

FORUM: Environment Committee

ISSUE: The Question of Revising Environmental Regulation in Rapidly Industrializing States

STUDENT OFFICER: Seow Yongzhi

POSITION: Deputy Chair of the Environment Committee

Introduction

In recent years, the environment has become a major global issue, and is a fundamental criterion by which state and corporate actions are judged. Environmental regulation encompasses a wide scope of legislation passed both internationally and internally within sovereign states, but generally only international legislation is considered under the auspices of the UN. International environmental agreements include treaties, conventions and protocols. Protocols are subsidiary agreements that build on specific treaties, with the Kyoto Protocol being the most widely-known in international environmental law.

While environmental legislation applies equally across all sovereign states¹, rapidly industrializing states have found it difficult to comply with the treaties, which hinder or forestall their economic growth. This is because such nations feel that the West have no more right than rapidly industrializing states to pollute the environment, yet the wealth of the West today has been built upon environmental destruction in the past two centuries. In particular, China and India are unwilling to actively take steps towards environmental protection if it means sacrificing economic growth: as Pradipto Ghosh, India's former environmental secretary, said: "the goals of addressing climate change cannot supersede our goals of maintaining our current rates of GDP growth and poverty alleviation programs, as was agreed by everyone at Kyoto"². Hence, the fundamental conflict of interests between and within countries must be resolved in any proposed solution, especially for rapidly industrializing states. Ultimately, environmental regulation within states must be enforced by states themselves, and the question of how revised measures can be implemented successfully relates back to finding a suitable compromise that states will accept and be willing to work with.

Within the umbrella issue of environment lie various sub-issues, including air and water pollution, conservation and management of natural resources (such as forestry and fuels) and protection of wildlife (especially marine life). Environmental regulation should ideally be revised to take into account all relevant sub-issues and promote acceptable yet effective measures to deal with most, if not all, of them in a manner that best achieves sustainable development.

Key Terms

Environmental Regulation: refers to a body of environmental legislation (treaties, conventions, protocols, common law etc.) that may be passed either internationally or internally within states, normally focussed either on pollution control and remediation or resource conservation and management

Rapidly Industrializing States: nations undergoing brisk economic growth, usually export-oriented, with its economic focus shifting from primary (agrarian/natural resources) to secondary (manufacturing) industry

Perspective of the UN

The UN is primarily interested in working towards legal documents that can be agreed upon by every member state, working in the general direction of protecting the environment.

The challenge faced by the UN is in reconciling the primary economic interests of rapidly industrializing states and existing environmental concerns, as their environmentally unfriendly economic policies plague the world.

¹ A state with effective internal and external control over a geographic area, and which is not dependent on, or subject to any other power or state

² Foster, Peter. "India snubs West on climate change". [The Telegraph](#) 12 Jun 2007

Major Parties Involved

African Union



The African Union is a regional organization that conducts and coordinates the foreign policies of all African states, with a few exceptions including suspended members such as Guinea and Niger, and Morocco as the only withdrawn member. The African Union shows outward signs of being supportive of implementing environmental policy across the region to deal with the question of climate change, as evidenced by the Johannesburg Declaration on the Environment for Sustainable Development³, which contain amongst its 49 clauses a commitment “to mainstream climate change adaptation measures into national and, where appropriate, regional development plans, policies and strategies with a view to ensuring adequate adaptation to climate change in such areas as water resources, food and energy security and management of coastal and marine resources”. Most African states have ratified the Kyoto Protocol, indicating a measure of commitment, except the Sahrawi Arab Democratic Republic (not fully recognized as a state at present) and Somalia who have not yet expressed any position.

ASEAN



ASEAN is a collection of South-East Asian states, all of whom have ratified the Kyoto Protocol. Collectively, ASEAN states mostly represent developing nations who have banded together to forge common policies on the international stage. ASEAN has shown its commitment to environmental regulation with various Declarations, including the 1984 Bangkok Declaration on the ASEAN Environment which includes measures such as the fostering of national macro-economic environmental development plans and the development of methods to preserve wildlife and curb pollution. Perhaps the most pertinent question plaguing ASEAN at present is the issue of frequent forest fires and trans-boundary haze, produced mostly from Indonesia, which threatens to pollute the air and increase the chlorofluorocarbon density per unit air and tear more holes in the ozone layer. The most recent action taken by the body collectively has been carrying out the actions necessitated by the Singapore Declaration of 2007. Consistent revision of environmental legislation remains a priority for ASEAN.

