2008 Top News on the Environment in Asia

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Institute for Global Environmental Strategies (IGES)

Contents

Asia-Pacific Region

Institute for Global Environmental Strategies (IGES)

1. Discussions on Measuring the Effectiveness of Adaptation Actions under Climate Regime Gain Momentum

Adaptation is necessary even with sufficient mitigation actions taken up since climate change impacts will continue to be felt years down the line. However, the debate on adaptation under the global climate regime has gained momentum only very recently and especially after the Bali Action Plan, which was the result of COP13, called for enhanced actions on adaptation. Enhanced adaptation is possible through various means such as vulnerability assessments, prioritisation of adaptation actions, and incentivising the implementation of adaptation actions. Prioritising adaptation actions is especially important since adaptation costs are projected to be huge and there is a need for achieving quick vulnerability reduction, with limited funds available for adaptation, matching the projected rapid climatic change.

IGES has conducted consultations and carried out field research as part of a research project on adaptation metrics, supported by the World Bank. The project has helped revealing the broad contours of a possible framework, possibilities and limitations of operationalising the concept of measuring the effectiveness of adaptation actions in the future climate regime. Consultations revealed a broad range of opinions from opposition to such measurements to the need for a cautious approach. Limitations were identified such as lack of sufficient capacity and understanding to measure effectiveness as well as difficulty in identifying a base line year for comparison. The findings of this work were presented at a side event co-organised with World Resources Institute (WRI) on 5 December at COP 14 in Poznan, Poland.

2. Slowing in CDM Registrations with the UN?

The Clean Development Mechanism (CDM) was instituted as a supplemental measure with the objective of achieving the greenhouse gas reduction targets in the Kyoto Protocol. Since November 2005 the number of registrations has exceeded 400 annually at their height, but has fallen to just 288 as of October 2008. The background to this development is a sharp rise in the number of projects subjected to review at the time of registration with the United Nations. India and China together account for 60% of these,

and other Asian countries have also been affected.

The most frequent reason given for the review is insufficient evidence that a given project would not be implemented without the CDM, and these are concentrated in biomass, hydropower and wind power projects and in energy efficiency projects at industrial facilities.

Although a range of guidance documents have been produced, the situation remains fundamentally unresolved. In working towards effective greenhouse gas measures in developing countries and effective utilisation of the CDM, further improvements need to be made.

3. Pilot Projects Testing REDD

According to the 4th IPCC report, some 20% of carbon dioxide emissions derive from deforestation and other changes in land use. REDD (reductions in emissions from deforestation and forest degradation in developing countries) was formally raised for discussion at COP13. REDD is enjoying increased attention as developing countries look to it for capital inflows and developed countries hope to bring developing countries within the framework of warming. International negotiations concerning REDD are aiming for an agreement at COP15 towards the end of 2009, but such factors as the difficulty of finalising methodologies and the motivations of the various countries involved are at work to create circumstances that will require extensive debate.

Meanwhile, a range of initiatives are launching pilot projects with the leadership of the aid community, governments and private-sector firms. While these pilot projects take the international negotiations into account, they operate according to their own thinking, indicators and criteria. Some look beyond the absorptive function of forests to stress considerations of biodiversity and the livelihood of local residents. It is difficult to check deforestation without assuring the livelihood of forest inhabitants, and such measures as closing off lands in order to forcibly halt deforestation may lead to conflict with forest inhabitants. This is why some projects, including pilot projects in Indonesia and Cambodia, are now looking to apply the CCB (climate, community, biodiversity) principles to secure a triple benefit. The feasibility of securing the triple benefit in such projects will likely have a major impact on the future course of international negotiations on REDD.

4. 2008 Singapore International Water Week

The first Singapore International Water Week (SIWW) was held on 23-27 June 2008 to provide a global platform for resolution of the world's water problems. The programme at SIWW 2008 included a plenary assembly, Water Leaders Summit, Water Convention, Business Forums, Water Expo, social events and the presentation of the Lee Kwan Yew Water Prize. Some 8,500 policy-makers, corporate leaders, experts and engineers from 79 countries attended SIWW 2008.

The Singapore government offered SIWW 2008 as a global platform to explore solutions to the world's water problems and promote technologies, create opportunities and honour achievements in this area. Another possible motive of the host government may have been to exploit SIWW as an event to gather technologies, financing and human resources with a view to seeking resolution of the severe water shortage obtaining in Singapore itself.

5. Increasing Efforts towards Material-Cycle Societies in East Asia

In 2008, the three leading economies in East Asia introduced new major laws and national plans on resource circulation. Japan adopted *The Second Basic Environment Plan* aimed at achieving an international low-carbon and recycling society in harmony with nature. Considering the growing waste problems all over Asia, the plan has a more international and integrated perspective compared to the previous plan which mainly focused on domestic problems.

In the Republic of Korea, *the Act for Resource Recycling of Electrical and Electronic Equipment and Vehicles* took in effect in 2008. This law obliges the recycling of electric appliances and end-of-life vehicles and restricts the use of certain hazardous substances in products. Similarly, in China, *the Circular Economy Promotion Law*, which aims to save resources and improve the environment, was passed and will take effect in 2009.

The establishment of these laws for promoting material-cycle societies reflects the increasing concerns over the depletion of resources and the environmental pollution caused by the improper disposal of waste. It also reflects the international development of environmental regulation. The trend to move from a society based on linear material

flows towards a material-cycle society seems to be gaining momentum in East Asia.

6. Introducing Environmental Education Promotion Law in Korea

The government of Republic of Korea (ROK) enacted Environmental Education Promotion Law (EEPL) in February, 2008 in order to fulfill sustainable development through a political framework of environmental education (EE) at a national level. EEPL aims at contributing to the nation and local community's sustainable development within the balance between nature and human beings. It is noticeable that a structure of the EEPL indicates shifting towards three new policy directions of the government. First, the EEPL shows a strong will of the central government to promote EE through legislative formulation within a well-built framework. Second, the law devotes over one third of the articles to promoting non-formal EE. Finally, the EEPL highly indicates the government's new policy towards upgrading quality and standardisation of EE through a national certification system. By enacting EEPL, EE in Korea is facing a landmark in its history. Within a strong legislative measure, EE can be strengthened and revitalised. In particular, EEPL is expected to provide an opportunity to enhance non-formal EE, which has relatively lagged behind in development of school-based EE along with the National Curriculum, to take off from its initial state because of its certificated system.

7. Bolstering Research Networks on Environmental Co-operation in the East Asia Region

Regional engagement with environmental issues is progressing rapidly in the East Asian region, as seen in the Singapore Declaration of last year's East Asia Summit (EAS). A reflection of these developments is action to bolster research networks on regional environmental co-operation, including the establishment in 2008 by the Network of East Asian Think-Tanks (NEAT), which links researchers from the ASEAN+3 countries, of a working group on environmental co-operation in East Asia and the establishment in June 2008 of the Economic Research Institute for ASEAN and East Asia (ERIA) as a research institute working jointly with EAS which implemented the ERIA-SD project on sustainable development.

In its first year the NEAT working group on environmental co-operation in East Asia took up climate issues and in August submitted policy proposals to the organisation's sixth Annual General Meeting. The ERIA-SD project held its first working group

meeting in Manila in July, where researchers from the various countries of East Asia held vigourous discussions on a programme of research on how to reflect the perspectives of sustainable development in the policies of East Asian countries.

Related web pages:
The first working group meeting of the ERIA-SD project
http://www.iges.or.jp/en/ea/activity080731.html

Memorandum of the NEAT working group
http://www.ceac.jp/e/pdf/neat_06wg01.pdf

ERIA 1st Working Group Meeting of the ERIA-SD Project

8. Agriculture and Energy: the Role of Biofuels is Coming under Close Scrutiny

In October, FAO released its 2008 report on the state of food and agriculture that examined the implications of the rapid increase in biofuel production from agricultural commodities. The report finds that “while biofuels will offset only a modest share of fossil energy use over the next decade, they will have much bigger impacts on agriculture and food security.” The report does not state a clear conclusion regarding the extent to which biofuels, among many factors, are causing a food-fuel conflict, but it seems to suggest that it is actually in part being materialised.

The report says that the main drivers of biofuel promotion in OECD countries are energy security and greenhouse gas emission reduction, while many developing

countries are hoping for the opportunities that can boost agricultural and rural development through biofuel production. As the report points out that “biofuels are often justified on the basis of multiple or sometimes competing objectives,” it is challenging to satisfy energy security, food security, agricultural/ rural development, as well as greenhouse gas emission reduction at the same time on a global scale. The report calls for reviewing the current biofuel policies that have caused a rush in biofuel promotion and assessing their costs and consequences.

Source: http://www.fao.org/docrep/011/i0100e/i0100e00.htm

The Asia-Pacific Region

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1. Climatic Changes Outlined in New UNEP Project Atmospheric Brown Cloud Report

Cities from Beijing to New Delhi are getting darker, glaciers in ranges like the Himalayas are melting faster and weather systems becoming more extreme, in part, due to the combined effects of man-made Atmospheric Brown Clouds (ABCs) and greenhouse gases in the atmosphere.

These are among the conclusions of scientists studying a more than three km-thick layer of soot and other manmade particles that stretches from the Arabian Peninsula to China and the western Pacific Ocean.

Today the team, drawn from research centres in Asia including China and India, Europe and the United States, announced their latest and most detailed assessment of the phenomenon.

Brown clouds are the result of burning of fossil fuels and biomass, and are aggravating the impacts of greenhouse gas-induced climate change in some cases and regions, says the report.

This is because ABCs lead to the formation of particles such as black carbon and soot that absorb sunlight and heat the air. They also promote gases such as ozone which enhance the greenhouse effect of CO2.

Globally however brown clouds may be countering or 'masking' the warming impacts of climate change by between 20 and up to 80 per cent the researchers suggest.

This is because of particles such as sulfates and some organics which reflect sunlight and cool the surface.

The clouds are also having impacts on air quality and agriculture in Asia increasing risks to human health and food production for three billion people.

Achim Steiner, UN Under-Secretary General and Executive Director, UN Environment Programme (UNEP) said: "One of UNEP's central mandates is science-based early warning of serious and significant environmental challenges. I expect the Atmospheric Brown Cloud to be now firmly on the international community's radar as a result of today's report".

The phenomenon has been most intensively studied over Asia. This is in part because of the region's already highly variable climate including the formation of the annual monsoon, the fact that the region is undergoing massive growth and is home to around half the world's population.

But the scientists today made clear that there are also brown clouds elsewhere including over parts of North America, Europe, southern Africa and the Amazon Basin which also require urgent and detailed research.

"Combating rising CO2 levels and climate change is the challenge of this generation but it is also the best bet the world has for Green Growth including new jobs and new enterprises from a booming solar and wind industry to more fuel efficient, vehicles, homes and workplaces. Developed countries must not only act first but also assist developing economies with the finance and clean technology needed to green energy generation and economic growth," said Mr Steiner.

"In doing so, they cannot only lift the threat of climate change but also turn off the soot-stream that is feeding the formation of atmospheric brown clouds in many of the world's regions. This is because the source of greenhouse gases and soot are often one and the same - unsustainable burning of fossil fuels, inefficient combustion of biomass and deforestation," he added.

Professor Veerabhadran Ramanathan, head of the UNEP scientific panel which is carrying out the research said: "I would like to pay tribute to my distinguished colleagues, drawn from universities and research centres in Asia including China, India, Japan, Korea, Singapore and Thailand as well as Europe and the United States".

"Our preliminary assessment, published in 2002, triggered a great deal of awareness but also skepticism. That has often been the initial reaction to new, novel and far reaching, counter-intuitive scientific research," he said.

"We believe today's report brings ever more clarity to the ABC phenomena and in doing so must trigger an international response - one that tackles the twin threats of greenhouse gases and brown clouds and the unsustainable development that underpins both," added Professor Ramanathan who is based at the Scripps Institution of Oceanography, La Jolla, California.

"One of the most serious problems highlighted in the report is the documented retreat of the Hind Kush-Himalayan-Tibetan glaciers, which provide the head-waters for most Asian rivers, and thus have serious implications for the water and food security of Asia," he said.

"The new research, by identifying some of the causal factors, offers hope for taking actions to slow down this disturbing phenomenon; it should be cautioned that significant uncertainty remains in our understanding of the complexity of the regional effects of ABCs and more surprises may await us " added Professor Ramanathan.

2. Asia Pacific Countries Make Strides in Early Phase Out of Ozone-Depleting Chemicals

Asia Pacific countries are pacing ahead in meeting their commitments to end production and consumption of chemicals that harm the Earth’s protective ozone layer, years ahead of internationally-agreed deadlines.

Under the Montreal Protocol for Substances that Deplete the Ozone Layer, Asia Pacific countries agreed to phase out ozone-depleting chemicals like chlorofluorocarbons (CFCs), halons, carbon tetrachloride (CTC) by 2010, and methyl chloroform and methyl bromide by 2015. Financial assistance was provided by the Multilateral Fund to cost-effectively phase out these ozone depleting chemicals. National Ozone Officers gathered at the meeting to discuss current issues, future strategies, action plans and reviewed where countries in the region stand in meeting the treaty obligations

At least five countries - Sri Lanka, Maldives, China, Indonesia and Fiji – have phased out CFCs, nearly two years ahead of the 2010 deadline. Sri Lanka and Maldives

recently joined ranks with China, Indonesia and Fiji in announcing early phase out of CFCs in their countries. Last year, China shut down five of its six remaining CFC plants, while Indonesia imposed a ban on the import of CFCs into the country in January 2008. Fiji phased out its use of CFC as early as 2000. In addition, 14 countries in the region have phased out CTCs and 13 countries have phased out halons ahead of the 2010 schedule.

The most significant and inspiring achievement comes from the Beijing Olympic Games where none of the venues for Olympic games and events used CFCs and HCFCs, making it the first " ozone friendly " Olympics of modern times .

Asian countries are also moving ahead in the early phase-out of other ozone depletion substances like methyl chloroform and methyl bromide, due for phase-out in 2015. Afghanistan, Bhutan, Brunei, DPR Korea, Fiji, India, Indonesia, Lao PDR, Maldives, Mongolia, Myanmar, Nepal, Pakistan, Philippines, Singapore, Sri Lanka, Thailand, Viet Nam have already ceased production and consumption of methyl chloroform, while Afghanistan, Bangladesh, Bhutan, Brunei, Cambodia, DPR Korea, India, Lao PDR, Maldives, Mongolia, Myanmar, Nepal, Pakistan and the Republic of Korea have phased out methyl bromide, used for soil and post-harvest fumigation.

Completing the phase out of CFCs in developing countries is by far the most important next step in protecting the ozone layer. Other challenges are the need for countries to speed up in meeting their obligations, dealing with methyl bromide exempted under the Montreal Protocol, stocks of ozone depleting chemicals in existing equipment (called "banks" of these chemicals), a growing black market for illegal CFCs and the freeze on production of Hydrochlorofluorocarbons (HCFCs) in 2013 and phase-out in 2030. While HCFCs are ozone-depleting chemicals, their high global warming potential means that their freeze and elimination under the Montreal Protocol will also garner significant benefits in climate change protection.

3. Marine Turtle Conservation Moves into High Gear

An innovative regional agreement is beginning to turn the tide for the 'ancient mariners' of the world's oceans.

A new report prepared for the meeting of 27 signatories to a region-wide turtle conservation agreement gives the most comprehensive picture to date of how well countries have been tackling this issue.

Much progress is being made. Australia has multi-million dollar programmes in place to support the development of community-driven approaches to turtle conservation and to find solutions to the problem of ghost nets. Indonesia is carrying out advanced research to identify fisheries-turtle interactions and to work with industry to develop suitable mitigation measures. The Seychelles has devised innovative approaches to involve the private sector in practical conservation measures

Eight countries already have in place national action plans focusing on turtle conservation, while another ten are preparing their national strategies. Australia, Oman, Seychelles and South Africa are among the countries that have been monitoring their turtle populations for decades; and several more countries have programmes of longer than 10 years duration.

The overall report card for the region's marine turtles is mixed. South Africa's nesting population of Loggerhead turtles has increased markedly with annual nests increasing from 250 to 1,750 over the past four decades. However, the Eastern Australian population of Loggerheads is reported to be in serious decline, a situation mirrored in Madagascar.

Green turtles, still very abundant in the Sultanate of Oman, have fallen in number in Indonesia and Philippines due to unsustainable egg collection and poaching. Olive ridley turtles, which nest in the thousands in India, are reported to be declining. In Thailand, their numbers are already critically low, and are thought to represent only about five percent of historical levels.

Signatories identified natural phenomena, such as predation, as the most common threat to marine turtles, followed closely by incidental capture in coastal fisheries. Both threats are reported to occur with "moderate to strong" intensity at about 35% of the sites surveyed, covering about 18 countries. Serious threat of egg collection came third in the ranking, identified as a problem at 20% of the sites in 14 countries. Traditional consumption of meat and eggs still occurs in three-quarters of the Signatory States canvassed.

Attention is being focused squarely on fishing impacts. Set gill nets are reported by half of the Signatories to have serious impacts on turtles. By-catch in shrimp trawls has been identified as a problem, yet less than a third of the members have effective systems in place to address it. Other harmful illegal fisheries have been documented, including what appears to be a resurgence of destructive fishing methods using dynamite and poison.

4. Campaign Spotlights Severity of Marine Trash in East Asian Seas: Region May Be One of the Most Affected by Marine Litter in the World

Marine litter and its effects on the marine and coastal environment in the East Asian Seas, is the focus of the *Clean up the East Asian Seas Campaign*, organised by the United Nations Environment Programme Coordinating Body on the Seas of East Asia (COBSEA). The campaign, which spans Australia, Cambodia, Indonesia, Malaysia, the People's Republic of China, Philippines, Republic of Korea, Singapore, Thailand and Viet Nam, aims to draw public attention to the seriousness of the problem in the region and encourage communities and national authorities to take action at local level.

Globally, data on marine litter from cleanup campaigns show increasing levels of garbage on coastlines and at sea, with an estimated 6.4 million tons of garbage dumped in oceans annually.

The campaign will promote current cleanup activities until the Clean Up the World Weekend and Coastal Cleanup Day, that take place during the third weekend of September, along with a Green Fins Photo Contest on the theme 'Marine Litter, the Sea and the Coast" and a COBSEA Clean Beach Award.

The campaign is part of activities under the COBSEA Regional Action Plan on Marine Litter adopted by COBSEA countries early this year. The Regional Action Plan outlines actions to address the need for enhanced efforts to prevent and mitigate marine litter, increase awareness and strengthen regional cooperation. It also affirms the need for a stronger focus on this issue by governments in the region.

The COBSEA Clean Up the East Asian Seas Campaign is being organised with the Clean Up the World, Ocean Conservancy's International Coastal Cleanup and Green

Fins and supported by Toyota and Thai Airways.

The East Asian Seas region has the highest coral reef biodiversity in the world with more than a third of the world's coral reefs. However, pollution, tourist activities and destructive fishing have taken their toll on the reefs which are now in critical and threatened condition**.** In this region, COBSEA is one of the intergovernmental organisations under UNEP that is entrusted to assist member countries in sustaining their marine and coastal resources.

Central Asia

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1. CAREC Starts New Environmental Informational Campaign.

In 2009 the Regional Environmental Centre for Central Asia (CAREC) will implement environmental awareness campaigns on the national level of five Central Asian countries. In Kazakhstan the 2009 information campaign will be devoted to the issue of solid domestic wastes and unbridled dumps. That issue was identified during the consultation meeting, which was held in Almaty, on 21 October. 2008. The discussion involved representatives from the Ministry of Environmental Protection of Kazakhstan, international organisations, NGOs and mass media.
Participants of the event agreed that the problem with solid domestic wastes and unbridled dumps is the issue where the information campaign would have the biggest effect in resolving that particular problem. This project is funded by the European Commission and is to be implemented in partnership with NGOs, state bodies and informational networks of Central Asia. The first stage of the project consists of consultation meetings in each country of the region in order to identify priority environmental problems and develop action plans for the next year. The second stage consists of the actual implementation of informational campaigns with the involvement of NGOs, state bodies, educational institutions, mass media and business enterprises. It is anticipated that realisation of such national public awareness campaigns will contribute to the improvement of the environment in Central Asia.

