

CHAPTER TWO

FRMING THE ENVIRONMENTAL PROBLEM

Nature underpins human livelihoods both as a source of raw materials and as a sink for the disposal of our waste. The quality of the natural environment can be profoundly affected by human's unrestricted use of those nature resources (Boyce 2002).

The environment we call here comprises all living and non-living things that occur naturally on Earth or some part of it (e.g. the natural environment in a country). This term includes a few key components⁷:

1. Complete landscape units that function as natural systems without massive human intervention, including all plants, animals, rocks, etc. and natural phenomena that occur within their boundaries.
2. Universal natural resources and physical phenomena that lack clear-cut boundaries, such as air, water, and climate, as well as energy, radiation, electric charge, and magnetism, not originating from human activity.

2.1. Outlining the environmental problem

Environmental problems have been around for centuries. Beginning in the seventeenth century during the industrial revolution, science and technology were harnessed to produce new labor-saving devices, industrial machines, and goods for mass consumption. Manufacturing industries were fueled by great quantities of inexpensive natural resources and raw materials, many of which were located in colonial regions of the world. During the period of classic imperialism, the Europeans conquered and colonized “underdeveloped” territories, exploiting them for their resources and raw materials. Meanwhile, on the European continent, air, water, and soil pollution spread beyond local areas. The development of the gasoline-driven engine at the end of the nineteenth century shifted demand away from coal and steam to oil and petroleum-based energy resources. As industrialization spread throughout Western Europe and the United States, industrial pollution gradually became a bigger problem (Balaam and Veseth 2005).

⁷ Refer to http://en.wikipedia.org/wiki/Natural_environment. (accessed on May 10th of 2008)

Environmental damaging activity takes place everywhere. It was until 1960s that human being first recognized the great impact of economic development on environment and began to take it as a seriously political and economic issue.

2.1.1. Environment as a political issue

After the end of the cold war in the end of 1980s, environment was gradually becoming a security issue when the vice president of World Resource Institute (WRI) Jessica Tuchman Mathews advocated bringing environmental problem into the security issues in her report entitled *Redefining Security*, because recently the environmental problems, such as deforestation, shortage of water and desertification, happened everywhere which just the causes of those regional disputes and security threats⁸. In 1988, British Prime Minister Margaret Thatcher and Soviet Foreign Minister Eduard Shevardnadze gave speeches that connected the environment to concerns about global security. According to Shevardnadze, the environment is a “second front” that is “gaining an urgency equal to that of the nuclear-and-space threat”. The environmental issues have come into international society notice (Balaam and Veseth 2005).

The phrase “Environmental politics”, different culture and society would give it different meaning. For example, Environment politics in some society would be taken as an action to challenge status quo. East European nations in 1980s is another example, the content of environmental politics is against National Socialism from exploiting environment and eco-system to development industry and agriculture. For some Asian and African nations, they use environmental politics to challenge world order set by some developed countries to fight for their basic right to survive (Doyle 1998, 陳穎峰譯 2001). Generally speaking, environmental politics could be understood a measure to balance economic growth and environmental protection within a state and to maintain the security of environment and sustainable development of nature resource for human beings.

No matter how human beings look at environmental issues in different angle, the only solution in public sphere for those environmental problems is bringing them into political policy-making process. With the environment problems having gone from being local and

⁸ 蕭旻禎 (2004)。從環境政治觀點論地球暖化現象之防制-以 1997 年京都議定書為例。(未出版)。台北：中國文化大學政治學研究所碩士論文，頁 16。

often temporary to global and possibly permanent, it became more complex and multilayered, involving nation-states, many international organizations, NGOs, regional alliances, global agreements, business firms, and even individuals. No matter under what kind of political system or international political framework, the problem solving process involves the use of state power to make decisions about who gets what, when, and how in a global society (Balaam and Veseth, 2005). Many environmental problems, such as global warming, share the features that great number countries are involved, which differ substantially with respect to economic, political, environmental and other characteristics. These features make it difficult to coordinate environmental policies effectively in international level (Schmidt 2001).