³ UNEP/AMCEN/12/9

Brazil

Brazil has the largest portion (66%) of its territory covered by forests amongst Latin American countries, and clearing and burning in the Amazon proceeded at alarming rates in the 1970s and 1980s. Following the events of the late 1980s, international organizations and developed countries have allocated significant resources for the environmental sector in Brazil. In 1992, environmental projects worth about US\$6.8 million were identified, with US\$2.6 in counterpart funds⁴. More than 70 percent of the total value was for sanitation, urban pollution control, and other urban environmental projects. Among the specific environmental projects with international support was the National Environmental Plan (Plano Nacional do Meio Ambiente--PNMA), which received a US\$117 million loan from the World Bank. The National Environmental Fund (Fundo Nacional do Meio Ambiente--FNMA), in addition to budgetary funds, received US\$20 million from the Inter-American Development Bank to finance the environmental activities of NGOs and small municipal governments. The Pilot Program for the Conservation of the Brazilian Rain Forests (Programa Piloto para a Proteção das Florestas Tropicais do Brasil--PPG-7) was supported by the world's seven richest countries (the so-called G-7) and the European Community, which allocated US\$258 million for projects in the Amazon and Atlantic Forest regions. The Global Environment Facility (GEF), created in 1990, set aside US\$30 million for Brazil, part of which is managed by a national fund called Funbio. GEF also established a small grants program for NGOs, which focused on the *cerrado* during its pilot phase. The World Bank also made loans for environmental and natural resource management in Rondônia and Mato Grosso, in part to correct environmental and social problems that had been created by the World Bank-funded development of the northwest corridor in the 1980s.

China

China is the greatest producer of carbon dioxide gas due to human activity, according to the Carbon Dioxide Information Analysis Centre (CDIAC) of the United Nations, accounting for some 22.30% of the world's total. In response to environmental problems, from the late 1970s, China began implementation of a number of environmental policies in relation to air and water pollution and solid waste disposal, and the number of these regulations has been steadily increasing. The State Environmental Protection Administration (SEPA) in China has also declared control of industrial pollution to be a top priority for Chinese regulators. Responding to this severe environmental pollution, the National Environmental Protection Agency (NEPA) and the State Planning Commission (SPC) jointly proposed China's Environmental Action Plan for 1991–2000. The plan highlights the environmental issues that officials at the national level consider particularly significant. The top three (of seven) problems listed deal with water pollution, air pollution, and hazardous waste. The next three involve conservation of natural resources in the form of water, land, forests and grasslands. The final problem centers on the balance and integrity of China's ecosystems. However, weak enforcement of environmental regulations has been recognized as a major problem in China.

Indonesia

The geographical resources of the Indonesian archipelago have been exploited consistently with social and historical patterns. One cultural pattern consists of the formerly Indianized, rice-growing peasants in the valleys and plains of Sumatra, Java, and Bali; another more marginal sector consists of the upland forest farming communities which exist by means of subsistence swidden⁵ agriculture. The heavily forested, mountainous interior hinders overland communication by road or river, but fosters slash-and-burn agriculture. Major problems face the mountainous interior regions of Kalimantan, Sulawesi, and Sumatra, including deforestation, soil erosion, massive forest fires, and even desertification resulting from intensive commercial logging. In 1983, some 3 million hectares of prime tropical forest worth at least US\$10 billion were destroyed in a fire in Kalimantan Timur Province. In the mid-1980s, Indonesia's deforestation rate was the highest in Southeast Asia, at 700,000 hectares per year and possibly as much as 1 million hectares per year. In many areas of Kalimantan, large sections of forest were cleared, with little or no systematic effort at reforestation. Although reforestation laws existed, they were rarely or only selectively enforced, leaving the bare land exposed to heavy rainfall, leaching, and erosion. Because commercial logging permits were granted from Jakarta, the local inhabitants of the forests had little say about land use, but in the mid-1980s, the government, through the Department of Forestry, joined with the World Bank to develop a forestry management plan. The efforts resulted in the first forest inventory since colonial times, seminal forestry research, conservation and national parks programs, and development of a master plan by the Food and Agriculture Organization (FAO) of the United Nations (UN).