Resource www.carec.kz

2. Training for Young Environmental Leaders in Central Asia.

Today's young environmentalists from Central Asia already have the capability of becoming leaders and experts in the area of regional environment protection tomorrow. CAREC, having combined its efforts with the regional environmental NGOs, offers the future leaders an opportunity to systematise their knowledge and to obtain practical work experience through participation in the Training Programme for Young Environmental Leaders. This project is carried out with financial support from the Ministry of Construction, Planning and Environment Protection of Netherlands. The training is aimed at systematisation of knowledge on strategic planning, development of project proposals, and fundraising for their implementation. Duration of the project is two years. Participants of the Programme will learn how to develop and execute projects, and collaborate with other environmental organisations, and will acquire knowledge of environmental problems and their solutions in a friendly international spirit. During this period of time, two groups of young specialists from Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan have completed the training. As opposed to many other CAREC-hosted workshops and trainings, this training programme continues for one full month instead of the usual two to three days.

Resource www.carec.kz
Photo 1

Training for Young Environmental Leaders in Central Asia, Almaty, Kazakhstan. © CAREC

3. A Drop of Water is a Grain of Gold

During 2003-2007, more than 7000 representatives of rural population of Almaty oblast were provided with access to clean drinking water.

CAREC with the financial support from the Government of Norway has started implementation of the third phase of the project "Financial Programme – Clean Water for Rural Settlements". The overall goal of the third project phase is the dissemination of the main outcomes as well as lessons learnt and approbated methodology to local authorities in charge of implementation of complex Drinking Water programmes on the regional and oblast levels The project was started by CAREC in August, 2003 in order to support the implementation of the programme of the Republic of Kazakhstan "Drinking Water" for 2002-2010.
The main goals of the project are to:

- Increase the community access to clean drinking water in rural areas;
- Organise the local self-governance, institutions required for permanent and self-supporting access to clean drinking water;
- Improve public understanding of environmental, social and economic benefits of maintenance of sustainable systems for provision with clean drinking;
- Strengthen public participation (community based approach) in decision making, management and handling of water supply systems;
- Maximise profits of water users cooperatives for maintenance, management and handling of water supply systems.

During the implementation of the third phase of the project it is planned to provide another 3000 villagers in Kazakhstan with access to clean drinking water.

Resource www.carec.kz

4. New Compulsory Subject "Environment and Sustainable Development" has been Launched

A national workshop “Initial experience and prospects for development of the new subject “Environment and Sustainable Development” was held in Pavlodar on 21-23 October, 2008. It addressed major methodological aspects of Education for Sustainable Development (ESD), mechanisms and the most efficient competence building practices for future specialists. This workshop was organised by CAREC and Pavlodar State Pedagogic Institute (PSPI) in cooperation with the Ministry of Education and Science (MES), the Ministry of Environmental Protection (MEP) of Kazakhstan and under the support of the OSCE Centre in Astana. Faculty of the state-owned universities were able to enhance their capacities in sustainable development by attending a course of lectures and presentations, and several practical exercises as part of the new compulsory subject “Environment and Sustainable Development”.
In order to ensure practical implementation, participants were provided with the newest training materials on sustainable development and the electronic version of the lecture course, developed and tested during sustainable development workshops held for Kazakh governmental officials in Venice. Successful practical implementation depends on the universities themselves, as well as on their commitment, capacities of the faculty and availability of required teaching and methodical materials. Having achieved commendable outcomes in Kazakhstan, CAREC is getting ready to undertake implementation of similar projects in other Central Asian countries in 2008-2009 with the support of the European Commission.

Resource www.carec.kz

Photo 2

«National workshop “Initial experience and prospects for development of the new subject “Environment and Sustainable Development” ***August, 2008, Almaty, Kazakhstan. © CAREC,***

Australia

Peter Woods
Chief Information Officer
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1. Climate Change and Emissions Reduction

The world's climate is changing and, as one of the hottest and driest continents on earth, Australia's climate is particularly vulnerable. To tackle climate change, the Australian Government has set a long term greenhouse emissions target of 60 per cent below 2000 levels by 2050.

A Carbon Pollution Reduction Scheme is being established that will set an overall environmental cap by issuing a set number of permits, and allow entities to trade permits, thereby putting a price on carbon. The scheme will address the impact on strongly-affected industries, and measures will be developed to assist households, particularly low income households, to adjust to the impact of carbon prices

Further information:
http://www.environment.gov.au/minister/wong/2008/pubs/mr20080716.pdf
http://www.climatechange.gov.au/emissionstrading/index.html
http://www.treasury.gov.au/lowpollutionfuture/

2. Energy Efficiency

To tackle climate change and reduce its energy use and reliance on fossil fuels, Australia has developed a package of measures designed to help the community to improve energy efficiency. The measures include:

- encouraging the use of energy efficient products by expanding energy rating labels and standards for electrical appliances;
- phasing out inefficient lighting;
- providing rebates for solar hot water systems,
- providing rebates for installing energy-efficient insulation in rental homes;
- implementing innovative financing arrangements, like low-interest Green Loans;
- establishing a Solar Homes and Communities Plan to provide rebates for solar panels;
- providing up to half the cost of solar power systems for people not connected to a mains electricity supply;
- implementing a Solar Cities Programme in seven cities to reduce carbon pollution by over 76,000 tonnes each year; and
- implementing a Solar Schools Programme, which assists schools to improve their energy and water efficiency and reduce their costs.

Further information:
http://www.environment.gov.au/settlements/energyefficiency/index.html

Solar panels ©DEWHA

3. Climate Change Regional Cooperation

Having ratified the Kyoto Protocol, Australia is committed to helping shape a global solution on climate change and is actively participating in international negotiations in this area.

Australia is also taking a lead role in assisting nations in the region adapt to climate change, through a commitment of $AUD150 million over three years to meet priority needs in vulnerable countries, particular its Pacific Island neighbours. Australia is supporting practical measures that build local skills and capacity through the Pacific Future Climate Leaders programme, which is training future Pacific climate change leaders through scholarships, exchange programmes and community education, and the Global Environment Facility's Small Grants Programme, which supports community-based adaptation programmes in the Asia-Pacific Region. The Australian Government is also delivering and coordinating scientific and technical assistance to tackle climate change and strengthening Pacific meteorological services in partnership with New Zealand and Pacific Island countries.

Further information:
http://www.environment.gov.au/minister/wong/2008/pubs/mr20080829.pdf

4. Water for the Future

Climate change, drought and over-use are causing water shortages that pose a serious threat to Australia's economy and way of life. In response a $AUD12.9 billion 10-year national plan has been launched to secure the long-term supply of water for Australian households, businesses and farmers, as well as provide water to restore the health of Australia's stressed river systems.

Water for the Future is built on four key priorities - taking action on climate change; using water wisely; securing water supplies, and supporting healthy rivers.

The plan involves improving the information available on water resources, setting a cap on water extraction, upgrading out-dated irrigation infrastructure, and investing in pipelines, water saving infrastructure and water treatment plants. It also entails helping households to install rainwater tanks and greywater systems, and helping communities through investment in desalination, water recycling and stormwater re-use. A major component involves the Australian Government in buying back water entitlements, at a fair market price, to put water back into the environment.

Further information:
http://www.environment.gov.au/water/

Water recycling ©DEWHA

5. Caring for Our Country

A new $AUD2.25 billion *Caring for our Country* initiative to protect Australia's unique natural environment and sustainably manage its natural resources commenced in July 2008. The initiative has the goal of achieving an environment that is healthy, better-protected, well-managed, resilient, and provides essential ecosystem services in a changing climate.

Six national priority areas have been identified:

1. establishing a comprehensive, adequate and representative national reserve system;
2. protecting biodiversity and natural icons;
3. protecting coastal environments and critical aquatic habitats;
4. promoting sustainable farm practices;
5. securing environmental and natural resource outcomes, particularly for Indigenous groups through natural resource management in remote and northern Australia; and
6. building capacity to achieve landscape-scale change through community skills, knowledge and engagement.

Further information:
http://www.nrm.gov.au/funding/future.html

Tree planting ©DEWHA

6. World Heritage Funding for the Region

Australia is providing $AUD2.5 million to UNESCO to support World Heritage initiatives internationally, with a focus on the Asia-Pacific region. The Pacific, rich in both cultural and natural wonders, is the least represented region in the world with only three World Heritage-listed properties.

Australia's support includes $AUD1 million to the UNESCO World Heritage Centre to help build world heritage capacity in Pacific Island countries.

Further information:
http://www.environment.gov.au/minister/garrett/2008/mr20081013.html

Bangladesh

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1. Air Pollution Major Cause of Mortality and Morbidity

Air pollution has been identified as the leading cause of morbidity and mortality in Bangladesh, according to a study. If the exposure to urban air pollution was reduced by 20-30 percent, it would result in saving 1200 to 3500 lives annually and avoiding 80-230 million case of diseases, said Country Environmental Assessment (2006) report released recently. The Government of Bangladesh and the World Bank jointly conducted the assessment while the Government recognised the need to address the problem of urban air pollution because of its wide ranging adverse impacts. The government developed the Clean Air and Sustainable Environment (CASE) project with proposed World Bank financing to facilitate the adoption of sustainable environmental initiatives in the key polluting sectors (urban transport and brick making) with a focus on reducing air pollution and improving safe mobility. The proposed CASE project aims at demonstrating innovative approaches to addressing the problem rather than the traditional regulatory approach. A "co-benefits" approach to help reduce urban air pollution will be demonstrated under the project. This will include mitigation of GHG emissions from key polluting sectors as well as addressing traffic management and safety issues in the transport sector. Recently, a World Bank team conducted an appraisal of the proposed project during which the World Bank team and Government counterparts reviewed the progress of the project preparation.

The proposed CASE project builds on the experience and lessons of two past bank supported projects in Bangladesh, namely the Air Quality Management Project (AQMP) and Dhaka Urban Transport project (DUTP). Both AQMP and DUTP had a major impact on improving Dhaka's air quality.

Source: The Daily Star, 11 August 2008

2. Dhaka Declaration on Climate: SAARC Ministerial Meeting for Multi-Pronged Measures

The Dhaka Declaration on Climate Change endorsed by the South Asian Association of Regional Cooperation (SAARC) Ministerial Meeting on Climate Change yesterday recommended an action plan in different areas including adaptation, technology transfer, mitigation and capacity building for international negotiation process. In the declaration, it has been clearly stated that every member country has the right to food, water and energy security. Also it has been agreed that mutual consultation will take place among the SAARC member states for taking national positions in international negotiations forums. The draft declaration urged the international community for partnership development in this regard by providing additional financial resources, as already agreed upon. The declaration saw it as the moral obligation of the developed countries.

In the Dhaka declaration the SAARC countries commit themselves to promote programmes for advocacy and awareness raising on climate change and to inculcate habits towards a low carbon society, including incorporation of climate change and related science-based educational material in educational curricula as per SAARC procedure and practices.

The declaration incorporates provisions for SAARC countries to cooperate on climate change issues for capacity building including development of CDM projects and on incentives for removal of GHG by sinks and exchanges of information of best practices, sharing of the results of research and development for mitigating the effects of climate change and undertaking adaptation measures, and for enhancing south-south cooperation on technology development and transfer, as per established SAARC norms.

The declaration observed that climate change is substantively the result of GHG emissions by the developed world for over two centuries, now posing as a direct threat to sustainable development and the achievement of the Millennium Development Goals (MDGs) in developing countries which have little or no responsibility for the current process of climate change.

Ministers of Environment and delegates and experts met in Dhaka over 3 days from 1 July 2008 to deliberate on measures that may be undertaken to minimise the adverse impacts of climate change.

The ministerial meeting was opened by Chief Adviser Dr. Fakhruddin Ahmed who set the tone of the meeting by stating clearly that deep cuts in emission by the industrialised developed countries are needed to mitigate climate change. On the other hand, they should provide compensatory financing for adaptation and making the region climate resilient.

The meeting, chaired by Special Assistant to the Chief Adviser, Raja Devasish Roy, was preceded by an Expert Group meeting for two days.

Source: The Independent, 4 July 2008

3. Dr. A. Atiq Rahman Winner of Champion of the Earth Award 2008

Renowned environmentalist Dr. Atiq Rahman has won this year's Champions of the Earth Award for the Asia Pacific region. The Executive Director of Bangladesh Centre for Advanced Studies (BCAS), Dr. Atiq has received the award along with six others across the world. The United Nations Environment Programme (UNEP) in Nairobi, Kenya announced the award on the 10th Special Session of its Governing Council. The other recipients of Champions of the Earth 2008 are Helen Clark, Prime Minister of New Zealand, Balgis Osman-Elasha, a senior researcher at Sudan's Higher Council for Environment & Natural Resources, Henrietta Elizabeth Thompson, former Energy and Environment Minister of Barbados, Prince Albert II of Monaco, former US Senator Timothy E Wirth and Abdul-Qader Ba-Jammal, Secretary general of the People's General Congress of Yemen.

In the award letter, Achim Steiner, UN under-Secretary General and UNEP Executive Director, observed that Dr. Atiq is one of the leading specialists in the field through his

national and international experience in sustainable development, and environment and resource management.

Dr. Atiq's publications on the subjects of environment and development in Bangladesh can be a reference for peers, he said, adding that the post-graduate course that Dr. Atiq had designed on "Sustainable Development Challenges and North South Dialogue" is innovative. Lauding Dr. Atiq's contribution, Achim Steiner noted that as a citizen of Bangladesh, a country extremely vulnerable to climate change and flooding, his expertise remains vital throughout the region.

The United Nations Environment Programme (UNEP) set up the award in 2004.

Past Champions of the Earth winners include, among others, Ms. Massoudeh Ebtekar, former Vice President of Iran, Mikhail Gorbachev of the Russian Federation, Prince Hassan Bin Talal of Jordan and Al Gore, former Vice President of the United States.

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Source: The Daily Star, 28 January 2008

4. Groundwater Arsenic Problem may Worsen in Bangladesh

Bangladesh may find it difficult in future to cope with the growing arsenic problem in its groundwater, experts told an international symposium in Dhaka on 11 August 2008. The symposium titled "Arsenic calamity of groundwater in Bangladesh: Contamination of water, soil and plants" was organised as part of a research programme by a group of scientists from Japan and Bangladesh. Japanese Ambassador to Bangladesh Masayuki Inoue was present at the function as the special guest. The research team led by Dr. Kingsuk Roy, Associate Professor at Nihon University in Japan, has been conducting periodical field surveys on arsenic contamination in soil, water and plants in different parts of Bangladesh. Some findings of the survey conducted on plant species in different villages of Narayanganj showed some crops such as roots of water spinach and roots of wax gourd having strong affinity to absorb arsenic from soil water. Some crops such as arum have been reported to be contaminated much more than the internationally allowable standards, according to the research findings. About tube-well water, the researchers said water from arsenic affected tube-well should not be used for irrigating homestead and agricultural crops. According to them, a tube-well is not safe for ever and needs regular check ups. They said arsenic is now a great threat to the future generations of Bangladesh as the problem has taken a serious turn. The arsenic problem of groundwater in Bangladesh, the scientists said, is related not only to the geography and geology, but also to the culture and patterns of water use. It is time to stop the silent killer through coordinated efforts, they emphasised.

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Source: The Daily Star, 12 August 2008

5. UK Pledges £75 Million Climate Fund for Bangladesh

The United Kingdom has agreed to provide Bangladesh with GBP75 million (about USD132 million) in grants over the next five years to enable it to recoup the losses caused by the recent natural calamities, including the prolonged floods and cyclone Sidr. The two governments signed an agreement to that effect at the 'UK-Bangladesh Climate Change Conference' at the Royal Geographical Society in London. The declaration also states that the two governments will work together to reduce the emission of global greenhouse gases by the developed countries by about 50 per cent within 2050 to save the lives and properties of hundreds of millions in Bangladesh and other least developed countries. Douglas Alexander, Minister for International Development, UK, and AB Mirza Azizul Islam, adviser for finance and planning, Bangladesh signed the declaration in London. Mirza Aziz said that the responsibility for managing the Climate Change Trust Fund may be given to the World Bank. The UK government has already pledged £60 million from its total package to this trust fund. The conference was also addressed by Ulla Tormaes, Danish Minister for development and cooperation, and Muzzafar Ahmad, an economist and environment activist.

Besides the £60 million meant for the trust fund, the UK government will provide another £12 million for different projects funded by UK agencies and £3 million for research. It could not, however, be confirmed whether this fund is over and beyond the overseas development assistance already pledged to Bangladesh or a part of it. Creating international consensus to reduce emissions will be the next agendum to help save developing countries from the dire effects of climate change, said the British Minister. Mirza Aziz termed the commitment as recognition that Bangladesh was truly vulnerable to climate change. Aziz called upon the international community, particularly the developed countries, to reduce their emissions and provide Bangladesh with more and adequate funds to implement its climate change strategy and action plan.

The joint declaration called upon developed countries to reduce their global greenhouse gas emissions to save the least developed countries and small islands, and also the developing states.

Source: New Age: 11 September 2008

Bhutan

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1. A New National Park Created

Bhutan has created a new national park measuring 3737 sq. km to commemorate the centenary celebration of the Monarchy. The park will consist of a vast and mainly uninhabited area touching five districts lies between Jigme Dorji national park in the west and Bumdeling wildlife sanctuary in the east. It will help preserve ecological systems and safeguard a corridor along the entire northern area of Bhutan. It will also benefit wildlife in neighbouring Arunachal Pradesh and Sikkim stretching up to Ladakh and even Pakistan.

The area has many glacial lakes and watersheds of rivers in Bhutan that turn hydro-power turbines. According to the Minister of Agriculture, the park is home to the national flower (blue poppy), national animal (takin) and national tree (cypress), as well as cordyceps, rhodendrons, chirpines and hundreds of other aromatic and medicinal species of plants. It also has many endangered species like snow leopard, musk deer, blue sheep, royal Bengal tiger, red panda, takin, himalayan black bear, marmots and several species of pheasants.

Bhutan has four parks, four wildlife sanctuaries and one wildlife reserve.

Sketch of the proposed national park. ©*Kuensel*

Source: Kuensel, 11 June 2008, Vol. XXIII, No. 45.

2. A SAARC Forestry Centre Established in Thimphu

A SAARC forestry centre was established in Thimphu, Bhutan, in June 2008. It will serve as a focal point for information on forest and related topics for the eight member countries of the South Asian Association for Regional Cooperation (SAARC). The centre will conduct research on mountain ecology, explore new ways of managing forest resources and other related fields, and gather research data from member states. It will focus on programmes on mountain ecology, participatory forestry, sustainable forest management and information and knowledge management.

Inaugurating the centre together with the Minister of Agriculture, the SAARC Secretary General said that no country is better suited than Bhutan where environmental conservation is one of the pillars of its development philosophy of Gross National Happiness.

About 26 percent of the country is protected area. Bhutan has 7,000 species of vascular plants, 770 bird species, and 46 species of rhododendron. New species are being discovered in every survey.

SAARC Secretary General with the Minister of Agriculture at the inauguration. ©*Kuensel*

Source: Kuensel, 14 June 2008, Vol XXIII, No 46.

3. Bhutan Can Earn through Carbon Trading

Bhutan is studying the viability and details of carbon trading so that the country's environment can earn some money. The Kyoto Protocol allows large carbon emitters in developed countries to buy carbon points from developing countries that emit less

carbon. According to a World Bank study, in 2007 the international carbon trade market was worth US $ 64 billion.