In domestic politics, those who want to protect or deteriorate environment all need enough power to defeat their opponents to make the policy and implement it. For example, in some nations, political green parties have formed to influence state policy toward environmental-friendly direction.

2.1.2. Environment as an economical issue

Long before the rise of market economies, humans already relied on nature resources for their livelihood. Environment provides all kinds of service-supporting eco-system and sustains human being's survival. Under economic systems, production, distribution and consume all work within nature environment. During the process, it would produce waste and change the natural environment. Those waste and changes gradually overwhelm nature's capacity for resource renewal and waste assimilation, along with population growth and economic growth, and finally result in environment pollution and degradation.

The standard economics textbooks characterize pollution and natural resource depletion as impersonal 'negative externalities,' which means that the participants in the transaction process do not bear all of the costs, so social costs just slip through the fingers of the market's invisible hand. The standard theory of externalities provides a basic explanation for excessive pollution in the market economy. If a perfect competitive market exists externalities, an inefficient allocation of resources will emerge if nothing is done to address those externalities. For example, the factory owner doesn't have to pay external cost for his pollutant behavior during his production process. Under the function of market mechanism, he would produce more than the suitable quantity and that would bring a absolutely lost for the

society. The main reasons for those externalities are common property and nonexclusive. Environmental resources are common property which owned by nobody, so they can be easily overused by selfish individuals. Nonexclusive means that it is hard to prevent polluters from invading the environment or using those natural resources. To correct those externalities, economists propose following ways to remedy them: bestowing property right, government interventions and economic incentive tools⁹.

Bestowing property right: If possible, government can give property right to those common goods. Once those common goods become private property, user and polluter have to pay for the owner. Then, resources overconsumption, waste and shortage can be prevented.

Government interventions are in the form of regulation, such as command and control. The traditional neoclassical economists see regulatory measures as one mean for correcting allocation distortions in a market system, so command and control is the traditional way government use to deal with environmental issues. However, in command and control, polluters will be lack of motive to improve their pollutant behavior.

Economic incentive tools, such as price control (Pigovian Tax) and quantity control (emission trading), internalize the external costs through either a system of taxes on pollutant activities equal to marginal social damage or a system of tradable emissions permits that restricts aggregate pollution to the efficient level. These tools can guide abatement activities into a least-cost pattern at the same time. Therefore, polluters will be urged to improve their pollution behavior to get economic benefits.

Some economists argue that the human impacts on the environment without strict control would result in “the tragedy of commons”¹⁰. Some economists, advocating market economy, argue that human ingenuity, guided by price signals, will triumph over environmental constraints. The traditional economists are concerned with the problem of how scarce resources can be used to meet unlimited human desires; however, green economists are, in contrast, concerned with how human happiness can be maintained within ecological restraints (Wall 2006). There are many arguments that can be marshaled to suggest that economic expansion can be ecologically sustainable. More ecologically sustainable practices

⁹ 張清溪等著(2000)。經濟學理論與實際。四版上冊,頁 352-356。

¹⁰. The “tragedy of the commons,” described in a famous article by Garrett Hardin (1968), epitomizes the distribution-blind analysis of environmental degradation. Hardin proposed state regulation to safeguard the commons.

are being used to maintain economic growth because of green and environmental movement pressure.

2.1.3 The political economy of the environment

Politics involves the use of state power to make decisions about who gets what, when, and how in an international society. Politics is also a process of collective choice, drawing in competing and often conflicting interests and values, and political parties in domestic policy-making. Economics, according to the usual textbook definition, is about the allocation of scarce resources among competing ends.

Political economy includes not only economics thus defined, but also something more, as Boyce (2002) stated:

It is about the allocation of scarce resources not only among competing ends, but also among competing people. The distribution of wealth and income are treated as a peripheral issue in much of economics, but in political economy who has what is absolutely central. Distribution is relevant both normatively, in judging the desirability of economic outcomes, and positively, in understanding how economies work.

