2. ADB Funds Central Urban Environment Projects
3. Sci-tech Institute Helps Improve Environment in Craft Villages
4. Environment Management to be Computerised

Contents of the 2005 Top News on the Environment in Asia

5. E-waste: A Threat to the Environment
6. Bhutan's Forest Cover 64.35 percent, not 72.5 percent

[Cambodia] Khieu Muth, Ministry of Environment, Royal Government of Cambodia

1. State of the Environment Report 2004
2. Sub-decree on the Management of Ozone Depleting Substances
3. Draft Law on the Establishment and Management of Protected Areas
4. Draft Law on Biosafety
5. Senior Officials' Briefing on National Capacity Self-Assessment (NCSA)

[China] Chang Miao, Tsinghua University, Department of Environmental Science and Engineering

1. Build a Resource-Saving and Environmentally-Friendly Society: the Direction of Making the 11th Five-Year Plan
2. The Year of Environmental Impact Assessment in China
3. The Formal Implementation of the Newly Revised Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Wastes
4. China's Reply to the Kyoto Protocol and the Future Development of the CDM Projects
5. China Becomes a Contracting Party to the Cartagena Protocol on Biosafety
6. Petrochemical Company Blamed for Songhua River Pollution

[India] Jyoti Parikh, Integrated Research and Action for Development (IRADe)

1. The Environmental Cost of the 2004 Tsunami
2. Incidence of Cancer and Its Link with Pesticides in the Punjab
3. India is Losing Its Prized Tigers
4. India's Reinforced Commitment towards Climate Change
5. Heavy Rains Hit Cities of India and Claim Hundreds of Lives
6. Indian Centre for Science and Environment Receives World Water Prize 2005
7. India's Endangered Rhinos Making a Comeback, according to Kalyan Das, Chief Officer of the Jaldapara Sanctuary in West Bengal

[Indonesia] Mohamad Soerjani, Institute for Environmental Education and Development (IEED), Retired Professor in Ecology and Environmental Science, University of Indonesia

1. The Early Start of Environmental Education
2. Early Environment Study at the Tertiary Level
3. Management and Development of Environmental Education
4. Efforts for the Implementation of the Kyoto Protocol
5. The Ciliwung River Campaign

[Japan] Yohei Harashima, Takushoku University

1. Asbestos Problem
2. COOL BIZ
3. EXPO 2005 AICHI JAPAN
4. Kyoto Protocol Target Attainment Plan
5. The Inclusion of Shiretoko on the World Heritage List

[Republic of Korea] Sang-il Hwang, Korea Environment Institute

1. The First Nuclear Waste Dumpsite in the Republic of Korea (ROK)
2. VOC Content Standard in Paint for the First Time in the Republic of Korea
3. A Voluntary Agreement on the Reduction of Greenhouse Gas and Integrated Air Pollution Substances
4. The Ministry of Environment Initiates the Collection of Used Cell Phones

[Lao PDR] Ketkeo Salichanh, Environment Promotion Division,Science, Technology and Environment Agency

1. Decree on the Compensation and Resettlement Aspect of the Development Project
2. Decree on the Environment Protection Fund
3. Lao PDR Organised an Exhibition on Environment Protection
4. National Environment Committee (NEC) Conference on "Environment and Socio-Economic Development" 9-10 March 2005.

[Malaysia] Norhayati Mustapha, Institute of Strategic and International Studies (ISIS)

1. Tsunami and Haze
2. Biodiversity and Natural Heritage
3. Biotechnology and Biofuel
4. Towards Sustainable Development
5. River and Water Management

[Mongolia] Ayush Namkhai, Ministry of Nature and the Environment

1. Water Fee Increased
2. "Green belt" Programme
3. A Buddhist Park was Established
4. Amendments to the Environmental Protection Law

[Nepal] Phool Chandra Shrestha, Freelance Consultant

1. Rhino Success Story Receives a Jolt
2. No Place in the City for Old Vehicles
3. Okharpauwa Landfill Site Comes into Operation
4. Polluted Narayani a Threat to Aquatic Life
5. A New Way to Conserve Herbs

[New Zealand] Claire Gibson and Neil Ericksen, The International Global Change Institute (IGCI), The University of Waikato

1. Marine Environment Classification
2. New Zealand Urban Design Protocol
3. Drinking Water Standard
4. Business and Environment-Friendly Tax Changes

[Pakistan] Mushtaq Ahmed Memon, Institute for Global Environmental Strategies

1. Can We Avoid the Worst Environmental Consequences of an Earthquake?
2. Supreme Court Plays its Role to Safeguard the Environment
3. Strategies to Promote Environmental-friendly Vehicles
4. Is the Windmills Project a better Option than Nuclear Energy?
5. MoUs for the Preservation of the Indus River Dolphins
6. IUCN Unveils the Report on the State of the Environment in Sindh

[The Philippines] Merlin M. Magallona, Institute of International Legal Studies, University of the Philippines

1. International Research Expedition Discovers Rich Concentration of Marine Biodiversity
2. The World Bank Estimates Huge Losses Due to Environmental Degradation
3. Protected Areas are Used as Sites for Energy Resource Exploration
4. Japan Resumes Forestry Assistance after Twenty-eight

Years

[Russian Federation] Anatoly Lebedev, Bureau for Regional Outreach Campaigns (BROC)

1. Possible Privatisation of Forests Causes Protest Campaign
2. President Forced Ministry to Start Controversial Pipeline
3. Economic Congress States that Resources in the Russian Far East (RFE) are being Lost
4. New Government Structures are Unable to Protect the Environment
5. RFE Governors will Turn Raw Fish Back Home

[Singapore] Koh Kheng Lian, Asia-Pacific Centre for Environmental Law

1. The Singapore Green Plan 2012 Review (SGP2012)
2. "Water for All: Conserve, Value, Enjoy"
3. Case Concerning Land Reclamation by Singapore in and around the Straits of Johor (Malaysia v Singapore), 2005: Environmental Impact
4. Fine Tuning of the Electronic Road Pricing (ERP) to Curb Traffic Gridlock
5. Capacity Building in Environment

[Sri Lanka] Nalaka Gunawardene, TVE Asia Pacific

1. Tsunami's Ecological Damage Assessed
2. Indian Shipping Canal Threatens Marine Environment
3. GM Foods Continue to Make News
4. Mechanical Dredging of Sand Suspended

[Thailand] Qwanruedee Chotichanathawewong, Energy, Industry and Environment Programme, Thailand Environment Institute

1. Severe Flood and Drought in Thailand
2. Empowering the Young Generation to Protect the Environment
3. Tsunami Aftermath: On the Road to Recovery
4. Success in CFC Phase-Out
5. Ministry of Energy Responds to the King's Recommendation on Renewable Energy

[Vietnam] Pham Huu Nghi, Institute of State and Law, Vietnamese Academy of Social Sciences

1. National Environmental Conference 2005
2. Five Major Goals in Environment Protection Set for 2005-2010
3. Wetlands Preserve Nation's Biodiversity
4. National Assembly Approves the Revised Law on Environmental Protection

2006 Top News on the Environment in Asia

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