Detailed studies will have to be done on carbon emissions and the carbon sink potential of Bhutan's nature parks and programmes and other environment friendly projects.

Unfortunately, the Kyoto Protocol does not recognise standing forests, and only awards carbon points to new forest planting initiatives. According to the Nature Conservation Division (NCD), around eight percent of Bhutan which consists of degraded forests and shrub areas will provide significant carbon points if new trees are planted.

There is pressure from many countries like Brazil to award carbon points for standing forests. Any revision of the Protocol in 2012 will benefit Bhutan because the highest carbon points in forests will be given for sub-tropical broadleaf forests, which constitute a majority of the country's forest cover.

Internal carbon trading which involves rewarding an upstream community for keeping the river clean for downstream people will also be studied. Mega hydropower projects cooperation with India will also make Bhutan eligible for carbon trading through hydro projects, and receive compensation for its contribution to the reduction of emissions.

Source: Kuensel, 11 June 2008, Vol XXIII, No 45.

4. 21 New Birds Recorded

Already home to some of the world's endangered bird species, Bhutan has recorded 21 new additional species, according to the Nature Conservation Division (NCD).

A group of 12 birdwatchers spotted Brahminy starling (Sturnus pagodarum) along the Pho Chhu in Punakha in March this year. The Brahminy starling, recorded only in eastern Afghanistan, Nepal, India and Sri Lanka and now in Bhutan, has a black crest, rufous-orange head, yellow bill and legs and grey breast.

“One of the reasons why additional bird species are being noticed is because more and more people seem interested in bird watching and learning about birds,” said forest officials at the NCD. Mr Sherub, who contributed 16 new birds for the record, said that some of these birds might also be migrants exploring new places.

Out of the species of birds recorded in Bhutan, 24 species have been globally recognised as threatened. One of the critically endangered species is the white-rumped vulture (Gyps bengalensis). Its population has declined by more than 80 percent in the last ten years.

Bhutan is also home to some of the most endangered and rarest bird species in the world: the white-bellied heron (Ardea insignis), the rufous-necked hornbill (Aceros nipalensis), beautiful nuthatch (Sitta formosa), chestnut-breasted partridge (Aborophila mandellii), and the well-known black-necked cranes (Grus nigricollis).

Some of the recent additional birds for the country are the spectacled finch (Allacanthis burtoni), pacific golden plover (Pluvialis fulva), blue pitta (Pitta cynea) and ashy prinia (Prinia cocialis).

Brahminy starling

Source: Kuensel, 26 April 2008, Vol XXIII, No 32.

5. Tigers in Snow Leopard Land

Pictures and pugmarks from the Jigme Dorji national park indicate the presence of the royal Bengal tigers at higher altitudes that ever seen before. The tigers have gone so high as to overlap with the habitat of snow leopards. Bhutan is officially the only

country to have tigers at such high altitudes and where the habitat of snow leopards and tigers overlap.

The study used strategically placed GPS-marked and infrared-trigger cameras to find out the total number of tigers in the country. The implications and reasons for tigers living at such high altitudes will hopefully emerge from the study. Global warming and habitat pressure could be some of the reasons. Bhutan may be the next research frontier for understanding the secrets of these unlikely high altitude competitors.

Previous data shows that there are between 115 and 150 tigers in Bhutan

The snow leopard and the Royal Bengal tiger

Source: Kuensel, 7 May 2008, Vol XXIII, No 35.

6. Getting to Grips with Garbage

Each Bhutanese generates about a kilogram of household waste everyday, according to the first national solid waste survey carried out in urban centers of Bhutan. Organic waste like vegetables, fruit remains and garden waste topped waste composition. The highest waste was found in Phuentsholing and Samdrup Jongkhar, which are both border towns. Paper and paperboard formed the second highest fraction of municipal solid waste. Solid waste included all paper products, corrugated and non-corrugated carton boxes and packaging material. Offices generate the highest paper and paperboard waste.

Surprisingly, plastic waste formed about 13% of municipal solid waste, although use of plastic bags was banned in Bhutan in 1999.

Out of 43,697 tonnes of municipal solid waste that urban centers generated in 2007, organic waste made up 25,388 tones, paper and paperboard 7,516 tones, which is equivalent to about 1.53 billion sheets of A4 size photocopy paper. Plastic waste generation was estimated at 5,550 tonnes, which is roughly 24 plastic bags per capita per week.

The first national conference on solid waste management attended by various agencies, districts, corporations and industries recommended public awareness of waste reduction, especially at the school level, solid waste management plans with clear vision, involving all bodies at the local level, adequate funding and revision of municipal taxes.

Source: Kuensel, 20 August 2008, Vol. XXIII, No 64.

China

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1. Improved Environmental Quality from Beijing Olympics

The concepts underpinning the Beijing Olympics were a Green Olympics, the People's Olympics and a High-tech Olympics. After seven years of preparations, China delivered on the promises made to the International Olympic Committee. One of these focal motifs, a Green Olympics, consisted of the principle of sustainable development permeating the entire Olympic process.

In concrete terms, the following measures were put into effect under the aegis of the Green Olympics:

* Formulation and implementation of a set of environmental measures
* Broad application of green technologies
* Urban environmental infrastructure projects expedited throughout China on the occasion of the Olympics
* Progress in co-ordinating and improving industrial structure and foundations laid for an environmentally friendly industrial structure through energy conservation
* Broad improvements in environmental quality and air quality
* Citizen involvement (The Beijing municipal government focused efforts on improving citizens' living environment through such measures as automotive exhaust reductions, smoke and soot mitigation and promoting clean energy sources. This combination of efforts was both well-regarded among the citizens and raised their awareness of environmental conservation.)

Holding this Green Olympics heightened the central government's interest in environmental issues and contributed to the ongoing shift from a top-down, government-led approach to national environmental policy to a bottom-up approach of full citizen participation. These Olympics contributed also to the promotion of environmental policy and system, and to the development of industries with international environmental principles.

The Bird's Nest, the main Olympic stadium (photo by author)

Source: Division of Environmental Management and Policy, Tsinghua University

2. Establishment of Legislation Promoting Recycling Economy

On 29 August the fourth session of the Standing Committee of the 11th National People's Congress (NPC) passed the People's Republic of China Recycling Economy Promotion Law. President Hu Jintao signed the 4th Presidential Order, thus promulgating the legislation. (The full text of the law has been published by Xinhua.)

Drafted with the objectives of promoting a recycling economy, efficient utilisation of resources, protection and improvement of the environment, and bringing about sustainable development, the law is comprised of 59 articles in seven chapters: general rules, basic administrative system, volume reduction, re-use and recycling, incentives, legal responsibility and supplementary provisions. The primary provisions of the legislation are as follows.

The promotion of a recycling economy will require the prioritised adoption of non-toxic, non-polluting or low-toxic, low-polluting materials and design plans in engineering, equipment, products and packaging materials facilitating collection, disassembly and biodegradability and satisfying national standards in these areas. Firms must adopt advanced water conservation technologies, methods and facilities institute and implement water conservation planning, and work to upgrade water conservation controls. Meanwhile, the state will encourage firms to use efficient products that contribute to petroleum economies.

Working towards effective resource utilisation, firms will be recycling soot, coal, tailings, waste stone, waste material, waste gas and other industrial waste product generated in industrial processes. Firms must also increase their water reutilisation rates by means of serial-water and recycled-water systems and recycle wastewater from industrial processes by adopting advanced technologies, systems and equipment. They will also be employing advanced technologies to recycle waste heat and excess pressure generated in industrial processes.

The state is to provide preferential tax treatment to industrial activities that promote a recycling economy and encourage the import of such technologies, equipment and products as those incorporating advanced energy conservation and water conservation. People's governments and relevant administrative departments at the provincial level and above will commend organisations and individuals that contribute to the management of the recycling economy, scientific and technical research, product development and popularisation, and firms will also commend groups and individuals that make outstanding contributions.

The Recycling Economy Promotion Law comes into force on 1 January 2009.

Source: Xinhua Net 20080901 TC

3. Revision of the Water Pollution Prevention Law

The PRC Water Pollution Prevention Law was revised by the NPC Standing Committee, proclaimed on 28 February and came into effect on 1 June. This revision clarifies local government responsibility for the protection of aqueous environments and enhances administrative oversight of polluters by local governments.

The revision institutionalises implementation of the state aqueous environment protection targets responsibility programme and its auditing and evaluation programme and incorporates progress made towards aqueous environment protection targets into the performance evaluations of local governments and responsible parties. In regions exceeding the benchmarks for total discharge of the major water pollutants, organs responsible for environmental protection will for the time being suspend the issue of environmental impact documentation for new projects affecting the total discharge of the major water pollutants. The revision also adds third-party liability for damages resulting from water pollution and imposes, in addition to penalties on entire operations causing water pollution incidents, fines of up to 50% of their annual income on individuals directly responsible and in positions of oversight. This specification of severe punishment for the illegal discharge of water pollutants is expected to curb illegal activity.

Source: Division of Environmental Management and Policy, Tsinghua University

4. Implementing the Roadmap for an Environmental Economic Policy

The State Environmental Protection Administration (SEPA), which was upgraded to ministerial status in March, initiated work in May 2007 together with other interested bodies on studies and trial models in state environmental economic policy with the objective of constructing an environmental economic policy system that favours environmental protection, including environmental taxes, green loans, green insurance, regional ecology compensation, green capital markets and emissions trading.

Policies implemented since 2008 are as follows. (1) Green insurance (procedural and safeguard mechanism effective subsequent to pollution incidents): On 18 February SEPA

and the China Insurance Regulatory Commission jointly announced a "guidance opinion on environmental pollution liability insurance" that will form the basis for the two bodies to introduce a trial model for hazardous chemical producers, petrochemical firms, hazardous waste processors, and particularly firms and industries that have caused serious incidents in recent years. (2) Green securities (framework for operation of green capital markets): On 25 February SEPA announced a "guidance opinion on strengthening supervision and control of environmental action in listed companies". Green securities policies implemented in conjunction with the China Securities Regulatory Commission include regulations on market equity investments, regulations on flow-through of inheritance funds, and an inspection and supervisory control regime with powers including punitive delisting. Scrutiny of the environmental action of listed companies and their disclosure of environmental information are central to curbing the excessive expansion of industries that feature both high energy consumption and high levels of pollution -- the "two highs" -- promoting sustained environmental action by listed companies and hindering risk in capital markets. At the same time, SEPA will deliver assessments of the environmental performance of relatively mature listed companies and publish corporate rankings and an environmental performance index of the Chinese securities markets. This will heighten public interest in environmental action by listed companies and promote improved corporate environmental performance. (3) Green commerce and export-import controls on environmentally unfriendly products: On 26 February SEPA published a "2008 first high-pollution, high-environmental risk product listing" covering six industrial sectors and 141 product classes. SEPA proposed that the Finance Ministry and State Administration of Taxation cancel export cargo tax refunds and exemptions for 39 classes such as agricultural chemicals, paints, dry cells and organoarsenics now eligible for them and recommended that the Commerce Ministry and China Customs ban trade in products that include them. The 141 listed products include 16 characterised by high pollution, 63 by high environmental risk and 62 by both high pollution and high environmental risk.

Source: Division of Environmental Management and Policy, Tsinghua University

5. Buoyant Investment in Environmental Sector

The increasingly dire issue of environmental pollution in China, implementation of environmental and economic policies by the government, and active market and capital investments are among the factors that have drawn the attention of domestic and foreign investors to the Chinese environmental sector and positioned it as a promising emerging market.

Working jointly with the China Environmental Investment Website (www.enviroinvest.com.cn) and the International Finance Corporation's China Project Development Facility, in January 2008 the Tsinghua University Department of Environmental Science and Engineering held the 1st International Forum on China Environmental Investment in Beijing. Two hundred participants from SEPA, the Finance Ministry, local governments, the international financial system, investment institutions, environmental sector firms, securities firms, research organisations and the mass media conducted an exchange of opinions on the main theme of investment and financing in the Chinese environmental protection sector. Many venture capital firms are drawn to the

environmental and energy sectors, and business sentiment is bullish in such fields as environmental technologies, installation and operation of environmental infrastructure and equipment, energy conservation technologies and development of new energy sources.

Source: China Environmental Investment Website
(www.enviroinvest.com.cn)

Fiji

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1. Inland, Foreshore and Ocean Water Pollution

Fiji's coast line is vast and heavily populated by villages and major urban centers. This has led to the coastline being used as a major area for marine food harvesting, recreation as well as being a major industrial activity area. All these have combined to seriously deteriorate the water quality of both the inland water bodies and foreshore and ocean waters. The major causes of this has been the usage of the water bodies as a free dumping grounds for all sorts of wastes from domestic, commercial, and industrial wastes. In February, it was reported that factories were dumping industrial waste a feeder drain to the Laucala Bay area. (source: Fiji Times, 21 February 2008) and in May, an oil spill along the Nasase seawall was found to be emanating from a culvert linked to Government House. (Fiji Times, 11 April)

Recent implementation of legislation has done little to curb all these practices as policing and implementation of these legislations are not that affective.

2. Solid Waste Disposal

In February, it was reported a delay in rehabilitating dump works would further deteriorate the coastal area and its surrounding environmental status. (source: Fiji Times 19 February). The populace is largely uneducated in the manner in which they dispose of domestic and industrial solid waste and it is common sight to find litter and rubbish strewn along the roads and the foreshores. The municipal and national authorities are themselves not geared adequately address these issues and the NGOs to date have been rendered ineffective in disseminating information in regards to environmentally safe modes of solid waste disposal.

Plate 1: Extent of litter in the Suva foreshore area (The Fiji Times – 4 June 2008)

3. Deforestation

Deforestation is one of the most serious and widespread environmental problems in Fiji. This process includes clearing of rest lands for shifting cultivation, permanent agriculture or settlements, including roads and construction.

In a report by the Fiji Times on 6 June, the Department of Environment Director Epeli Nasome commented “Once a number of trees are removed, this will surely result in some soil erosion and the consequential siltation of nearby natural waterways. Some causes of deforestation include uncontrolled logging practices, encroachment of development into rural and forested areas and infrastructural developments.

"Fiji has a National Biodiversity Strategy and Action Plan (NBSAP). This plan has developed an inventory of natural resources and has also identified areas that should be conserved for various reasons. Under the Environment Management Act 2005, all new development proposals are required to undertake environment impact

assessments (EIA) to ensure the proposed development has minimum adverse impacts on the natural environment."

Mr Nasome said there was also a national code of logging practices of the Forestry Department that provided guidelines for proper logging activities.

4. Depletion of Coastal and Marine Resources

This is due to the reclamation of land near coastal areas for development. This is one major issue that Fiji is facing right now since developments along coastal areas are growing at an alarming rate. The construction of hotels and buildings leads to the removal of mangroves and others plants that provide protection to the coast and foreshores from erosion. On 10 March, the Fiji Times reported that increasing coastal pollution and rapid development without any environmental impact assessment and over-exploitation of resources are threatening coral reefs and coastal habitat.

The discharge of sediments to the environment through excavation and civil construction works and land and the draining of wet land for land reclamation; sitting of resorts, hotels and marinas for purposes of tourism and recreation; and buildings of coastline industrial installations and harbors for marine transportation and commercial operations destroy many hectares of natural habitat and all pose a serious environmental concern.

In addition, in a report on sea mineral extraction in the Fiji Sun on 4 September, it was stated that the huge demand for sea minerals would affect the coastal environment and its ecosystem.

5. Climate Change

This phenomenon is causing world-wide weather pattern change and most vulnerable are island nations such as Fiji. Most of the Fiji is inhabited along the coastline area and a number of urban centers and developments are through coastal land reclamation. Rising sea levels due to climate change will also render arable land to be unsuitable for agriculture, affecting the subsistence nature of Fiji's agricultural sector and food security.

On 15 November, the Fiji Times reported that the water level at the Monosavu Hydro Dam was dangerously low due to lack of rain. In October, the Monasavu dam area only received 400 millilitres of rain but the outflow of water to generate electricity on a daily basis is 1.5 metres.

6. Wastewater Disposal

Fiji's wastewater disposal is an area of concern and one of most important contributing factors to waterways and foreshore pollution. Firstly, the wastewater or sewer infrastructure is not adequate for the current population. Secondly, the methods

of sewer disposal used by the coastline villages and squatter settlement areas are not environmentally conducive. More than half the population uses the septic wastewater system which is highly undesirable given the terrained topography, undulating landforms, unsuitability of soil media and highly variable rainfall patterns.

The inadequacy of centralised wastewater collection and treatment infrastructure and system poses its own share of concerns. The frequency of burst sewer mains due to inadequate maintenance and care is causing water pollution, fish deaths through eutrophication and is also a public health issue. The treatment plants also release untreated effluents to the foreshore areas during heavy rainfall events due to inadequate treatment capacity and overloading of the plants.

Plate 2: Overflowing Sewage in front of Fiji Ports Corporation Limited head office at the Kings Wharf in Suva. (The Fiji Times – 16 October, 2008).

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India

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1. National Action Plan on Climate Change with Eight National Missions

India is faced with the challenge of sustaining its rapid economic growth while dealing with the global threat of climate change. This threat emanates from accumulated GHG emissions in the atmosphere, anthropogenically generated through long term and intensive industrial growth and high consumption lifestyles in developed countries. While engaged with the international community to collectively and cooperatively deal with this threat, India needs a national strategy to firstly, adapt to climate change and secondly, to further enhance the ecological sustainability of India's development path. This path is based on its unique resource endowments, the over-riding priority of economic and social development and poverty eradication, and its adherence to its civilizational legacy that places a high value on the environment and the maintenance of ecological balance.

The NAPCC identifies measures that promote our development objectives while also yielding co-benefits for addressing climate change effectively. It outlines a number of steps to simultaneously advance India's development and climate change related objectives of adaptation and mitigation.

In dealing with the challenge of climate change India must act on several fronts in a focussed manner simultaneously. The National Action Plan hinges on the development and use of new technologies. The appropriate institutional mechanisms suited for effective delivery of each individual Mission's objectives and include public private partnerships and civil society action. The focus will be on promoting understanding of climate change, adaptation and mitigation, energy efficiency and natural resource conservation.

There are eight National Missions which form the core of the National Action Plan. These are:

i. Solar
ii. Enhanced Energy efficiency
iii. Sustainable Habitat
iv. Water
v. Sustaining the Himalayas
vi. Green India
vii. Sustainable agriculture
viii. Strategic knowledge for Climate Change

a. National Missions on Solar and Energy Efficiency

The Mission on Solar will be launched to significantly increase the share of solar energy in the total energy mix while recognising the need to expand the scope of other renewable and non-fossil options such as nuclear energy, wind energy and biomass. The Mission on Energy Efficiency is based on the energy Conservation Act of 2001 which provides a legal mandate for the implementation of the energy efficiency measures.

b. National Mission on Sustainable Habitat

The Sustainable Habitat Mission will be launched too make habitat sustainable through improvements in energy efficiency in buildings, management of solid waste and modal shift to public transport. The Mission will promote energy efficiency as an integral component of urban planning and urban renewal through various initiatives. Capacity building would be an important component of the Mission.

c. National Missions on Water, Forestry, Sustainable Agriculture and Himalayan Ecosystem

The Mission on Water will be mounted to ensure integrated water resource management helping to conserve water, minimize wastage and ensure more equitable distribution both across and within states.

The Mission for sustaining the Himalayan Ecosystem will be launched to evolve management measures for sustaining and safeguarding the Himalayan glaciers and mountain ecosystem.

The Mission for a Green India will be launched to enhance ecosystem services including carbon sinks. The Prime Minister has already announced a Green India Campaign for the afforestation of 6 million hectares. The national target of area under forest and tree cover is 33% while the current area under forests is 23%.