However, the term political economy has a long and rich history. In its earliest manifestations, it meant essentially economics; indeed, the two terms were basically synonyms in the 19th and early 20th centuries (Groenewegen 1987). Economics analysis and political analysis often look at the same questions, yet economic analysis focuses less on issues of state power and national interest but more on issues of income and wealth, as well as individual interest. In the present, political economy refers to a variety of different, but related, approaches to studying economic and political behavior, which range from combining economics with other fields, to using different fundamental assumptions which challenge those of orthodox economics, for example: political economy is most commonly used to refer to interdisciplinary studies that draw on economics, law and political science in order to understand how political institutions, the political environment and capitalism influence each other.¹¹

In environmental sphere, as Balaam and Veseth (2005) pointed out:

The fundamental dilemma of the environmental problem is the tragedy of the commons. The

¹¹ Refer to http://en.wikipedia.org/wiki/Political_economy (accessed on May 10th of 2008)

earth's stock of resources is limited - finite resources such as oil can be used up, living resources such as forests and fish runs can be overused and depleted. For the most part, the environment is a common good, one that is shared by everyone but owned by no one. As the tragedy of the commons explains, such goods are prone to abuse because of the selfish character of human nature. Actions such as industrial production and the overconsumption of manufactured goods and services that abuse the environment benefit the individual but may harm the community. Human nature drives us to seek individual benefit, even at the expense of the environment, if the costs are borne principally by others.

Many argue that the state should play a role in preventing or correcting the environmental tragedy of the commons. If society values the environment, but individuals abuse it, the state has to take corrective action. When environmental problems become global, the state's ability to deal with them breaks down. Even environmental concerned governments fall victim to the prisoners' dilemma¹² when it comes to global environmental problems. The prisoners' dilemma occurs when self-interest becomes a barrier to cooperation that is necessary to achieve collective benefits. Although voluntary cooperation is by definition welfare improving, individual countries may, as Congleton (2001) also pointed out, for two reasons, nevertheless failed by participating in an international environmental agreement. First, if some countries may not profit from environmental cooperation although they also contribute to pollution, they would not be in the negotiation. Second, each single government has an incentive to abstain from an agreement as long as the abstention wouldn't be breakdown the cooperation. It explains why it is so much harder to address global environmental problems than those problems that are confined to a single nation or locality, because states are usually more interested in generating wealth and power than they are in saving the planet (Balaam and Veseth, 2005).

Whether or not countries will participate in the international environmental negotiation would depend on the cost-benefit analysis. It is a crucial indicator for policy-makers to determine if their countries join the negotiation. There could be incentives for countries to involve in if expected costs of participation should not exceed the benefits a country expects to receive. Sometimes, the inability to determine exact costs and benefits associated with

¹² The prisoner's dilemma was originally formulated by mathematician Albert W. Tucker and has since become the classic example of a "non-zero sum" game in economics, political science, evolutionary biology, and of course game theory. Refer to http://en.wikipedia.org/wiki/Prisoner's_dilemma (accessed on May 10th of 2008)

action to address the international environmental issues makes international cooperation problematic (Anand 2004).

In the negotiation process of international environmental issues, some issues develop fast, but some are retardant. Some countries adopted aggressive position, but some feel apathy about the issues. One explanation adopted interest-based approach finds that the phenomenon mostly results from different national interests involving in the process¹³. Then, the explanation takes two possible national interests: ecological degradation and executive cost into analysis. According to different national interests, the national attitudes toward international environment negotiation can be divided into four types as table 2.1.

1. Type A: those countries with less ecological impact and low executive cost would be bystanders when international society adopts action to deal with global environmental issues.
2. Type B: Faced less ecological impact, however, when international society adopts control measures, those countries will pay more executive cost. They are inclined to be draggers.
3. Type C: Although executive cost is low, those countries faced high ecological impact will play the role as pushers in the international environmental negotiation.
4. Type D: With high ecological impact and high executive cost, those countries are inclined to be intermediates.