⁴ Equal to funds provided by the Brazilian government

⁵ Swidden is an agricultural strategy that necessitates the slashing, cutting, felling, and burning of forested areas for the planting of impermanent garden plots or agricultural fields

India

Indian's environmental problems are largely exacerbated by factors such as its huge population and industrialization. India is the 3rd largest emitter of carbon dioxide gas by human activity as of 2007, according to the Carbon Dioxide Information Analysis Centre of the United States, accounting for some 5.50% of the world total. Most of the land area in the country show evidence of degradation, affecting the productive resource base of the economy. Out of the total geographical areas of 329 million hectares, 175 million hectares are considered degraded. India's forest wealth is dwindling due to overgrazing, over exploitation, encroachments, unsustainable practices, forest fire and indiscriminate siting of development projects in the forest areas. Withdrawal of forest products, including fuel wood, timber etc. are much beyond the carrying capacity of Indian forests. The current annual withdrawal of fuel wood is estimated at 235 million cubic meters against a sustainable capacity of about 48 million cubic meters. Air pollution is widespread in the country and regular monitoring is being carried out under the National Ambient Air Quality monitoring System. A high level of Suspended Particulate Matter (SPM) is the most prevalent form of air pollution. High concentration of Sulphur Dioxide (SO₂) and SPM occur in about 20 percent of the cities so monitored. High domestic use of coal or bio-mass fuel is a serious problem in high human exposure to SO₂, SPM and carcinogenic agents. In response to the various environmental problems, India set up the National Council for Environmental Policy and Planning in 1972 which was later evolved into the Ministry of Environment and Forests (MoEF) in 1985. The Environmental Action Programme (EAP) was formulated in 1993 to improve environmental services and integrate environmental concerns into development programmes. The National Environmental Policy of 2006 is the first initiative in strategic formulation for environmental protection in a comprehensive manner, which undertakes a diagnosis of the causative factors of land degradation with a view to flagging the remedial measures required in this direction. The solutions offered to tackle the problem comprise adoption of both, science-based and traditional land-use practices, pilot-scale demonstrations, large scale dissemination, adoption of multi-stakeholder partnerships, promotion of agro-forestry, organic farming, environmentally sustainable cropping patterns and adoption of efficient irrigation techniques.

Russia

In the 1990s, the government categorized about 40 percent of Russia's territory (an area about three-quarters as large as the United States) as under high or moderately high ecological stress. Excluding areas of radiation contamination, fifty-six areas have been identified as environmentally degraded regions, ranging from full-fledged ecological disaster areas to moderately polluted areas. Urbanization and air and water pollution also are problems. Although reductions in industrial production caused air quality indexes to improve somewhat in the 1990s, Russia's air still rates among the most polluted in the world. According to one estimate, only 15 percent of the urban population breathes air that is not harmful. 75 percent of Russia's surface water is now polluted, 50 percent of all water is not potable according to quality standards established in 1992, and an estimated 30 percent of groundwater available for use is highly polluted. Erosion carries away as much as 1.5 billion tons of topsoil every year. In the past twenty-five years, Russia's arable land area has decreased by an estimated 33 million hectares, with much of that loss attributable to poor land management. An estimated 74 million hectares of agricultural land have been contaminated by industrial toxic agents, pesticides, and agricultural chemicals. In 1988 the initial groundswell of environmental concern stimulated the Gorbachev government to form the State Committee for the Protection of Nature (Gosudarstvennyy komitet po okhrane prirody-- Goskompriroda), an agency given broad responsibilities similar to those of the United States Environmental Protection Agency. In 1992 the Russian Federation used Goskompriroda as the model for a new Ministry of Environmental Protection and Natural Resources, which received a similar mandate. Russia is a signatory of most major international environmental treaties. Among them are the International Tropical Timber Agreement (1983), the Convention on International Trade in Endangered Species (CITES, 1973), the United Nations Convention on the Law of the Sea (1982), and the Montreal Protocol controlling substances harmful to the ozone layer.

Timeline of Events

International Treaties, Conventions and Protocols

1958

Convention on Fishing and Conservation of Living Resources of the High Seas

1959

The Antarctic Treaty

1971

Ramsar Convention on Wetlands of International Importance especially as Waterfowl Habitat

1972

Convention on the Prevention of Marine Pollution by Dumping Wastes and Other Matter (London Convention)

1973

Convention on the International Trade in Endangered Species of Wild Flora and Fauna (CITES)

1976

Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (ENMOD)

1979

Convention on Long-Range Transboundary Air Pollution

1980

Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR)

1983

International Tropical Timber Agreement

1985

Helsinki Protocol on the Reduction of Sulphur Emissions or their Transboundary Fluxes by at least 30 per cent