The Mission of Sustainable Agriculture would develop strategies to make Indian agriculture more resilient to climate change. It would identify and develop new varieties of crops and especially thermal resistant crops and alternative cropping patterns, capable of withstanding extremes of weather, long dry spells, flooding and variable moisture availability.

d. National Mission on Strategic Knowledge for Climate Change

To enlist the global community in research and technology development and collaboration through mechanisms including open source platforms. The mission will be set up to identify the challenges of as well as responses to Climate Change. It would ensure funding of high quality and focused research into various aspects of climate change.

Source: Website of Prime Minister. Government of India (http://pmindia.nic.in/)

2. India's Nuclear Deal for Energy Security

The Government of India signed the Nuclear Deal with the Government of United States in recognition of the significance of nuclear energy for meeting growing global energy demands in the country with a cleaner and more efficient manner; and for establishing legal framework for using nuclear energy for peaceful purposes in order to achieve energy security for the country. This deal will enable India to have civil nuclear energy cooperation with U.S.A covering all aspects of the associated nuclear fuel cycle. The deal affirms that India will support the objectives of the International Atomic Energy Agency (IAEA) and its safeguards system and its importance in ensuring that international cooperation in development and use of nuclear energy for peaceful purposes is carried out under arrangements that will not contribute to the proliferation of nuclear weapons or other nuclear explosive devices. India's Nuclear Deal has commitment towards the physical protection of nuclear material as well as the environment. This Agreement shall remain in force for a period of 40 years and shall continue in force thereafter for additional periods of 10 years each.

Source: Website of Prime Minister. Government of India (http://pmindia.nic.in/)

3. Climate Change and Biodiversity: Rhododendrons of the Eastern Himalayas

Impacts of climate change in plants are now becoming more visible and evidence and scientific evidences are accumulating. It is extremely difficult to capture the signatures of the impact of climate change on plants in the face of other threats and pressures and often absence of baseline information exacerbates the problem. The Rhododendron conservation project of Biodiversity and Conservation Programme of Winrock International India is an opportunity. With support from Department of Science and Technology, Government of India a Community arboretum is being set up in Western Arunachal Pradesh in the community owned forests of the Mompa tribal community. While an arboretum at around 9000 ft. will be set up initially, a network of arboretums have been envisaged at different altitudinal gradients to represent the entire diversity of Rhododendrons of Eastern Himalaya.

The arboretums under the initiative would serve as sample plots to initiate studies on climate change impacts on Rhododendrons and Himalayan forest. Since the phonological responses provide one of the best biological indicators of climate change, Rhododendrons, with their distribution in the temperate forests along an

altitudinal gradient would be an ideal species to explore. The historical records of descriptions and field notes made by the collectors in the past can provide vital clues to shifts in phonological patterns in the Rhododendrons. The traditional knowledge and information that rests with the Mompa and Sherdukpen community, the major tribal groups inhabiting the region will be of extreme value and serve as important climate witness.

To supplement evidences from historical records and traditional knowledge the information available on the climate data from the local weather stations on rainfall, temperature and snowfall data tests.
The DST supported project on setting up of a Rhododendron arboretum was initiated in November 2008. The project has received SPOT satellite imageries from Action Planet for preparing distribution maps of Rhododendrons, Field work will be undertaken during February – May 2009 when the Rhododendrons are in bloom in Eastern Himalaya.

Source: A report paper on: Biodiversity and Conservation: Sudipto Chatterjee, Winrock International India. (sudipto@winrockindia.org)

Indonesia

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1. Police Busted the Largest Illegal Pangolin Trade Operation

At the end of July officers from the Indonesian National Police Criminal Investigation Bureau and Ministry of Forestry uncovered 13.8 tons of Malayan Pangolins *Manis javanica*, packed frozen ready for export and led to the arrest of 14 suspects. This is the largest seizure of pangolins ever in Indonesia.

Pangolins (or scaly anteaters) are fully protected by Indonesian law, and are banned from international trade under CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora). Smuggling pangolin is in violation of Law 50/1990 on Natural Resource and Ecosystem Conservation and carries a maximum sentence of five years and an IDR (Indonesian Rupiah) 100 million fine (1 USD approximately equal to IDR 10,000).

Pangolins are illegally traded for almost all parts of the body. After being clubbed to death, the pangolins are simmered in hot water to separate the scales from the hide. Dead pangolins are cleaned, weighed, packed and kept in cold storage ready for consignment. Only their intestines are discarded. The meat and organs are sold for consumption, while the hides are turned into wallets and handbags. The coveted scales are used as ingredients in traditional medicine and cosmetics.

Frozen pangolin meat is usually exported to restaurants in China, Taiwan or Hong Kong, transiting through Malaysia or Viet Nam. The price of pangolin meat on the local market can fetch up to IDR 250,000/kg and in the international market USD112/kg. The price of the meat served in restaurants can double up to USD210/kg. The pangolins scales will also sell for USD 1 for each scale or USD 400 per kilogramme. With that large amount of money, it is understandable that the illegal trade of wildlife has become an appealing business.

Officers from the police forces and Ministry of Forestry confiscated the meat, hides and scales of the pangolin. The confiscated specimens represents an estimated loss of IDR 25.4 billion (USD 2.5 million) for the nation.

PHOTO x 2

Frozen pangolins seized during the raid.
Photos: Indonesian National Police – Ministry of Forestry

Source: The Jakarta Post – 30 August 2008; TRAFFIC Southeast Asia

2. Lost Deer Species Re-discovered

The Sumatran Muntjac *Muntiacus montanus*, a 'lost' species of deer, has been rediscovered by Fauna & Flora International (FFI) and the Kerinci-Seblat National Park Tiger Protection Unit when they rescued it from a hunter's snare on an anti-poaching patrol in the remote mountains of Kerinci-Seblat National Park in the western Sumatra, nearly a century after its last positive sighting. The Sumatran muntjac was originally discovered in 1914 but had not been seen since 1930.

FFI Kerinci-Seblat Programme Manager, Debbie Martyr, managed to take photographic proof of the rescued deer, the first ever photographs of a live specimen. Two more individuals were subsequently photographed, using automatic infra-red ‘'camera traps" at a different location in the park.

The 'lost muntjac of Sumatra' has now been placed on the International Union for Conservation of Nature (IUCN) ‘Red List' of species in danger, under the category ‘data deficient'. The Sumatran muntjac's forest habitat is seriously threatened by slash-and-burn farming as well as illegal road building. In addition, poachers often set up snares to capture wildlife.

FFI will start to work with the Indonesian Institute of Science and the Ministry of Forestry to develop and launch an urgent field research programme to establish the deer's range, ecology and the status of the population. It is hoped that local governments around Kerinci-Seblat National Park will also work with the National Park to secure the future of Indonesia's newest large mammal.

PHOTO x 1

A Sumatran Muntjac was rescued from a hunter’s snare
Photo: FFI - Indonesia

Source: Wildlife Extra, 10 October 2008

3. The Fifth IOSEA Meeting in Bali

Indonesia hosted the Fifth Annual Meeting of the Indian Ocean South East Asian (IOSEA) Marine Turtle Memorandum of Understanding (MoU). The meeting was held in Sanur, Bali on 20-23 August 2008, and attended by 28 IOSEA MoU's signatory states. IOSEA Marine Turtle MoU is an intergovernmental agreement that aims to protect, conserve, replenish and recover marine turtles and their habitats of the Indian Ocean and South-East Asian region, working in partnership with other relevant actors and organisations.

Sea turtles are endangered species, protected by Indonesian law. The law protects six species of sea turtles: the Hawksbill Turtle (*Eretmochelys imbricata*), Olive Ridley Turtle (*Lepidochelys olivacea*), Leatherback Turtle (*Dermochelys coriacea*), Green Sea Turtle (*Chelonia mydas*), Loggerhead Turtle (*Carretta carretta*) and the Flatback Sea Turtle (*Natator depressus*). It is estimated that more than 7,700 marine turtles in Indonesia are hooked or trapped in the trawls every year. Those turtles are accidentally caught as by-catch of tuna long-line fleets and shrimp trawls.

In terms of sustainable fisheries, Indonesia has signed as full member of Regional Fisheries Management Organisations (RFMO) including the Indian Ocean Tuna Commission (IOTC) and the Convention on Conservation of Southern Bluefin Tuna (CCSBT). Moreover, it has been also in the process to sign as full member of Western and Central Pacific Fisheries Commission (WCPFC).

The meeting emphasised the importance of state role in minimising interaction of marine turtles and fisheries. Considering the character of marine turtle as migratory species, it was also reiterated that its habitat protection needs to be conducted simultaneously by many countries, through the protection of nesting sites or reduction of fisheries impact to marine turtle mortality rate.

The meeting concluded that the member countries must emphasise the need to tighten cooperation amongst themselves. The network is essential in promoting the use of Turtles Excluder Device (TED) and circle hook in fishing to reduce sea turtle deaths caused by conventional fishing techniques.

PHOTO x 1

The IOSEA meeting, attended by the representatives of the IOSEA MoU's signatory states
Photo by Ani Mardiastuti

Source of info: http://www.ioseaturtles.org/, WWF Indonesia at http://www.wwf.or.id, The Jakarta Post – 27 August 2008

4. Harapan Rainforest was Visited by Prince of Wales

HRH The Prince of Wales on 2 November 2008 visited one of the world's most innovative rainforest conservation projects as part of his Far East tour. The visit shows Princes Charles' commitment to saving the rainforest. Prince Charles also praised the rich biodiversity of the Jambi forest.

The Prince witnessed how logged rainforest on the Indonesian island of Sumatra is being protected and restored by Consortium of BirdLife International, Burung Indonesia (BirdLife in Indonesia), and the RSPB (BirdLife in the UK). The three organisations are working together to regenerate this area of rainforest, a 101,170 hectare site on an island on which most forests have been lost to oil palm or timber plantations. They decided to name this forest, "Harapan", which is Indonesian for "hope".

The Harapan Rainforest Project has been named as the world's first forest restoration. It covers 101,000 hectares of low-lying forest in South Sumatra and Jambi provinces. More than half the area has been degraded during the past 30 years. The Ministry of Forestry has granted the Consortium a concession certificate for the forest restoration for one hundred years in April this year, thus prohibiting developers from cutting down the forest's remaining trees.

Indonesia has a huge potential for rainforest protection and this trail-blazing project will show how precious sites like Harapan Rainforest can be retained for wildlife, for the people whose livelihoods depend on rainforests, and how they can be used to cut the world's greenhouse gas emissions. This means carbon stores can be left intact, flooding reduced and unique wildlife safeguarded. The elusive Sumatran Tiger *Panthera tigris sumatrae*, Sumatran Elephants *Elephas maximus sumatrae*, spectacular hornbills and almost 300 other species of bird are among species that the Harapan Rainforest now protects.

The Consortium would trade carbon credits from the forest to finance the project and they have been exploring the possibility of adopting the Reducing Emissions from Deforestation and Forest Degradation (REDD) mechanism, an alternative emissions cutting scheme adopted at the Bali Climate Change Conference last year. The forest is estimated to absorb up to five million tons of carbon per year.

PHOTO x 2

Prince Charles admiring the diversity of the forest (left) and planting a tree (right)
Photo by BirdLife Indonesia

Source: http://www.rspb.org.uk/sumatra, The Jakarta Post - 2 November 2008, The Telegraph – 26 October 2008 at http://www.telegraph.co.uk/earth/main.jhtml?xml=/earth/2008/10/26/sm_rspbsumatra.xml

5. Translocation and Release of Tigers

On 22 July 2008, the Ministry of Forestry of Indonesia released two Sumatran Tigers *Panthera tigris sumatrae*, called 'Agam' and 'Pangeran', in Bukit Barisan Selatan National Park in Lampung, Sumatra. The release of the tigers finally took place after a long process. About a month before, on 27 June, the Ministry of Forestry, in collaboration with Safari Park Indonesia, PT Kreasi Adhiniaga (a private company), and many other conservationists, airlifted five tigers from Aceh (in northern Sumatra) to the Bukit Barisan Selatan National Park in Lampung (in southern Sumatra). This translocation and release event was recorded as the second in the world, and the first for insular habitat.

The tigers were released after one month of medical checkups and other health treatments at Tambling (Tampang and Belimbing) Wildlife Nature Conservation. The released tigers had been tagged with Global Positioning System (GPS) devices to track their movements in their new habitat. Three other tigers in the conservation area are still receiving health treatments and awaiting immediate release. The treatment facility was built in 2003 on a 100-hectare plot of land in Belimbing, inside the National Park.

It is estimated there are only between 350 and 400 Sumatran Tigers across Sumatra. The five tigers were caught by residents in South Aceh regency following a conflict of tigers and humans in that area. The rate of tiger attacks on cattle and humans in Aceh has increased dramatically lately due to depleting forest areas due to the expansion of farmland. The Bukit Barisan Selatan was selected as the release area for its excellent habitat and abundant prey supply.

In addition to the decreasing forest habitat, the critically endangered species can still be found in the network of illegal wildlife trade. The tigers are the target of animal collectors, and also suppliers for traditional medicines. The demands for the tiger parts have also increased. The body parts, from its moustache to its claws, are believed to have many superstitious uses. To ensure the survival of this species, the Indonesian government has placed the Sumatran Tiger on the species priority for conservation action.

PHOTO x 2

The tiger was unloaded from the airplane (left). The release of the tiger (right).
Photos: Ani Mardiastuti

Source: The Jakarta Post – 24 July 2008, The Jakarta Post – 6 August 2008

Japan

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1. Global Warming Issue and the G8 Hokkaido Toyako Summit

This year, public concern on global warming has grown rapidly in Japan. From the beginning of this year, many areas of the media have featured this issue in the form of special programmes, which resulted in raising awareness. Japan is set to decrease greenhouse gas (GHG) emissions to meet its commitments under the Kyoto Protocol. In parallel, the post Kyoto Protocol negotiation has already started. The issue of global warming was one of main agenda for the G8 Hokkaido Toyako Summit held in Japan on June, 2008. G8 Leaders agreed to seek to share and adopt the long-term goal of achieving at least 50% reduction of global GHG emissions by 2050 with all Parties to the Framework Convention on Climate Change. In spite of no consensus on the mid-term goal, the government of Japan actively suggested the so-called “sectoral approach” as a tool for achieving national emission objectives and for reducing GHG emissions. By the end of 2009, all countries, including both developed and developing countries, have to make a consensus on the mid-term goal.

Detailed information on the outcomes of the G8 Hokkaido Toyako Summit is available at: http://www.g8summit.go.jp/eng/index.html

Toyako, Hokkaido, Japan

2. Crisis in Recycling System

Since the late 1990s, in order to establish a sound material-cycle society, the government of Japan has developed a recycling system for containers/packaging, home appliances, food, construction material, vehicles, and so on. Within a decade, Japan’s recycling system is said to face a crisis because of the following two significant problems. One is the so-called “falsification of eco-labelling” scandal, in which major

Japanese paper companies falsified the label of content percentages of used paper in recycling paper. This scandal undermines the credibility of all eco-labelling initiatives. The other one is, under the conditions of world-wide material shortage and rapid economic growth in neighboring countries, the amount of outward flow of recyclable resources such as plastic bottles has sharply increased in Japan. This worsened business conditions for domestic recycling companies in Japan. From an international standpoint, Japan may have to reconsider its recycling system.

3. Controversy over Domestic Emission Trading System

In order to meet the commitments under the Kyoto Protocol, Japan shall strengthen domestic policy measures against global warming immediately. In this regard, whether domestic emission trading system for greenhouse gas (GHG) will be introduced or not is now at the center of a controversy. While both the Ministry of the Environment and many environmental experts, referring to existing cases in Europe and the United States, strongly suggested starting a domestic emission trading system, industries are negative about it due to the following reasons. First, corporate voluntary initiatives against global warming, such as the Keidanren's Voluntary Environmental Action Plan, have achieved satisfactory results. Secondly, setting a cap on GHG emissions will lead to an excess control of industrial activities. Thirdly, introducing a domestic emissions trading system will promote the shifting of industrial activity overseas. In June 2008, the Council on the Global Warming Issue suggested to the Prime Minster to continue discussion and examination of a domestic emission trading system that suits Japan through trial implementation. The government of Japan then officially decided to introduce a domestic emissions trading system on a trial basis.

Proposal of the Council on the Global Warming Issue is available at:
http://www.kantei.go.jp/foreign/hukudaphoto/2008/06/16proposal.pdf

4. Tourism and the Environment

The Act on Promotion of Ecotourism came into effect in April 2008. The Act is intended to simultaneously accomplish three objectives, namely, conserving natural environment, vitalising tourism, and advancing environmental education through ecotourism. Tourism has great potential for promoting local economic development, because it is one of the key businesses in local communities. As in the case of the Iwami Ginzan Silver Mine, many local authorities in Japan hope to inscribe their own local cultural and natural heritage as a World Heritage site in order to increase the number of tourists. The government of Japan is working to enhance tourism-related measures, towards the

ultimate goal of creating a “tourism nation”. For that purpose, the Tourism Agency was inaugurated in October 2008. One of the main missions for the Tourism Agency is to make use of the rich natural environment in local communities as a resource for tourism. This brought about concerns over the issue of “tourism and the environment” towards sustainable society.

Tourism Nation Promotion Basic Plan is available at:
http://www.mlit.go.jp/kankocho/en/

5. Basic Law for Biological Diversity

The objectives of the Basic Law for Biological Diversity, enacted in May 2008, are to provide basic principles for the conservation of biological diversity and the sustainable use of its components. The Basic Law reflects proposals by many nature conservation groups in Japan. The Basic Law also establishes a domestic legal basis for the National Biological Diversity Strategies under the Convention on Biological Diversity (CBD). As the most distinctive feature, the Basic Law requires the government to take necessary measures to ensure that, at the early stage of project planning, corporations conduct environmental impact assessment of any project with an adverse effects on biological diversity. This is based on the concept of so-called “Strategic Environmental Assessment (SEA)”. The Tenth meeting of the Conference of the Parties (COP 10) to the CBD is scheduled to be held in Nagoya, Japan in 2010. Public awareness of biological diversity is expected to be heightened before COP 10.

Republic of Korea

So Won Yoon

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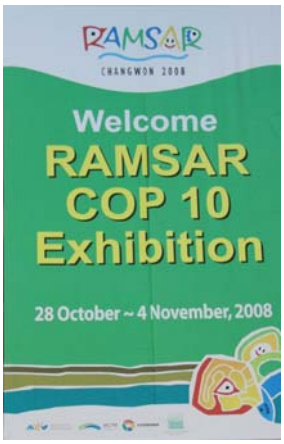
1. Ramsar COP10 in Korea: A Great Leap Forward in Global Wetland Conservation



Ramsar COP10 was successfully held in Changwon, Republic of Korea from 28 October to 4 November. It is estimated that 2,288 people from 140 countries including the representatives of governments and NGOs participated in the plenary session and other events of Ramsar COP10. About 2,890 people attended 53 side events and 19 academic symposiums, nearly 454,000 took part in various cultural events, exhibitions, and wetland excursions, and a total of 2,339 contributed to a carbon offset fund designed to make COP10 eco-friendly. Ramsar COP10 adopted 32 resolutions on the legal status of the Ramsar Convention, budget, biodiversity in rice paddies as wetland systems, and others. The Changwon Declaration, drafted by the Republic of Korea and finalised by an expert meeting, is considered as one of COP10's greatest achievements. It is an outward-looking and action-oriented declaration which calls for the recognition of wetlands as "natural water infrastructure" and the inclusion of wetland conservation in climate change response strategy, national policy, and measures to improve the quality of life. What makes Ramsar COP more important is that it raises public awareness on environmental protection, including wetland conservation and sends across the world the message that healthy wetlands are closely related to human health, and that the meeting attended to various opinions from the international community and reflected them into the resolutions. The Republic of Korea's successful holding of COP10 is expected to contribute its efforts to host the IUCN World Conservation Congress and Rio + 20 conference in 2012.

2. "CleanSYS" Businesses will be Exempted from Basic Emission Charge

Starting from 2009, the Ministry of Environment will exempt businesses equipped with "CleanSYS" from paying basic air pollutant emission charge. CleanSYS is a system to monitor air pollutant emissions from businesses 24 hours a day. It automatically measures the

concentration of air pollutants from the smokestacks of factories. CleanSYS is linked online to the main computer of a control center which is operated by Environmental Management Corporation. The idea is to provide incentives to CleanSYS businesses because they can effectively prevent environmental pollution thanks to real-time monitoring of pollutant emissions. Such real-time monitoring enables those businesses to swiftly tackle disruptions to the production process. In 2007, air pollutant emission charges paid by CleanSYS businesses totalled KRW 4.1 billion (KRW 3.1 billion in basic emission charges, and KRW 1 billion in excess charges), which accounted for 36% of emission charges on total businesses (= KRW 11.5 billion: KRW 6.4 billion in basic emission charges, and KRW 5.1 billion in excess charges).

3. Fuel Quality Standards, Contribute to Reduction of Air Pollution

The Ministry of Environment carried out analysis and evaluation of vehicle fuels, in particular gasoline (6 categories) and diesel (4 categories), sold in Seoul metropolitan area during the second half of 2007. According to the result, for gasoline, all oil companies received a 4-star and diesel received 5-star, the highest of international standards. Thus, there was no difference in the total grades of oil companies. However, in case of gasoline, some categories - olefin and vapor tension – satisfied domestic standards, but not the highest international standards, requiring further improvement. Sulfur, benzene and aromatic compounds received 4 or 5-star grade, the highest international standards. Since the fuel quality standard system was introduced for vehicle fuels (gasoline and diesel) provided to Seoul metropolitan area, the quality of vehicle fuels has been improved, with a yearly reduction of 330 tons of sulfur oxides which influence the generation of fine particles. The Ministry of Environment revealed that it planned to carry out a precise analysis on the reduction of air pollutants following the operation of fuel quality standards system and to seek for measures to improve fuel quality in collaboration with related industries.

4. Republic of Korea’s Challenge for “Green Growth”

The Republic of Korea has announced a long-term strategy that will determine the direction of its national energy policy until 2030. The government mapped out the plan on the basis of the 3Es—Energy Security, Economic Efficiency and Environmental Protection.

The country will reach its long-term energy goals by taking the following steps. First, for improving energy efficiency and reducing energy consumption, the government will allow

more market mechanisms to determine energy prices, and will promote high energy conservation standards. By 2030 the Republic of Korea will have moved toward a service-based economy, as opposed to one based on manufacturing which consumes large amounts of energy. Secondly, to increase the supply of clean energy and reduce the use of fossil fuels, renewable energy sources and nuclear power will account for 11 percent and 27.8 percent, respectively, of the energy mix by 2030. This represents a sizable increase from the current levels of 2.4 percent for renewable energy and 14.9 percent for nuclear power. Thirdly, in order to boost the green energy industry, the components of the green energy industry are clean fossil fuel technologies, improved energy efficiency, and the use of energy sources that produce zero greenhouse gas emissions. To support the development of the green energy industry, the government will invest KRW11.5 trillion (about USD11 billion up to 2030) in research and development into green technologies. Lastly, to ensure that its citizens have access to affordable energy, the government will ensure that all Koreans have an adequate supply of energy to maintain an acceptable standard of living. The plan aims to help low-income households so that they do not spend more than 10 percent of their total income on energy needs. To this end, the government will assist low-income households in obtaining more energy-efficient facilities and appropriate heating and cooling equipment.

Lao PDR

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1. Heavy Flooding of Mekong River in 2008

From 13 to 15 August, residents in Vientiane worked round-the-clock to prevent flooding, because the water levels of Mekong River this year were higher than they were when Vientiane suffered severe flooding in 1996. In that year the river level was just over 12m, according to the director of the Department of Hydrology and Meteorology, who added "At that time, we didn't have preventive measures as good as those that we have today, and the embankment was not up to standard". This year the water levels reached 13.87 m, but the flood danger line in Vientiane is 12.5 m. Many villages in Vientiane were cut off from the rest of the city. The National Committee for Flooding and Drought, along with private and state sectors and international organisations, mobilised assistance for flood danger by raising money for the flood effort. People laid sand bags along the river bank of the Mekong, especially in the Vientiane capital.

Source: Vientiane Times, 18 August 2008

2. Achievement and Challenges of Forest Education

The main forestry education centre is the Faculty of Forestry, National University of Laos. The mandate of the faculty is to produce qualified foresters to meet the needs of the forestry sector of the country and Lao societies in order to manage forest resources sustainably. The current education programmes at the faculty are Forest Management, Watershed and Land use, Forestry Utilization and Forest Policy, Ecotourism and Natural Conservation. These are very important for the promotion of local authorities to develop foresters in order to help local communities to manage their forest resources. The current faculty will open new programmes as well as community forestry and will develop a non-timber forest products curriculum jointly with Vietnamese Xuanmai Forestry University and Cambodia Faculty of Forestry Royal University supported by Asian- EU link project. The course levels studies are: diploma, Bachelor, Master's and in 2010 it is planned to open a PhD course.

In order to develop such education programmes on forestry, the faculty has to overcome many challenges as well as develop infrastructure development, research and teaching materials. Due to lack of government funds to support the activities of development, and a lack of expert staff, the faculty still needs support from various international organisations.

3. Strong Economic Growth for Lao PDR

The Asian Development Bank (ADB) has forecasted that Laos' GDP will grow by at least 7% over the coming years, despite concerns about a rising inflation rate. The major investments are: mining, hydropower projects and expanding tourism sector. These would ensure the country's GDP achieved a growth rate of between 7 to 8 % from now until 2011.

In order to support the government's strategic plan on poverty reduction, it has to use the potential resources of the country especially minerals as well as gold and copper. There have been increased foreign investors carrying out mining projects in Laos. Sepon's gold and copper mine project in Savanakhet province has increased production from 60,000 tonnes of copper to 80,000 tonnes this year. Laos currently has 11 major hydropower plans in operation and at least 36 smaller ones. Together they generate approximately 3.5 billion kilowatt-hours per year, of which about 2.2 billion kilowatt-hours are exported to Thailand.

Due to ever-increasing economic demand, the Government must carry out effective management of the environmental protection for sustainable development even while natural resources exploitation increases.

Source: Vientiane Times, 18 September 2008

4. Land Conflict Problem Solving in Lao PDR

Addressing natural resources and land related conflicts between farmers and investors was the main focus of the National Land Management Authorities. The result of cases studied at training workshops on solving land disputes found that district authorities were granting land concessions to investors when they did not have the authority to make these types of decisions.

National Land Management Authority Head and Minister to the Prime Minister's Office, Mr. Kham-Ouane Boupha, said land conflict occurred because the population and economy were growing, but land had not been allocated to meet growing demand. This contributed to deforestation and negatively impacted the environment.

To address the issue, Mr. Kham-Ouane said it was necessary to educate people about environmental protection, land management and natural resources. To facilitate this work, it was essential to have staff who knew about the cause and solutions of land disputes.

Source: Vientiane Times, 18 August 2008

5. Climate Conditions from 1976 – the Present Day

Looking at the table of climate data recorded by comparing three meteorological stations located in the north (Luangpharbang city) with a latitude of 19"50', middle (Khamuane town) with a latitude of 18" and south (Champasuk town) with a latitude of 14 "50' during the years 1976 – 2006, it can be seen that all three stations showed a variation of the average temperature by more than 1 °C.

Table 1 shows the comparative average temperature at three meteorological stations located on different latitudes from 1976 to 2006.

Table 1

Years	Location of meteorological stations		
	Luangprabang (North)	Vientiane (Middle)	Champasuk (South)
1976	25.1	26.1	26.8
1980	26.2	26.9	27.6
1985	25.6	27.6	27.0
1990	25.6	26.0	27.5
1995	25.6	26.0	27.5
2000	25.5	26.5	27.6
2005	26.0	27.2	27.9
2006	26.2	27.1	27.9

Source: Meteorological and Hydrological Department, Vientiane, Laos

Dong Dok Vientane meteorological station recognised that, despite it usually being the start of the dry season, November 2008 had almost no rainfall, but there was still heavy monsoon rain with rainfall levels reaching 91.8 mm over 4 days from October 30 to November 3.

Kauliewe Village, 12 Aug. 08

Pakgnum Village, 14 Aug. 08

(Photos by author)

Malaysia
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1. Facing up to Climate Change

The year saw an unprecedented wave of climate change-related activities. At its 5th sitting on April 8, the Intergovernmental Co-ordination Group for the Indian Ocean Tsunami Warning and Mitigation System noted the impending upgrading of the National Tsunami Early Warning System, while in the private sector, Malaysia Airlines and its subsidiaries introduced a mechanism, the first in Southeast Asia, aimed at offsetting carbon dioxide emissions into the atmosphere by allowing its customers to make voluntary payments to reduce the carbon footprint of their travel. The proceeds, managed by the Forest Research Institute of Malaysia (FRIM) on behalf of the Natural Resources and Environment Ministry (MONRE), will be worked out by an online carbon calculator and used to fund selected UN-sanctioned programmes protecting rainforests, a natural carbon sink, in Malaysia.

Other related events included a Seminar on 5 June which focused on actions being taken in the run-up to the 14th Conference of Parties (COP 14) in Poznan and COP 15 in Copenhagen, a 23 June Executive Forum on 'Integrity in Environmental Conservation and Climate Change', a Diplomacy Workshop on 'Climate Change Negotiations' and National Conference on 'Extreme Weather and Climate Change' in October. Deliberations on the country's Second National Communication (NC2) to the United Nations Framework on Climate Change (UNFCCC) progressed with two sittings in February and September, respectively, and work on a Draft National Policy on Climate Change began in the form of a multi-stakeholder Consultation Workshop, also in September.

2. Energy Initiatives in tandem with Climate Change

Given the close link between energy usage and global warming, energy was given equal emphasis throughout the year. In February, the Prime Minister launched the Sarawak Corridor of Renewable Energy (SCORE), an extensive development plan to lift the population's standard of living by utilising the state's natural resources. In line with a national drive to conserve energy and to counter rising bills, the Energy, Water and Communications Ministry (MEWC) launched a four-building energy audit that will result in proposals for more energy-efficient government buildings, paving the way for a regulation that will require large energy users to hire energy managers, and the revival of efforts to label products according to their energy efficiency.

At about the same time, MONRE acknowledged future use of "new technology" such as wind turbines, mini-hydros, bio-mass, and jatropha curcas, (a non-edible oil-rich seed processed into bio-diesel) instead of petroleum. In July, recognising that the zeal for energy had resulted in conflict with food production, the Prime Minister called for a halt to widespread conversion of arable land to produce biofuel. In the same month, the Sabah Land Development Board took the lead in cultivating jatropha for biodiesel production. Besides planting about 1,000 ha with jatropha, the Board will also utilise about 6,000ha to grow padi in the Sook region. National carmaker Proton Holdings

Berhad was given the green light by the Cabinet Committee on Inflation to carry out in-depth validation and testing of cars using batteries. The Prime Minister had also earlier launched a hydrofuel that could lower the consumption of petrol or diesel by 50 per cent. Simultaneously, industry executives asked for reduction of taxes on hybrid cars, proposing that government promote the use of hybrid cars within its own agencies and institutions.

The country's Budget 2009, announced at the end of September, was lauded for its energy incentives proposal, ie. to promote greater use of renewable energy and more efficient energy usage, as a result of which, hybrid cars would be more affordable. On 1 September the Selangor state government announced plans to make its industrial site project in Sepang a centre for the solar energy industry, and in mid October, the Science, Technology and Innovations Ministry (MOSTI) revealed its engagement of several studies on hydrogen-powered engines and hydrogen generation. ISIS Malaysia on its part wrapped up a study on an Energy Blueprint for the Energy Commission, while the national planning agency was initiating work on a comprehensive Energy Policy, scheduled for completion in 2009.

3. Sabah at the Forefront of Biodiversity

Frequently in the news was the state of Sabah which represented a microcosm of the country's biodiversity. First highlighted was a tripartite agreement signed in April to rehabilitate parcels of land along the Kinabatangan and Segama rivers in eastern Sabah for freer movement of wildlife, *viz*. the orang utan and the Borneo pygmy elephant. Sabah's carbon sequestration initiatives, i.e. the Innoprise-Face Foundation Rainforest Rehabilitation Project in eastern Sabah and the Sabah Foundation's Reduced Impact Logging project commenced at the same time.

Sabah hosted the inaugural "Malaysian Rainforest Flora and Fauna Festival", and in June was recognised by the Forest Stewardship Council, which extended the certification of the Deramakot Forest Reserve, Malaysia's pioneer sustainable forest management area, as a well-managed forest for a further 15 years. The re-certification, which extends to 20 April 2013 had made Deramakot the longest certified rainforest in the world. In mid-July, a study on the virtually unknown social structure of Bornean elephants began in Kinabatangan with the fitting of satellite collars. The bulk of the study was done by the Elephant Conservation Unit (ECU), founded by the French NGO, Hutan, in 2002, to address the issue of human-elephant conflict. Data collected will assist the Sabah Wildlife Department in managing the Kinabatangan elephant population. Coincidently, not long after, scientists doing research in the Sabah jungles captured images of two adult elephants helping a month-old calf, and, separately, an image of the rare Sumatran rhinoceros.

In August, Sabah's potential to get its first Ramsar site at the 10th session of the Conference of Parties to be held in South Korea, was duly recognised. The Kinabatangan-Segama wetlands will be Malaysia's sixth and largest Ramsar site, its area to include the Trusan Kinabatangan, Kuala Segama-Maruap mangrove forest reserve and the Kulamba wildlife forest reserve. In the same month, an agreement to set up a "conservation bank", the first of its kind outside the US which sells bio-diversity credits (as shares for those keen to invest in conservation) was signed, to

raise funds to protect and conserve the biodiversity-rich 34,000ha Malua Forest Reserves in the east coast of Sabah.

4. Sustainable Water

Water-related issues feature in the news on an almost daily basis and this year's headlines ranged from the down-to-earth flash floods, plant shutdowns and river-water contamination, to managerial aspects such as raising of water tariffs, river-adoption schemes and corporate takeovers of water-supply companies. Recognising the importance of water management and to follow up on the March 2007 Conference on "Managing Challenges towards Sustainable Water Resources and Environment", the Water Association of Selangor, Kuala Lumpur and Putrajaya (SWAn) and ISIS Malaysia co-organised the Asia Pacific Regional Water Conference 2008, on the theme "A Shared Future in Water".

Held from 18 to 19 November, the event was officiated by the Deputy Prime Minister, the Right Honourable Dato' Sri Mohd Najib Tun Abdul Razak, and pooled public, private and NGO stakeholders from Malaysia, Denmark, the UN, Singapore, Germany, Philippines, India, USA and Indonesia to deliberate on paradigm shifts in managing water, impact of climate change on water resources, legislation as key to efficient water resource management, challenges and options in wastewater treatment, leading-edge technologies for sustainable water provision, novel ways of financing water projects, and the outlook for 2009 and beyond. Among the conference highlights deemed as pointers to future direction of the water industry were adaptation and mitigation measures, investment in hard and soft solutions and, to overcome the currently fragmented institutional framework, a proposal to establish and endorse a National Water Policy.

DPM Officiating the 2008 Asia Pacific Regional Water Conference (APRWC)

Left to right - Tan Sri Rozali Ismail, President, SWAn, Datuk Shaziman Abu Mansor, Minister of Energy, Water and Communication, The Right Honourable Dato' Sri Mohd Najib Tun Abdul Razak, Deputy Prime Minister, and Tan Sri Mohamed Jawhar Hassan, Chairman & CEO, ISIS Malaysia

Panel for Special Session on 'Paradigm Shift in Managing Water', APRWC

Left to right - Tan Sri Rozali Ismail, President, SWAn, Prof. Torkil Jonch Clausen, Managing Director, DHI Water Policy, and Tan Sri Mohamed Jawhar Hassan, Chairman & CEO, ISIS Malaysia

Photos by ISIS Malaysia

5. Haze Report

The year turned out to be relatively haze-free despite cautionary predictions in early 2008. This may have been due to natural shifts in wind and rainfall patterns and/or preventive efforts between neighbouring countries. A Sub-Regional Ministerial Steering Committee on Transboundary Haze Pollution was held early April, hosted by MONRE, Malaysia, whereby Environment ministers of Thailand, Singapore, Indonesia, Malaysia and Brunei agreed that member states should be vigilant and undertake concrete actions, particularly on preventive and mitigation efforts. In June, Malaysia and Indonesia signed a haze prevention agreement to teach farmers in Sumatra's Riau province alternative methods to the slash-and-burn land clearing.

The memorandum of understanding was for Malaysia to conduct RM2 million worth of training and capacity building, peatland rehabilitation and installation of a haze early-warning system. Farmers would be taught the "zero-burning" technique (composting) which has been successfully used by Malaysian plantation companies. Air Pollutant Index meter readings were to be sponsored at a cost of RM160,000 to educate farmers on the seriousness of the haze, and dialogues organised. Meanwhile, at home, in early August, the Selangor Department of Environment (DOE) prepared ‘open-burning’ charges against a company deliberately burning peat land along the Elite Highway in Dengkil, causing haze in the Klang Valley. Investigations had shown that burning was started in phases by the company's workers as a quick and easy way to clear land for a honeydew melon and starfruit project.

Mongolia

J.Tsogtbaatar
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1. 160,000 Tons of Toxic Substance Pollutes Air of Ulaanbaatar Annually

Each year, 160,000 tons of toxic substances are released into the air of Ulaanbaatar. It means 317.8 kg of toxic substance falls back on each person. Air pollution is a phenomenon of natural and socio-economic processes. The main polluter of the air is coal. Forty seven million tons of coal is burnt per year, with 600,000 tons of it burnt by households of ger* districts and the rest burnt by power stations. The smoke emitted from coal burning contains small particles of ash. The ash enters our nostrils and mouths and damages our bodies. Scientists believe that each human should inhale 16 kg of fresh air. But nowadays it is impossible in reality. There are 36 kinds of air-borne substances which are toxic and harmful to the human body. For instance, there is carbon-monoxide, sulphur-dioxide, Nitrogen-oxide in the air of Ulaanbaatar. They cause lung cancer, dust-related diseases as well as diseases of the respiratory tract. Last year cases of respiratory tract disease increased so drastically that 36,000 people were affected by this type of diseases and MNT**2.4 billion were spent for their treatment. Half of the population of Mongolia lives in Ulaanbaatar and over 30% of are children under the age of 15. Lately young children have become victims of air-pollution because it weakens children’s immunity and consequently makes them ill. Also experts say that outbreaks of cancers and bacteria-caused diseases have shown a tendency to increase. The key source of air pollution are power stations, smoke of ger districts, vehicles and dust-storms which rise up out of polluted ground soil. Approximately 130,000 households of ger districts which have 50,000 very primitive lavatories, and here the sewage and garbage places pollute the soil of Ulaanbaatar severely. Research shows that the ger districts have 2-8.5 times greater chemical pollution, 10 times greater bacteriological pollution than in house districts. Ulaanbaatar air contains toxic substances such as dioxide, cadmium that cause diseases dangerous to gene and human reproduction as well as bone-loss, brain-fag and cancers. Moreover, there are over 200 toxic substances contamination of which has not been identified.