1987

The Montreal Protocol on Substances That Deplete the Ozone Layer

1988

Sofia Protocol concerning the Control of Emissions of Nitrogen Oxides or their Transboundary Fluxes

1989

Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (UNEP Basel Convention)

1991

Protocol on Environmental Protection to the Antarctic Treaty

1992

The United Nations Framework Convention on Climate Change (UNFCCC)

Convention on Biological Diversity (CBD)

Rio Declaration on Environment and Development

1994

United Nations Convention to Combat Desertification (UNCCD)

1997

Kyoto Protocol to the United Nations Framework Convention on Climate Change

1998

Aarhus Protocol on Persistent Organic Pollutants (POPs)

2000

Cartagena Protocol on Biosafety

2004

The Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade

Country-Specific Policies

1853

Shore Nuisance Act (India)

1905

Bengal Smoke Nuisance Act (India)

1912

Bombay Smoke Nuisance Act (India)

Wild Birds and Animals Protection Act (India)

1927

Indian Forest Act (India)

1972

Wildlife Protection Act (India)

1974

Water (Prevention and Control of Pollution) Act (India)

1977

Water (Prevention and Control of Pollution) Cess Act (India)

1980

Forest (Conservation) Act (India)

1982

Environmental Management Act No. 4 (Indonesia)

1984

Water Pollution Prevention and Control Law (China)

1986

Environmental Protection Act (India)

1988

Motor Vehicles Act (India)

1989

Environment Protection Law (China)

1991

Land Code (Russia)

Law on Public Health (Russia)

Law on Land Use Fees (Russia)

Law on Environmental Protection (Russia)

1995

Prevention and Control of Solid Waste Pollution (China) – revised in 2004

National Environment Tribunal Act (India)

Law on Environmental Impact Assessment (Russia)

Law on Continental Shelf of the Russian Federation (Russia)

Forest Code (Russia)

Water Code (Russia)

Law on Use of Atomic Energy (Russia)

Law on Nature Reserves (Russia)
Law on Protection and Use of Fauna (Russia)
Law on Subsurface Resources (Russia)

1996

Law on the Radiation Safety of the Population (Russia)
Law on Land Improvement (Russia)

1997

Environmental Management Act No. 23 (Indonesia) – replaced Act No. 4
National Environment Appellate Authority Act (India)

1998

Law on Solid and Industrial Waste (Russia)

2000

Pollution Prevention and Control Law (China)

2002

Environment Impact Assessment Law (China)
Promotion of Clean Production Law (China)

2005

Renewable Energy Law (China) – amended in 2009

Possible Solutions

1. **Sustainable development:** exploring how countries may develop socially and economically while taking environmental concerns into consideration

The United Nations 2005 World Summit Outcome Document refers to the "interdependent and mutually reinforcing pillars" of sustainable development as economic development, social development, and environmental protection.

2. **Green development:** prioritizing the environment over social and economic concerns
 - Pursuit of alternative energy sources (hydroelectric, wind, nuclear etc.)
 - Protection of biodiversity and wildlife from human activity
 - Halting of all practices, economic, cultural or otherwise, involving deforestation and desertification

Bibliography

The Economic Impact of Environmental Regulation – Stephen M. Meyer
<http://web.mit.edu/polisci/mpepp/Reports/eier.pdf>

China, India and the Copenhagen Impasse
<http://www.eastwestcenter.org/news-center/east-west-wire/china-india-and-the-copenhagen-climate-impasse/>

Environmental Policies in China
<http://www.gapem.org/Text/China%20eco-efficiency%20managi.pdf>

Environmental Legislation in China (Mainland)
<http://www.teknologiateollisuus.fi/file/4045/Environmentallegislation-MainlandofChina-0811.pdf.html>

Treaties, Agreements and Conventions about the Environment
<http://www.chanrobles.com/environmenttreaties.htm>

Major Environment Concerns: State of Our Environment (India)
<http://indiabudget.nic.in/es98-99/chap1103.pdf>

Pollution Issues

Earth Summit
<http://www.pollutionissues.com/Co-Ea/Earth-Summit.html>

Treaties and Conferences
<http://www.pollutionissues.com/Te-Un/Treaties-and-Conferences.html>

ASEAN Environment
<http://www.aseansec.org/10371.htm>

Country Studies

Brazil
<http://countrystudies.us/brazil/25.htm>

Russia
<http://countrystudies.us/russia/25.htm>

Environmental Treaties

Database of Selected Environmental Treaties
<http://www.unescobkk.org/rushsap/environmental-ethics-resources/environmental-treaties/>