Source: www.olloo.mn news no. 1135932

* ger- traditional Mongolian living house
** MNT - tugrig- Mongolian currency

2. Integrated Water Management: Model on the Selenge River Basin

The most important tributary of the Lake Baikal is the Selenge River Basin. The Selenge River is a transboundary waterway in northeast Asia that rises in the Khangai mountains in Mongolia and flows into Lake Baikal in Russia which is listed in the UNESCO's world heritage. It accounts for 82% of the watershed area of the Lake Baikal. In Mongolia, the Selenge river has a water catchment of 281,000 km^2 , while the catchment area in Russia is about 134,130 km^2. Most of the Selenge River rests in Mongolia (roughly 65%) and what is left in Russia (about 35%). The river plays an important role mostly because 20% of the total land area of Mongolia is contained by it. Its upstream has been deteriorated due to rapid urbanisation, scarce wastewater treatment systems, and hasty mining developments in Mongolia. Simultaneously, the transition from a planned economy to a market economy, inefficiently operated wastewater treatment systems, and reckless deforestation have increased non-point pollution sources on the lower Selenge river in Russia. Therefore the management of this river has arisen as an important issue in northeast Asia.

However, it is not straightforward to provide its appropriate management, since it is a transboundary waterway which passes between Mongolia and Russia. First, the management system should consider the obstacles of water supply in both countries. Low precipitation and excessive minerals in the water are the foremost cause of severe water shortage in Mongolia. Second, it should appreciate and complement the existing systems of both countries. Existing water management plans are rarely incorporated in both countries, which have fragmented due to the interests of users and providers. Consequently, the Selenge River Basin needs to have a proper Integrated Water Management Model to disentangle the difficulties it is facing.

As an initial step, the Korean Environment Institute (KEI) worked to instate different groups, including the Korean Water Cooperation (K-Water), Institute of Geoecology of Mongolian Academy of Sciences, Baikal Institute for Nature Management of Russian

Academy of Sciences, UNEP-ETB and UNEP/NISD.

View of Selenge River in Transboundary Area

Photo by author

3. Number of Mongolian Takhi Increases

Forty years ago, the world's last species of truly wild horse - the Takhi*, commonly known as Przewalski's horse - could no longer be found in the wild.

Takhi disappeared from the wild due to an increase in human population, which led to habitat competition from people and livestock as well as over-hunting for horsemeat. By 1968, Takhi had become extinct in the wild in Mongolia, and only about 150 individual animals remained in zoos around the world. Over time, the surviving Takhi became increasingly domesticated and inbred. To save the species from what looked like inevitable extinction, the FPPPH (Foundation for the Preservation and Protection of the Przewalski's Horse) and FRPH (Foundation Reserves for the Przewalski's Horse) in the Netherlands came together to select a new habitat for the horses and reintroduce them back into the wild. The criteria for the new habitat included year-round availability of natural water sources, food, shelter, and a well-balanced ecosystem. In 1992, in partnership with the FPPPH, MACNE (Mongolian Association for Conservation of Nature and Environment) and the Mongolian government selected Hustai National Park as the new habitat for the reintroduction of wild Takhi. After two years of acclimatisation in 1994, 16 Takhi were released in the wild for the first time in 26 years to range free on the Mongolia steppe.

Ten years later, the Takhi population had increased to 150; today, that number is nearly 200. Horses have long been symbols of strength and courage in Mongolia, and the return of the Takhi has been a source of national pride. With its abundant wildlife, 450 species of flora and dramatic steppe landscapes, Hustai National Park attracts eco-tourists, volunteers, and researchers from all over the world. The Takhi project has also afforded biologists unprecedented opportunities to study the Takhi in the wild.

Mongolian Takhi

Photo by author

Source: MONTSAME, 2008-11-03

* Takhi- name of wild horse in Mongolia, sometimes named after Przewalski, a Russian scientist

4. Desertification Threatens Mongolia's Traditional Culture

Traditionally, the Gobi Desert is the homeland of nomadic herders who herd domestic animals in wide flatlands with sandy dunes and pasturelands associated with Gobi shrubs. In recent years, wide areas of the Gobi Desert have been affected by extreme desertification and land degradation, resulting in serious changes and negative impacts on the traditional culture and livelihood of the nomads of the region.

Under the old nomadic pasture system, the composition and herding of domestic animals enabled the nomads to achieve optimal results from their livelihood. During

that time, Mongolian herders paid more attention to the production and productivity of domestic animals by using what is called the “migrating rotation system of land use.” Under this procedure, Mongolian herders used four seasonal rotation systems for herding—coinciding with the seasons. The traditional Mongolian herding method, practiced by people for thousands of years, ensures rational use of land resources, but is now slowly being eroded under the impact of desertification and drought.

Mongolia moved from a centrally planned economy to a market economy in the 1990s. The transition period resulted in the dispersal of thousands of herder communities and the privatisation of animals. One of the results of the transition was that the number of animals increased to 33.6 million (in 1998), which led to the overstretching of the carrying capacity of pastureland. In 2002, this decreased to 23.9 million, a decrease of 9.7 million animals.

The results of desertification have increased the number of low-income families. They have also caused a decrease in the number of young herders, as the latter continue to migrate to urban areas to look for alternative work. The traditional relationship between old herders and young generations has been altered. At face value, desertification seems to be a natural and an ecological phenomenon, but, in fact, it is an urgent issue that has social and economic implications, one being the migration of herding populations to urban areas of Mongolia. The country and its people have to face the impending overhaul of its nomadic herding system. The nomadic pastoral lifestyle that proved effective for centuries and an environmentally friendly herding system that suited the requirements of a unique area are facing the danger of extinction. The impacts of climate change and desertification call for a new settlement and pastoral management system that thoughtfully considers the human, geographical, social, cultural, and economic factors.

Source: J.Sang Saeng of UNESCO/APCEIU;

Moving herder

Photo by author

Nepal

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1. Melting Everest Draws Scientific Attention[1]

The impact of climate change has started to become evident in the Himalayas. A study has shown that the average air temperature in Nepal has risen by one degree Celsius since the mid-1970s and elevated areas like *Namche Bazaar* are warming the most. This is, in fact, as high as twice the average warming in the mid-latitudes of the northern hemisphere and shows the prominent impacts of climate change in the mountain regions.

The International Center for Integrated Mountain Development (ICIMOD) in collaboration with the United Nations Environment Programme (UNEP) is conducting studies on the impact of climate change on glaciers and glacier lakes in the Hindukush – Himalayan region. According to the study, the levels of 20 glacier lakes have risen to a risky level. Mr. Samjwal Ratna Bajracharya, Gepmorphologist from ICIMOD says that if the present trend continues, most valley glacier trunks and smaller glaciers will disappear by 2050. Lake Imja Tsho at 5010 meters in the south of Everest is the most affected one. It is retreating at a rate of 74 meters per year now whereas the rate was only 41 meters before 2000.

To draw the world's attention on the rapid melting of the glaciers and to make the local community aware, ICIMOD, Asian Trekking and UNEP have organised expeditions to climb Mount Everest.

Rapid Melting of Glacier Ice in Imja Tsho Lake in the Mt. Everest Region
Source: Mr. Samjwal Ratna Bajracharya, Geomorphologist, ICIMOD

[1] http://www.ekantipur.com/ (May 8,2008) and ICIMOD

2. Carbon Trade Brings Benefits

At a programme organised by the Ministry of Environment, Science and Technology on Clean Development Mechanism (CDM), it was discussed that Nepal will be earning US $ 3.5 million every year[2] from Carbon Trade and contributing to environment friendly development. Nepal had earned US $ 600,000 the previous year from such trading.

The WB had provided the amount as per the agreement reached under the CDM Project for displacing the non-renewable energies such as firewood and kerosene with biogas to some extent. The Community Development Carbon Fund (CDCF) provided the money for the 807 biogas plants in the first project and the next lot is also being paid soon under the second project according to the information provided by the Alternative Energy Promotion Center (AEPC)[3].

Nepal has the potential to establish 1.9 million biogas plants in the country. However, only 195,000 plants have been established so far. Nepal will also be earning lofty amount from such carbon trading from the establishment of small hydro-electric projects with the capacity of 500 to 750 KW until 2011 while generating 15,000 KW. The forests of Nepal have also been selected for the carbon trade and this sector by storing carbon in the green plants could earn around Nepalese Rupees 3-4 billion[4] (equivalent to US $ 37 to 50 million).

[2] http://www.thehimalayantimes.com/fullstory.asp?filename=aNPata0ra2qzpla0Qa5ra.axamal&folder=aNPataiaoanaaal&Name=National&sImageFileName=&dtSiteDate=20080904

[3] http://renewenergy.wordpress.com/2008/06/06/nepal-may-earn-3-mln-by-cutting-carbon-emission/

[4] http://www.nepalmountainnews.com/news.php/2008/08/12/nepal-forests-enlisted-for-carbon-trade-officials-expecting-rs-4b-yearly-income.html

3. Hazardous Waste Inventory Prepared[5]

A survey was conducted to prepare the inventory of hazardous waste in Nepal under the Technical Assistance of ADB. Ministry of Environment, Science and Technology of the Government of Nepal was the implementing agency and PACE Nepal had conducted the study. The study focused on the hazardous wastes generated by manufacturing industries, hospitals and automobile workshops.

According to the report published in July 2008, the generation of hazardous solid and liquid wastes from 12 prioritised sectors of industries in the country has been estimated to be 5,051 M/T and 6,404,872 cubic meters per annum for the fiscal year 2006/07. The prioritised industrial sectors were dry cell battery, pharmaceuticals, foam, soap, iron galvanizing, tannery, paint, textile dyeing, pulp and paper, vegetable oil, pesticides, and wool dyeing.

The biomedical hazardous wastes generated from the health care institutions in the country have been estimated to be 4,195 M/T for the year. The generation of hazardous solid and liquid wastes from the Automobile Workshops has been estimated to be 3,465 M/T and 157,757 m3 per annum for the year. The quantities of such wastes are increasing every year.

Under the project, the preparation of the draft policy for Hazardous Waste Management has begun and guidelines will also be prepared.

Sludge from Auto Workshop
Source: PACE Nepal Pvt. Ltd.

Effluent and Sludge from Soap Industry
Source: PACE Nepal Pvt. Ltd.

[5] Source: MOEST, Report on Hazardous Waste Inventory Survey, Nepal - 2008

Wastes from Tannery
Source: PACE Nepal Pvt. Ltd.

4. Appellate Court Order on Pesticides[6]

The Appellate Court of Nepalgunj ordered the concerned authorities including District Administration Office, Nepalgunj Municipality and Public Health Office for the proper management of stockpiled obsolete pesticides, which are haphazardly stored at various locations within densely populated areas in the mid-western region of the country.

These pesticides have been stored for several years at the godowns (warehouses) of National Seed Company and Cotton Development Committee. It has been found that approximately nine tons of 18 varieties of expired pesticides in powder form are stored at Cooperative Limited and 135 litres of 23 varieties of liquid pesticides are stored in the godowns of Cotton Development Committee and Agricultural Development Branch. Among these, half a dozen of the pesticides have been banned all over the world. These expired pesticides include Aldrin Dust, Agrosan, GN, Ceresan, and DDT.

Global Environmental Fund has expressed an interest to provide technical and financial support for the safe disposal of these pesticides. A five member team lead by the then Parliamentarian Mr. Som Prasad Pandey inspected these godowns and now there is a belief that with the court order and high level visit, the problem of obsolete pesticides will be solved and these obsolete pesticides will be disposed safely.

Stock of Date Expired Pesticides

Source: Hakahaki, a magazine of NEFEJ April 2008 Issue

[6] Source: *Haka-Haki*, a Publication of Nepal Federation of Environment Journalists (in Nepali language) - April/May 2008 issue

New Zealand

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1. Finding Synergistic Conservation Values

Around 15% of New Zealand's (Aotearoa) population is indigenous: the Māori. The other 85%, the Pakeha, find their roots elsewhere. Their co-existence always has been a dynamic one, with lots of issues and history.

In her doctorate, Katie Simon provides a balanced and collaborative approach to the contesting worldviews of indigenous knowledge and Western science, termed 'synergistic', which endeavours to overcome the popular pre-occupation with conflict and opposition. It is argued that furthering the Māori development requires a focus not only on difference and conflict, but also on affinity and convergence.

The primary concern was to establish a better understanding of the synergistic, adaptive strategies or indigenous innovation of Māori "kaitiaki", the environmental stewards. This investigated conflicting and converging Māori and Western scientific conservation and use-values in Aotearoa environmental governance and management regimes under the Resource Management Act 1991. The balance of values were compared in ecological environmental governance, from five Aotearoa governmental authorities and three Māori river communities, utilising Māori and Western social science methods. A focus on indicators pinpointed contesting value change between the marginalisation of indigenous knowledge and dominance of Western science.

The potential synergy of Māori kaitiakitanga, (stewardship in global and national terms of sustainability) is held back by a prevailing viewpoint of the indigenous worldview as backward, past-oriented and non-synergistic. An oppositional dogma predominates, which is a key problem to overcome. It spans world and national literature, resulting in considerable gaps in knowledge on synergy, conceptually, methodologically, empirically and analytically.

Both worldviews were articulated through comparative, evolutionary, multi-dimensional, cross-cultural and inter-disciplinary research on synergy, whereby synergy is correlated between theory and social practice.

Potential synergy cross-cuts from high abstracted thought down and from the practical "flax roots" up. It is argued that Māori advancement fluctuates between them. Drawing on cultural and theoretical leanings of the Māori synergistic standpoint, both a strong correlation with existing theory and expanded synergistic theorising was found.

Due to the expansiveness of the research, these correlated findings only provide an embryonic understanding of potential synergy. A postscript describes other work on synergy with five external agencies concerning foreshore, lakeside, wastewater, land disposal and carbon marketing kaitiakitanga. It is argued that additional research on synergy is needed in order to further advance Māori.

Source: Katie Simon, Finding Synergistic Conservation Values, Ph.D. Thesis, 2008

2. Biosecurity: the Combined Threat from Change in Land Use and Climate

As in other countries, New Zealand is experiencing the effects of changing land use and the resulting pest invasion on native habitats. On top of that, climate change is expected to increase the suitability for several invasive subtropical species into the future. The increased occurrence of extreme events under climate change also offers more frequent opportunities for pest invasions because of the destruction of local vegetation by the event.

A recent study assessed these combined effects on the distribution of the trailing, perennial monocotyledon, *Tradescantia fluminensis* (Vell.). In New Zealand Tradescantia effectively invades disturbed edges of bush and riparian remnants.

Tradescantia ground cover (source, Liza Storey)

The study generated scenarios of climate changes using the CLIMPACTS Open Framework Modelling System and land use changes using GIS and spatial

information on land use/land cover, urban growth projections, stream network and riparian habitat.

The Ecological Niche Factor Analysis (ENFA, http://www2.unil.ch/biomapper) was used to compare the baseline with the scenarios for the year 2050. At the national level climate change increases the suitability for Tradescantia, while at the landscape level, land use change was more important than climate change in the distribution of this species.

This has implications for managing source populations of Tradescantia, with respect to existing and new habitats that are restored in areas that become more suitable for Tradescantia. Integrated assessments are essential to exploring anticipated changes at various scales and can be done for multiple species.

Source: Liza Storey, IGCI

3. New Zealand Hosts World Environment Day 2008

New Zealand, one of the first countries to pledge a carbon-neutral future, was the main host of the 2008 celebration of World Environment Day on June 5. The theme this year, “Kick the Habit! Towards a Low Carbon Economy" was meant to inspire and encourage actions to lower CO_2-emissions, a main contributor to global warming.

World Environment Day was established by the United Nations General Assembly in 1972 to mark the opening of the Stockholm Conference on the Human Environment. World Environment Day is commemorated each year on 5 June in a different city, as one of the vehicles the UN employs to stimulate worldwide awareness of the environment and enhance political attention and action.

Achim Steiner, UN under-secretary general and UNEP executive director, said, "New Zealand is among a pioneer group of countries committed to accelerating a transition to a low carbon and carbon-neutral economy. We are therefore delighted to be holding the main World Environment Day 2008 celebrations in Wellington and in communities across this South Pacific nation. What we need is action to slow, stop and then to reverse the growth of global greenhouse gas emissions. A transition to a low carbon economy is essential to achieving this”.

New Zealand works towards carbon neutrality through a programme that involves a goal of generating 90 percent of its electricity from renewable sources by 2025, and halving the per capita transport emissions by 2040.
To incentivise climate-friendly behaviour an emissions trading scheme is introduced that includes all sectors and all gases, as well as an energy strategy, and tackling climate change at the household, business and research levels. Methane from livestock accounts for about half of New Zealand's greenhouse gas emissions and it is now turning its expertise towards research to reduce agricultural greenhouse gas emissions.

Local communities were undertaking their own environmental activities throughout the country through more than 120 community and school-based events. In Auckland,

school pupils planted trees at Meola Reef Reserve as part of a mass planting initiative. They dressed in green and carried balloons in their walking school bus. An Auckland zookeeper painted portraits of animals from the zoo including a cheetah, a lion, an orangutan, a frog and a rhino to highlight the importance of animal conservation. Horizons Regional Council brought together pupils from around the Wanganui-Manawatu region to debate the social and economic effects of a carbon-neutral world in an inter-school competition.

Source: New Zealand Herald

4. Air New Zealand Flying Green

Air New Zealand is working hard to reduce its carbon emissions by more than 100,000 tons annually and thereby saving NZD43 million a year. So far the flight operations programme has cut 91,000 tons in carbon emissions in just over three years. Initiatives range from reducing weight on aircraft to more accurate fuel loadings so as not to fly with excess fuel weight, optimising flight speeds, better use of ground power when aircraft are at the airport gate and improved descent profiles.

Air NZ also expects to use at least one million barrels of environmentally sustainable fuel annually by 2013. For this, it has planned the world's first flight test on a large passenger aircraft using fuel sourced from the plant jatropha.

Jatropha is a plant that grows up to three meters high and produces seeds that contain inedible oil that can be used to produce fuel. Each seed produces between 30 and 40 percent of its mass in oil and jatropha can be grown in a range of difficult conditions, including arid and non-arable areas.

Jatropha plant and fruits with nuts visible (Source: http://en.wikipedia.org/wiki/Jatropha)

Air NZ aims 10 per cent of its fuel - enough to run the entire domestic fleet - to come from the nut grown in India and Africa within five years.

The jatropha fuel is cheaper than traditional jet fuel, emits less carbon dioxide and is socially responsible - it is grown on land unsuitable for food crops, which had not been forest land for at least 20 years. About NZD1 million a year is spent on this biofuel project which started when oil was about USD80 a barrel.

The Air NZ Boeing 747-400 test flight was expected to take place in Auckland in the last quarter of 2008 subject to final regulatory approvals and fuel testing by the engine manufacturer. It is likely to be a world first. Virgin Atlantic powered a jumbo jet partly using coconut oil in February, but Air NZ's flight will use a biofuel that is a commercially viable option. One of four engines will be filled with oil from jatropha for the Boeing 747-400 flight. It is a race against Dutch airline KLM, which planned a test flight with a biofuel made from algae.

Source: New Zealand Herald

Pakistan

Mushtaq Ahmed Memon
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UNEP-DTIE-IETC

1. Government of Pakistan Appoints New Minister for Environment

The Honourable Hameed Ullah Jan Afridi was appointed as Federal Minister for Environment on 31 March 2008. He worked as a social worker and remained with the National Rural Support Programme (NRSP) for social mobilization and poverty alleviation through community participation in rural areas of Pakistan. He established FATA (Federally Administrated Tribal Areas) Rural Support Programme (FRSP) using NRSP as a pattern, to improve living standards and to provide health and education related facilities to the people of FATA. The purpose of this programme was to create awareness in tribal people with a view to bringing tribal areas up to par with the rest of the country in development projects. He was elected as member to the Senate in February 2003. He was also a member of the Senate Committee on Interior, Commerce, Human Rights and Population Planning. He took part in the general election of 2008, and won a National Assembly seat from NA- 46 as an independent candidate.

Source: Government of Pakistan web site: http://www.pakistan.gov.pk

2. Solid Waste Management in Karachi[i]

Karachi is the biggest city in Pakistan and 13th biggest city of the world with a population of about 12.2 million people. However it is still without an efficient and effective solid waste management system. During early January, the City Government of Karachi signed an agreement with a Chinese company for solid waste management. Officials said about 8,000 tonnes of solid waste was being generated in the metropolis for which the city government would be paying around USD160,000 to the firm daily. The city government would pay USD20 per tonne to the company for lifting and disposal of garbage. However, the city government would share 15 per cent of the total income, to be generated by the company through recycling of the waste. The city government was going to impose a municipal tax across the city through which it would charge PKR25 per month for the lifting of garbage from each house. Sources explained that the revenue to be generated through the municipal tax would help the city government meet the cost to be paid to the Chinese firm. The Chinese firm was also supposed to install a waste energy plant at a later stage to generate 560 megawatts electricity. Unfortunately, so far this project has not yet started.

Source: Daily Dawn 12-Jan-2008 and 15-Aug-2008

3. Water Sector Capacity Building and Advisory Services Project (WCAP)

The objective of the World Bank-supported Water Sector Capacity Building and Advisory Services Project for Pakistan is to improve management and investment planning of water resources in the Indus River Basin. There are three components to

the project. The first component of the project is capacity building of, and support to, federal institutions in water resources planning, management and development. The component includes, among other things, support for building human resources and institutional capacity in the federal institutions and support for developing studies, strategies and plans for improving water resources planning and management. The second component of the project is improvement in water resources management and development. This component will include inter-alia: (i) upgrading of existing tools, databases, models and management systems; (ii) sediment management studies for the Indus system and possibility of flushing sediments through the Tarbela reservoir and its impact basin-wide; (iii) preparation of a power investment plan with focus on hydropower development in the upper Indus and conjunctive operation of dams and infrastructure; and (iv) feasibility studies and preparation of designs for quickly/easily implement able hydropower plants suitable for financing by international financial institutions. The third and the final component of the project is project management coordination, additional studies, training. This component will support the Government, in particular the ministry of water and power (MoWP) with project management, including coordination of all project related activities, monitoring and evaluation of project impacts, as well as technical and financial audits. This will also support institutional strengthening and training of staff involved in water resources management.

Source: The World Bank 11-JUN-2008

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[i] Author's comment:
This news was in fact included in Top News 2007. The final agreement was signed in January 2008, but work was suspended in August to renegotiate the agreement in the wake of increasing fuel costs. Now again, oil prices are down, so there is some ray of hope. This is a particularly critical issue, not only from solid waste management point of view, but because it also involves multinational private sector in waste services and renewable energy sector. Moreover, Karachi is still waiting for waste services and even upscale residential areas are littered with uncollected waste.

Papua New Guinea
Naus Kamal
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The PNG Eco-Forestry Forum

1. Proper Awareness A Must before Treading on the Path of Carbon Trading, Warns Forum

Many countries in the world see forests as a way out of the ever-increasing heat that is warming up the earth's atmosphere.

Developing countries with vast untapped rainforests are becoming the target as governments and intergovernmental organisations around the world scramble to get a hold of a patch of land with trees on it. They may say they want to protect trees to save the earth, but carbon financing is seen as a profitable prospect and may become one of the largest commodity markets in the world.

Papua New Guinea is among the other developing countries negotiating with the industrialised nations on how best it can use its rainforest to off-set this global crisis. One of the options it is targeting is Reduced Emissions from Deforestation and Degradation (REDD).

The Prime Minister of Papua New Guinea, Sir Michael Somare has had talks with the Norwegian government on plans to reduce the emission rate of carbon. The media quoted Sir Michael as saying that these steps to reducing carbon emission must be done through sustainable forestry practices and by setting up appropriate mechanisms to measure forests for carbon trading and monitor any degradation.

Forests in Papua New Guinea make up a third of the world's tropical rain forests. And most of these forests in PNG are owned by the people.

The PNG Eco-Forestry Forum (PNGEFF), which is the umbrella body for environmental non-government organisations (NGOs) in Papua New Guinea (PNG), is concerned that these indigenous landowners will suffer the most if the government does not come up with a policy that puts the interest of the people first. At the moment, the government has not come up with a framework to guide the development of activities and plans regarding carbon trading.

According to the Executive Director of the Forum, Mr. Thomas Paka, PNGEFF believes that any developmental issue must involve the landowners. He acknowledged the government of Papua New Guinea for taking the lead in the issue of Carbon Trading in view of REDD. He said the NGOs hope that the government is doing this for the people.

Mr. Paka, on behalf of EFF and its members, sounded a warning to all landowners and

resource owners to be careful when signing deals. He said the issue of carbon trading is new and people must have enough knowledge before they can go ahead and sign any deals. He said we acknowledge the government from the perspective that the decisions will benefit the people of PNG but if the decision will only benefit the government, then the NGOs will not recommend the government to move on with any arrangements unless all issues are properly looked into and dealt with.

The Forum has formulated a position paper which it wants the government to consider before it goes into any policy formulation. The position paper of the Forum proposes that the following key issues should be looked into and considered by the government in the policy development frame work for REDD:

1. Participatory – A Participatory Policy development process involving all stakeholders must be employed whereby the proposed Carbon Trade Policy is discussed throughout the country through regional Forums.

2. Payments – The above means that there should be no exclusive payment for environmental service trading rights and the imposition of excessive taxation for the government.

3. Assets – PNG's Environmental Assets are under immense threat from logging, mining, and agriculture projects. This could lead to a long term loss for any possible carbon trading opportunities and environmental services as well as loss of international image.

4. Awareness – The issue is complex and the landowners are challenged to educate themselves adequately before they can get into any voluntary carbon trading arrangements with brokers and or investors.

5. Guiding Principles – That the government also adopts PNGEFF guiding Principles of Equitable Carbon Financing to be included into the Climate Chang Policy. The principles relating to issues of; Consent, Governance, Benefits, and Sustainable Land use.

Mr. Paka said the landowners must freely give their consent on any development that will take place on their land. He said this is because the people's livelihood depends on the land. The government must do a thorough check up and confirm that 75% of the landowning group must give their consent. "We are raising this issue because this problem has arisen in the past where a minority group or individuals pretended they were the rest, sign agreement in Port Moresby and later problems arise.

The Forum also said that PNG's environmental assets are under threat from logging and agricultural activities. Therefore, if the government would like to go ahead with REDD programmes, then it has to also cut down on activities like logging and large scale agro-forestry projects so sufficient forest areas are made available for carbon trading arrangements.

2. Findings Reveal Substandard Practice in Papua New Guinea Logging Industry

An investigation into operations of one of the leading logging companies in PNG revealed instances of alleged human rights abuse and violation of established labour laws.

An investigation by Greenpeace into the operations of Turama Forest Industry (TFI), a subsidiary of controversial Malaysian logging giant, Rimbunan Hijau (RH) in September revealed allegations of gross human rights abuse and violation of various established laws of Papua New Guinea (PNG).

Evidence gathered from the findings into the operations of TFI in the remote Turama area of Gulf Province showed a worker being paid K185.25 (US$71.50) for 114 hours of work. This is made worse when the workers had to provide their own food even after being out at work for long hours. The only available option for workers is to get food on credit from the company's own canteen which charges very high prices and then get salary deductions to offset the credits. After this, a worker is normally left with only about K10 (US$3.86).

Evidence gathered also showed that employers, especially out in the field like the chainsaw and bulldozer operators and truck drivers are not being issued with proper safety gears like protective helmets, boots and safety goggles.

Even the promised development projects like proper road, school and health facilities have never been built while the company has continuously made big profits from logging the forest over the last 10 years.

There was also evidence of alleged environmental degradation and pollution of the river systems in the area which has led to depletion of food, medicinal, and other resources that supplement the lives of the people.

The investigations also led to a protest launched by Greenpeace which resulted in the blockade of logs shipment from the area. Four forest campaigners from the popular Greenpeace ship, *Esperanza*, climbed the giant cranes on the ship and fastened illegal logging banners across the ship's cabin in protest against TFI's operations. Action by Greenpeace also received praise from landowners in Turama area including the neighbouring communities and also from many people around the country. The protest resulted in stopping a shipment of an undisclosed volumes of logs bound for China at the mouth of Aiai River along the coast of Gulf Province.

Greenpeace's protest also gave prominence to the growing concerns of illegal activities in PNG logging industry, which involves human rights abuse, violation of legal or regulatory procedures, substandard business investment practice, and no real landowner benefits.

A recent report by Australian Criminology Institute into illegal logging timber trade in

the Asian-Pacific region states PNG as one of the main exporters of illegal timber. This and many other reports from previous investigations into logging industry continue to paint a negative image of the logging industry in PNG.

While launching the protest, Greenpeace also called on the government of Papua New Guinea to immediately impose a logging moratorium and commission an independent inquiry into the whole logging sector in the country.

3. Supreme Court Rules RH Logging Rights Illegal

The Supreme Court in October quashed a decision granting logging rights over the huge Kamula Doso forest area in Western Province of Papua New Guinea to Malaysian logging giant, Rimbunan Hijau (RH) in a court case brought by the PNG Eco-Forestry Forum, and ordered the company to pay costs to the Forum.

“This is a major victory for good governance,” said Kenn Mondiai, Chairperson of the Forum. The Decision quashed the previous orders of the National Court obtained by Wawoi Guavi Timber Company (WGTC), a subsidiary of RH in 2006, which required the PNG Forest Authority to award WGTC the rights to log the vast Kamula Doso forest area in Western Province covering about 800 000 hectares.

“This decision demonstrates to the whole world what has been going on for far too long, and legally reaffirms the Forum’s claim of widespread illegal logging in PNG facilitated by the government and the logging industry. This is only a tip of an iceberg and there is more to be uncovered of unlawful acquisition of resources and unequal benefit distribution.

The PNG Eco-Forestry Forum has been fighting through the Courts for over two years to overturn RH’s rights to log in Kamula Doso which was granted by the National Court in 2007. When the Forum decided to challenge the decision, the government amended the Forestry Act to remove the Forum from the National Forest Board”.

Minutes before the hearing began, WGTC conceded in the Supreme Court that the previous National Court Orders it had obtained with cooperation of the PNG Forest Authority in 2006 were improperly obtained affirming that their logging rights were illegal.

A 3-men Supreme Court bench recorded its displeasure at the conduct of RH in fighting the case for two years when it knew its logging rights were illegal by ordering the company to pay indemnity costs to the PNG Eco-Forestry Forum.

“This is a great victory for civil society and non government organisations in general,” added Thomas Paka, Executive Director of the Forum. “Our judges have shown that the ordinary people of PNG can stand up to corruption and win”.

Mr. Paka also said that the decision now also means a million hectares of forest is protected which would have otherwise seen the single biggest logging concession in the country being deliberately given away through an unscrupulous arrangement.

4. WWF Encourages Eco-Enterprising

A rise in global problems like poverty, along with the high cost of food and fuel prices have an impact on the urban settings. This process also affects the natural resources.

The global conservation organisation, World Wildlife Fund For Nature (WWF), has come up with a plan to offset this chain reaction. It believes that one way to sustain and enhance the natural resources would be to introduce methods in eco-enterprise.

WWF Western Melanesian Representative, Mr. Iain Carr said "WWF is assisting communities, government and other stakeholders to develop a comprehensive catchments management plan for Kikori Basin commencing in the Lake Kutubu Catchment. The plan will enable sustainable management of the natural resources by promoting eco-businesses in local communities."

To start off, the WWF has come up with two manuals on vanilla farming and insect farming. These manuals were produced by the WWF Kikori River Program. The manuals will aim to promote environmentally friendly activities in the local communities in the Kikori and Southern Highlands regions.

According to Mr. Carr, the insect manual was created in response to the Insect Farming and Trading Agency's need for a tool to help in its training. The vanilla farming manual was born out of WWF's attempts to find income generating options for the remote areas in Kikori and Southern Highlands regions.

He said these two manuals are rich in conservation, self-reliance, and sustainable development messages.

World Wildlife Fund is working hard to encourage the local communities in the Kikori Basin to take care of their environment. This is because the Kikori basin boasts of one of the most rich and diverse natural habitat in the world.

WWF fears that when companies go into the area, they will destroy the rich biodiversity.

Mr. Dennis Badi, the WWF Education Officer, said WWF is firm on its stand that any company who wants to operate in the Kikori Basin must have a good track record of looking after the environment. He said for this reason, WWF is working closely with Oil Search. This is to make sure the company does not engage in activities that are harmful to the environment.

Mr. Badi said the Kikori Basin is also a home to several species of birds and animals which are not found in other parts of the world.
WWF Scientists are now conducting studies to find the best management plans that will conserve and protect these rare and endemic species.

Kikori is home to the world's largest pigeon, the world's longest lizard and the world's largest orchid.

WWF has also helped to fund a booklet that features the pig-nose turtle. The pig-nose turtle is rare and endemic and is only found in the Southern part of PNG and the Northern Territory in Australia.

The booklet was written by Carla Eisemberg, a PhD student currently carrying out a survey on pig-nose turtles in the Kikori River. The project is a joint study between Canberra University, Oil Search (PNG) Limited and WWF Kikori River Program.

The booklet raises awareness on the significance of the pig-nose turtles. These turtles will be found on the country's five toea coin.

WWF and Oil Search Limited funded the printing of 5000 copies of this booklet. It will be used in schools in the Kikori and other neighbouring areas.

World Wildlife Fund launched the two manuals on insect and vanilla farming and also the booklet on pig-nose turtles in October at the Crown Plaza hotel in Port Moresby. The launching also marked the World Habitat Day, which fell on the 6 October.

<Photo and Caption for story N0.3>

An aerial view of the enormous Wawoi Guavi Logging Concession which its extension to the controversial Kamula Doso is the subject of the current Court Case which resultedin the victorious decision for the Forum.
(Photo: EFF File Photo)

The Philippines

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1. The Supreme Court Organises the Country's First Environmental Courts

In a historic resolution made available to the press on 9 January this year, the Supreme Court has organised the country's first environmental courts out of the existing trial courts. In the initial phase of implementation, 48 city and municipal courts and 24 regional trial courts have been especially assigned to hear and decide cases involving violation of environmental laws. A total of 117 trial courts will have jurisdiction designed for the protection of the environment by speedy resolution of cases.

The jurisdiction of environmental courts covers an expanded area of statutory law which now includes the Fisheries Code, the National Integrated Protected Areas System Act, the Clean Air Act, the Clean Water Act, the Ecological Solid Waste Management Act, the Wild Resources and Protection Act, and the Toxic Substances and Hazardous Wastes Control Law.

As part of the environmental protection agenda, the Supreme Court will conduct training seminars for personnel of the environmental and appellate courts.

The new thrust for environmental protection is in line with the orientation set last year by Chief Justice Reynaldo Puno of the Supreme Court. In an address at the Asian Justices Forum on the Environment held in Manila in July last year, he said that "it is now beyond argument that environmental protection is indispensable to support and sustain some of the most fundamental of human rights, such as the right to life, to health and to well being."

Sources: Philippine Daily Inquirer, 4 January 2008, 19 January 2008; The Daily Tribune, 15 January 2008.

2. More Than Half of Fauna Native to the Country Are in a State of Near Extinction

The Department of Environment and Natural Resources (DENR) has disclosed that more than half the birds, amphibians and mammals found only in the Philippines are in a state of near extinction.

In a statement given to the press on 21 July this year, Secretary Joselito Atienza of the DENR said: "Worldwide, we rank fifth in the number of plant species. We also rank fourth in bird endemism, which means that these birds are found only in the Philippines." About 1,137 animal species and 14,000 species of plants live only in the Philippines.

But Secretary Atienza added that the country is among the top biodiversity hot spots in which about 592 endemic species of amphibians, birds and mammals are considered "threatened or endangered."

In addition, included in the Red List of "critically endangered" species of the International Union for Conservation of Nature (IUCN) are 227 species of Philippine flowering plants. Among the critically endangered animals in the Philippines in the IUCN list are the monkey-eating eagle, the dwarf buffalo or *tamaraw*, the pygmy goby which the Guinness Book of Records considers as the smallest fish in the world, the Visayas warty pig, the Philippine cockattoo, the wrinkled hornbill, and the hawkbill turtle.

Source: The Daily Tribune, 22 July 2008; Philippine Daily Inquirer, 22 July 2008.

3. Candaba Swamp is Sanctuary to Thousands of Globe-Trotting Birds

Compared to the presence of 11,500 migratory birds estimated last year in the 32,000-hectare Candaba Swamp in the province of Pampanga, about 17,000 birds belonging to more than 80 species have been recorded in a 24-hour census this year. The Wild Bird Club of the Philippines (WBCP) takes a census every year using photographs and other established means which guard against double counting. Michael Lu, WBCP president, said that the result of the census this year is "not only a record for Candaba but for the whole of the Philippines".

WBCP also considers this year's census significant because it records the presence of rare birds. The Eurasian Spoonbill has been recorded for the first time (*Platalea leucordia*). Returning rare birds spotted are the Shenck's Bittern, Great Bittern and Gadwall.

Sources: Philippine Daily Inquirer, 14 January 2008.

4. Philippine Eagle is Shot Dead, Cooked and Eaten

On 10 July this year, Brian Balaon, a farmer and member of the indigenous community gunned down and killed a 3-year old Philippine Eagle, nicknamed Kagsagbua in Mount Kitanglad Natural Part in Bukidnon province. The death of Kagsagbua has caused outrage all over the country.

Two years ago, Kagsagbua was found shot in the forest and was nursed to recovery by the Philippine Eagle Foundation (PEF). In March this year, the young male eagle was released into the Natural Park.

Angry at the murderer, the *datus* of the indigenous community performed rites intended to lead to his capture, which contributed to Balaon's surrender.

Baloan admitted that he shot Kagsagbua, thinking it was an ordinary bird. He said the national eagle was hit in the heart and fell from the tree. Then he cooked Kagsagbua and shared the eagle's meat with his friends.

Under the Wild Resources Conservation and Protection Law, a person convicted of killing an endangered species may be sentenced to 12 years imprisonment.

The International Union for Conservation of Nature has classified Kagsagbua as "critically endangered" Philippine Eagle (*Pithecophaga jefferyi*), one of "as few as 226 mature individuals" left.

Sources: Philippine Daily Inquirer, 19 July 2008; The Daily Tribune, 22 July 2008.

5. Japan-Philippines Economic Partnership Agreement Takes Effect But Its Constitutionality is Questioned in the Supreme Court on Environmental Issues

The Japan-Philippines Economic Partnership Agreement (JPEPA) took effect on 11 December this year, but the controversy over its provisions pertaining to environmental protection has been brought to the Supreme Court. Civil rights and environment protection organisations have petitioned the Court for a restraining order to stop the implementation of JPEPA on the claim that it would open the country to the entry of hazardous materials from Japan.

The petitioners include members of Congress, political parties, labor unions, and trade organisations. Among the petitioners, Fair Trade Alliance and Akbayan Citizens Action Party argue that the tariff schedule set forth in JPEPA eliminates customs duties on waste products which are prohibited from being traded. They charge that JPEPA amounts to legalisation of "indiscriminate free trade in toxic and hazardous wastes", in direct violation of the "constitutional duty of the Philippine government to protect and promote the Filipino people's right to health and to a balanced and healthful ecology".

Sources: The Daily Tribune, 8 December 2008, 11 December 2008.

Russian Federation

Anatoly Lebedev
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1. New Forest Code and Tariffs as National Drama

Although the new Forest Code adopted in 2007 was a long term desirable document for all Russian society, being combined with administrative reform and a serious increase of export tariffs for raw logs, it seems to have become a national disaster. The key problem is a timetable of one year, designated to change the whole forestry legislation, regulations and thousands of projects by 80 %. It includes totally new comprehensive Forest Plans for each administrative region of Russia, new "reglament" for each local forest governance unit (*lesnichestvo*) which would replace old inventory documents, and many national instructions, regulations and procedures. They should contain seriously new approaches to classification of forests and their categories of safety, eco-regions, and types of lands and logging modes, Given that each new lease project should be based upon regional Forest plan and local Reglament, it is impossible to have them ready and adopted into the designated areas by beginning of 2009, since plans, based on these Reglaments and lease projects were urgently drafted simultaneously during the last months of 2008. In addition, it seems that the system has already no time to conduct appropriate environmental expert procedures of Forest Plans until the end of 2008. Fortunately, essential losses of log exporters due to new export tariffs to be introduced in 2009, were postponed by Putin in November by 8-10 months, which will help to avoid a serious collapse of the industry and the bankruptcy of many firms.

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2. Trans-Siberian Oil Pipeline under Public Scrutiny

Early this year environmental NGOs in Sakha-Yakutia Republic launched a broad public protesting campaign against environmentally-dangerous technology used to take a trans-Siberian oil pipeline across one of the largest rivers in the world, the Siberian river Lena . Initially planning to carry out this project by the least expensive and most environmentally destructive mode of trench-digging, the designer and customer later officially accepted the strict recommendation of public hearings and changed the scheme to one that crossed the river by a micro-tunneling method, considered as the most environmentally-friendly. There was a series of meetings in Yakutsk, organised by environmental activists in cooperation with political parties, which signed appeals to the Russian and Yakutia presidents on the issue. A coalition named "Our Home – Yakutia" initiated a set of lawsuits against the trench-digging technology of river crossing, and was supported by the Far East regional department of Environmental and Technical Supervising Agency (Rostechnadzor). However a federal impact assessment considered this method acceptable, which led to more public contradiction and general delay of the whole construction process. As a result, pipeline constructors using Chinese labor, created the main crossing by the unacceptable digging method and, responding to public appeals to the Russian President, guaranteed to put a spare line by tunneling.

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3. Old Huge Dam Projects to be Re-vitalised

One of the most controversial industrial strategies of the Russian government during this year was a huge programme of development on the system of hydro-power dams on the big rivers all

over Siberia and the Far East. Almost all the projects were drafted in Soviet times, when there was no democratic legislation, no ideology of environmental protection, biodiversity conservation or impact assessment. The most serious, huge and dangerous project of Evenki (formerly Turukhanskaya) HPD is designated to be set in North Krasnoyarsk region, on the lands of traditional deer herding for the indigenous people “evenki”. A large group of Russian and international environmental NGOs launched a broad civil campaign of protest, asking government to clearly and honestly justify the need for that flood of energy on the wild unpopulated forests. It was eventually announced that the designated energy production would only make real economic sense if it was sold to rapidly developing Northern China, and not used for local and regional development, as the area was already satisfied with power. Other scandalous dam projects are being developed on Katun river in Altai Republic and on Angara river west from Baikal Lake, also causing strong environmental and social protest activities. By changing the names of old projects and updating their justification with empty words on “economic development”, the state-owned “Rus-Hydro” tries to deceive the public with regular lies about a future electric paradise, which will enrich only a small group of Moscow-based oligarchs.

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4. Nuclear Industry Newly Scares the Whole Country

Although 60 to 80 % of citizens openly demonstrate their opposition to development and construction of nuclear power plants in Russia, prime-minister Putin adopted a development programme for the Russian Nuclear Ministry (Rosatom) for 2009-2015. The total cost of the programme is more than 2 trillion rubles (US$ 80 billion), and includes the creation and upgrading of existing nuclear plants in 15 Russian regions from the Baltic through to the Pacific coast, making a total of 26 new reactors. About 800 billion rubles for that programme will be provided in the state budget and covered by regular protesting taxpayers. In 1990 it was made obligatory by Russian law to conduct a referendum before making a final decision to construct a nuclear power plant, and Rosatom continues to say that. But in practice this norm is now deleted from the legislation and no referendum is actually available.

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5. Baikalski Pulpmill Stopped after 20-Year Fight

After many years of environmental protests in Russia against contaminating of Baikal Lake with sewage water from the old pulp mill in Baikalsk, the mill launched a closed water circulation system this September. However, it was only seen as a “green victory” for Baikal protection movement: after several days operations at the plant were stopped as the raw wood it used before became unavailable under new technology. About 1500 people were fired and started their own protesting campaign against the unfair practice of “Continental-Management”, having 51 % of shares (the rest is state owned). Nobody can say exactly that this event coincided with the global financial crisis or not, but the official campaign to accuse the green lobby was predictably launched in the Russian media. The matter is that officials and company owners, who continued to contaminate the World Heritage Baikal area over the past 30 years with toxic substances, did not think about any alternative jobs for local people. It then became the duty of environmentalists together with the municipal authority to look for a series of measures for Baikalsk survival. It is also remarkable that although “Baikal Environmental Wave” insisted on establishing a close water circulation model for many years, it now turns out that the plant cannot continue at all, since the soil under and around it is deeply poisoned and needs to be cleaned.

Pipeline construction on the Northern Amurskaya Oblast (Tynda District)
Photo by Tatiana Tonkikh (Tynda)

Collage of Baikalski pulp-paper mill
Photo by Greenpeace Russia

Singapore

Koh Kheng Lian
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1. Singapore Transport System

The *LTMasterplan: A People- Centred Land Transport Syste*m, launched on 18 February 2008, made major changes to improve the land transport system. It is people-centred and technologically intelligent. It aims to be more integrated and reliable, with more bus services to complement a greatly expanded rail network. Varied transport choices like premium buses, taxis and cycling will help to cater to different needs. With the construction of new expressways, island-wide connectivity will also be significantly improved.

To further ease road congestion, the ERP (electronic road pricing) network has been widened since April – November 2008, with 16 new gantries making a total of 71. A new price ERP rate structure has been introduced since July 2008 to increase the current rates for traffic passing through the gantries into different districts.

The overall aim of the transport system is to make the average speeds on expressways and arterial roads come within the 45kmh to 60 kmh.

Sources:
http://www.lta.gov.sg/ltmp/pdf/LTMP_Report.pdf

http://www.onemotoring.com.sg/publish/onemotoring/en/on_the_roads/ERP_Rates.html

2. Environmental Public Health (Quality of Piped Drinking Water) Regulations 2008

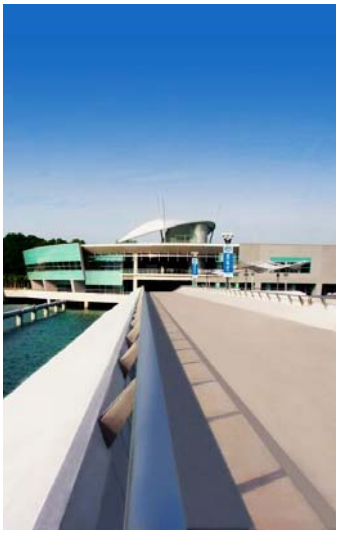
The regulations relating to standards for quality of piped drinking water came into operation on 1 August 2008, made pursuant to the Environmental Public Health Act. The Director General may issue or approve a code of practice on the requirements for water sampling plans and water safety plans. Earlier on in January 2008, the first edition of the Code of Practice on Piped drinking Water Sampling and Safety Plans was prepared in exercise of the powers conferred under the Regulations: http://www.nea.gov.sg

Every supplier is required to prepare and implement a water safety plan and water sampling to ensure that the piped water drinking water complies with the standards specified in the regulations. Non- compliance is subject to an offence liable on conviction to a fine not exceeding $10,000 and, in the case of a continuing offence, to a further fine not exceeding $500 a day or part thereof. A supplier is also required to keep and maintain records of the water sampling plan and remedial measures and other actions, if any.

3. Marina Barrage: Reservoir in the City

The Marina Barrage, the 15th reservoir in Singapore, was officially opened on 4 October 2008. It is the first Reservoir in the City in Singapore – and is built at the mouth of the Marina Channel, south of the island. It has a catchment area of 10,000 hectares, and when fully completed it will close the "loop" of the "Four National Taps", namely, local catchment water, imported water, desalinated water and NEWater, all of which will flow into the Barrage. The Marina serves three functions, namely, freshwater supply, flood control and lifestyle attraction. It is expected to meet more than 10% of Singapore's water supply.

Source: http://www.pub.gov.sg/marina/Pages/default.aspx



Singapore's first reservoir in the city realised
Marina Barrage, a project by PUB (Singapore's national water agency), is set to boost Singapore's water supply, alleviate flooding in the low-lying city areas and become a hot spot for recreational activities.

Photos by PUB, Singapore's national water agency

4. Climate Change and Energy Efficiency

In 2008, the Singapore National Environment Agency conducted a study on climate change in order to put in place adaptation measures. It also considered the mitigation of Greenhouse Gas Emissions focusing on energy efficiency and use of less carbon–intensive fuels in power generation, industry, transport, buildings and household sectors to reduce gas emissions.

A study has been commissioned to better understand the specific impacts of climate change on Singapore. The study is expected to be completed in 2009 and its results will facilitate the identification of new adaptation measures as well as the review of existing adaptation measures.

In the area of mitigating our greenhouse gas emissions, Singapore's carbon intensity has improved over the past years through greater use of cleaner fuels and enhancements in energy efficiency. Going forward, energy efficiency will be its key strategy to address greenhouse gas emissions. Energy efficiency not only reduces greenhouse gas and pollutant emissions, but also enhances our energy security and improves our economic competitiveness.

5. Singapore- Tianjin Eco-City

The groundbreaking ceremony of the Singapore -Tianjin Eco-city (Tianjin is located in the Republic of China) was held on 28 September 2008, following the Framework Agreement on the development of the Tianjin Eco-city, in November 2007. A set of Key Performance Indicators to guide the planning and development of the Eco-city, i.e. the Tianjin Eco-city Master Plan, as well as the preliminary detailed plan of the start-up area was formulated.

The Eco-city incorporates "three harmonies", namely, the harmony between people and people, people and the economy, and people and the environment. This will not only serve as a guiding principle in the planning and development of the Eco-city, but will also be one of its unique characteristics that will set it apart from other eco-cities which are being developed. It aims to be a model for sustainable development for other cities in China and the world.

When fully developed, the 30 km^2 large Sino-Singapore Tianjin Eco-city will have about 350,000 residents, living in inclusive, close-knit communities with strong social support networks.

6. The 9th Global Conference on Environmental Taxation (GCET)

The 9^{th} GCET was hosted by the Asia-Pacific Centre for Environmental Law (APCEL), Faculty of Law, National University of Singapore (NUS) and co-organised with the Singapore Academy of Law.

This annual series of conferences provides a global forum and has become one of the largest annual international gatherings of academic scholars, government officials, practitioners, NGOs and others from many disciplines, to discuss how fiscal and other economic instruments can help create a sustainable economy.

There were over 140 participants from 25 countries.

Source:
http://www.google.com.sg/search?hl=en&q=Tian+Jin+Project+in+cooperation+with+Singapore+&btnG=Search&meta=

7. Recent Publications

Tan Yong Soon with Lee Tung Jean & Karen Tan, *Clean, Green and Blue: Singapore's Journey Towards Environmental and Water Sustainability* (ISEAS: 2008).

Lye Lin Heng, "Singapore" in *International Encyclopedia of Laws*, pp 1-128 with Index (Kluwer Law International Law Series: 2008).

GWH Davison, PKL Ng & Ho Hua Chew, editors, *The Singapore Red Data Book: Threatened Plants and Animals of Singapore,* 2nd edition (Nature Society (Singapore: 2008)).

Jolene Lin, "Singapore and Renewable Energies: Carving Its Unique Role" in "Desalacion Agua con Energia Renovables" (National Autonomous University of Mexico Press, 2008).

Joseph Chun, "Wildlife Law in Singapore: Protecting Wildlife in the "Garden City"", in Raj Panjwani, ed, *Wildlife Law: a Global Perspective* (USA: ABA Publishing, 2008), pp. 201-256.

Sri Lanka
Nalaka Gunawardene
Director and Chief Executive Officer
TVE Asia Pacific

1. New International Airport Location Changed

In mid 2008, Sri Lanka stopped work on a controversial new airport in the island's south and decided to shift it to a new location. The island nation's second international airport was to be built in Weerawila, 300 km south of the capital Colombo, but the site was opposed by local farmers and environmentalists.

Residents protested against the project, launched in 2006, saying it would affect the livelihoods of over 2,500 farmer families. They used sit-in protests and petitioned court with the help of public interest lawyers. Meanwhile, environmentalists were concerned by probable disruption the airport's construction, and subsequent flight operations, could cause to the nearby Bundala bird sanctuary. This protected area, which hosts millions of migratory birds every year, was designated as a wetland of international importance under the Ramsar Convention in 1990.

This is only the second time that affected residents and activists have successfully objected to a development project in Sri Lanka. Some years ago, people of Eppawala, in the north-central province, campaigned against government plans to hand over a phosphate deposit to an American mining company. The project was abandoned after protestors accused the then government of selling national assets to foreigners.

References:
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http://www.lbo.lk/fullstory.php?nid=742140060

2. Supreme Court Suspends Controversial Green Tax

Three newly imposed taxes, part of the controversial 'Environmental Conservation Levy' (ECL), were suspended by the Supreme Court in November 2008.

Responding to fundamental rights petitions filed by a Buddhist monk and several

telecommunication companies, the country's apex court stopped taxes imposed on telecommunication towers, compact fluorescent bulbs of more than 40 Watts and on vehicles in the Western Province where most private vehicles are concentrated.

Introduced as part of the government's budget proposals for 2008, the ECL taxes were intended to meet the shortfall in funds for state conservation activities. Critics of the tax pointed out its discriminatory features, e.g. covering mobile phones but not fixed phones. They were also concerned that collecting the levy at household level could actually cost as much as it yields, and whether excessive state bureaucracy would allow collected taxes to be spent meaningfully on conservation.

References:

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http://www.lankadissent.com/en/index.php?option=com_content&view=article&id=2641:sc-suspends-3-environmental-levies&catid=1:latest-news&Itemid=50
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3. Vehicle Emission Testing Made Mandatory

After several years of preparations, Vehicle Emission Testing (VET) was made mandatory for all vehicles from mid 2008. This is expected to improve Sri Lanka's air quality which has deteriorated rapidly in recent times.

Attempts to introduce VET go back to 2001. It was one of the regulatory measures to reduce mobile emissions spelt out in government Gazette No 1295/11 of 30 June 2003. Implementing VET involves annual testing of vehicles and issuing certificates for vehicles that conform to national standards, as well as random roadside testing throughout the year. The Commissioner of Motor Traffic can decline the renewal of annual revenue license to vehicles that fail the emissions test; without this, no vehicle can lawfully run on public roads.

The government has accredited private companies with necessary expertise and facilities to perform VET. Some 200 testing centres are being established across the island. Parallel to this, fuel quality of petrol and diesel is being improved centrally, and higher exhaust emission standards have been set for new vehicles being imported to Sri Lanka.

References:

http://www.airmacsl.org/vehical.html
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4. Species and Habitats in Danger, Says New Report

Many of Sri Lanka's plant and animal species are threatened due to habitat loss, according to *The 2007 Red List of Threatened Fauna and Flora of Sri Lanka*, published by the Ministry of Environment and International Union for Conservation of Nature (IUCN).

Sri Lanka is endowed with a high number of species for a relatively small land area. Overall, about 27% of plants and 22% of its amphibians, birds, mammals, and reptiles are endemic. Of these, one in every two species of mammals and amphibians, one in every three species of reptiles and freshwater fish and one in every five species of birds are currently facing the risk of becoming threatened in the wild according to the new report.

Since the mid 1950s, the island has lost approximately half the forest cover, and currently retains only 23.5% of total land under forest. This represents an average loss of over 30,000 hectares every year. Many remaining forests are degraded due to human activity, or fragmented due to settlements and infrastructure development in surrounding areas. Remaining forest patches are too small to support larger mammals and some other species.

References:
http://cms.iucn.org/about/union/secretariat/offices/asia/asia_where_work/srilanka/publication/index.cfm

Sri Lanka is an amphibian hot spot but many species, such as this one, are under threat from habitat loss
Photo credit: TVE Asia Pacific

Habitat loss threatens animals large and small in Sri Lanka
Photo: TVE Asia Pacific

Sri Lanka's forests are being felled partly for timber and also for land

Photo: TVE Asia Pacific

Traffic congestion is a major source of air pollution in Sri Lanka.

Photo: TVE Asia Pacific

Thailand

Qwanruedee Chotichanathawewong, Assistant President,
Thailand Environment Institute and
Natapol Thongplew, Researcher, Thailand Environment Institute

1. National Park for Rent?

In Thailand, there are more than 140 national parks located in all regions. All national parks are operated and managed by one governmental agency - the National Park, Wildlife and Plant Conservation Department (DNP), Ministry of Natural Resources and Environment. With its current status, it is claimed that the management system is inefficient. The combination of an increasing number of visitors and a limited number of staff resulted in insufficient lodging and incomprehensive monitoring.

In order to solve the problems and improve the service in national parks, DNP proposed the idea to the public on providing concession contracts for 10 popular national parks to private companies. A concession contract allows private companies to invest and manage in three types of businesses in the national park, which are restaurants and souvenir shops, leisure and travel activities, and accommodation. The details of the concession contract vary depending upon the size of area, contract term, and size of entrepreneur.

However, this proposal was strongly opposed by the civil society. The possible occurrences of environmental impacts to the national parks are the primary concern of the public and NGOs. Because of strong opposition from the public, the proposal on concession plans was put on hold and the director general of DNP gave a promise not to proceed with any policy against the public's position.

Reference: *Manager, www.manager.co.th*
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2. Coastal Erosion Is a Serious Problem

Coastal erosion has become a critical issue for the country. Many cities located along the Gulf of Thailand have been threatened severely by coastal erosion. This crucial problem has gained attention from His Majesty King Bhumibol Adulyadej. His Majesty expressed his concern on coastal erosion, especially for cities located along the inner zone (horseshoe shape) of the Gulf of Thailand, which have experienced serious erosion.

The government's Department of Marine and Coastal Resources is the core agency responsible for solving the problem. The long-term strategic plan to protect and solve coastal erosion has been established.

The most serious area is the inner zone of the Gulf of Thailand where the building of a bamboo wall is set to be extended for 42 kilometers along the coastal zone since the pilot area showed a satisfactory result with the presence of new soil sediments for planting mangrove. For other cities, different approaches may have to be taken due to different coastal properties in each area. Currently, investigations are under taken for finding the most suitable approach to protect the areas and resolve the erosion problem.

Reference: *Thairat, www.thairath.co.th*
Siamrat, www.siamrath.co.th

3. Thai People Have High Awareness on Global Warming and Climate Change

In the past few years, numerous campaigns and news on global warming and climate change have been launched by both public and private sectors for raising public awareness. Television, radio, newspaper, internet and display boards are all means of information dissemination. Portraying the impacts of climate change, such topics as using cloth bags, saving energy, reducing waste, planting trees, riding bicycles, using a car pool

and using public transportation are popular for launching campaigns and disseminating information regarding global warming and climate change.

From a public point-of-view, global warming and climate change have become hot issues and it is noticeable that Thai people have a high awareness on global warming and climate change. We can see people walking along the street carrying cloth bags instead of plastic. Many people change their habits by saving energy and separating wastes at home.

One survey was conducted which confirmed that Thai people have high awareness. Assumption University conducted a survey on “Thai People with Global Warming” in Bangkok and other large cities in Thailand including Chiang Mai, Khon Kaen and Songkhla. The survey result exhibits that more than 97% of the surveyed population receive information on global warming. Furthermore, more than 82% perceive that global warming can affect the national economy and more than 67% are concerned that global warming can pose impacts on their working conditions.

Reference: *Manager, www.manager.co.th*
Thaipost, www.thaipost.net