Table 2.1: The Interest-based national attitudes toward international environment negotiation

		Ecological Degradation	
		Low	High
Executive Cost	Low	Type A: Bystanders	Type C: Pushers
	High	Type B: Draggers	Type D: Intermediates

Resource: Sprinz and Vaahtoranta (1994)

¹³ Refer to Detlef Sprinz and Tapani Vaahtoranta, The Interest-Based Explanation of International Environmental Policy, 48 International Organization, 77,87 (1994)

The interest-based analysis indicated that developed countries and developing countries could not abandon the consideration of national interest in international environmental negotiation no matter how environment ethics influence global environmental consciousness. Although cooperation between countries is essential to properly address the environmental problem, the negotiation process will still be dragged by those countries in different attitudes.

In the domestic environmental issues, whether nation-states will be willing to commit themselves to environment protection depends if national development policy focus more on environmental protection or economic growth. In the policy-making process, domestic interest groups will also try to capture government policy to be favorable to them. In an authoritarian state, the process is prone to be controlled by privileged interest groups to make policy which is favorable to their business interests but unfavorable to the environment. When the political system becomes a more mature democracy one, various institutional arrangements will be developed to ensure the transparency and accountability of the policy-making process to prevent improper manipulation (Tang, S.-Y. and Tang, C.-P. 2000).

2.2. The evolution of international environment discourse: from conservation to sustainable development

During the past fifty years, the environment has increasingly become the subject of international politics. With more and more science researches published to warn the world that unrestrained economic development without environmental protection concerns has induced a serious impact on ecological environments on which human life depends, people gradually realize the importance of a profound environment and have an urgent demand to alleviate the conflict between economic growth and environmental protection. Recently, the idea of sustainable development has emerged to become the new mainstream paradigm to deal with the dilemma.

The global economy boomed for nearly 20 years after World War II, ultimately fueling the environmental movement (Clap and Dauvergne 2005). The events that gave urgency to the political movement toward global environmental concerns were the Euro-American experiences of the Great Depression of the 1930s, and World War II due to unrestrained economic competition, duplication of political contests and struggle for natural resources for

rapid industrialization (Stavis and Assetto2001).

During the 1950s and early 1960s, accidents and pesticides generated a sense of urgency leading to heated domestic and international debates. As early as the 1960s, this critical scientific approach of ecological thoughts, which had been marginalized in post-World War II environmental discourse, reemerged, partly in response to increased awareness of environmental disasters. The “*Silent Spring*”¹⁴ written by Rachel Carson in 1962 warned that the overuse of pesticides would have serious impact on the ecosystem. Her message can represent the main concern during these periods. The other representative thought was the 1968 Biosphere Conference which was sponsored by the UNESCO for a Rational Use and Conservation of the Resources of the Biosphere.

During the late 1960s and early 1970s, scarcity and population issues took center stage. Books like Paul Ehrlich’s *The Population Bomb* (1968) cautioned that population growth in the developing countries, spurred in part by its economic predicament, would threaten the globe’s resource base. He warned: “It is obvious that we cannot exist unaffected by the fate of our fellows on the other end of the good ship Earth. If their end of the ship sinks, we shall at the very least have to put up with the spectacle of their drowning and listen to their screams”. Another scientific warning would be *The Limits to Growth* (1972). Sponsored by the Club of Rome, *The Limits to Growth* addressed itself to “the human predicament,” including “poverty in the midst of plenty; degradation of the environment; loss of faith in institutions; uncontrolled urban spread; insecurity of employment; alienation of youth; rejection of traditional values; and inflation and other monetary and economic disruptions”(Meadows et al.1972). The study argued that if previous patterns of economic activity and environmental abuse continued, it would be the environment, not land, food, or other factors, that would limit global progress. However, there are some optimists who argued that human’s genius would conquer the limits of growth and would go into a new golden era. In Kahn’s 1976 book “*The Next 200 Years: A Scenario for America and the World*”, written with William Brown and Leon Martel, They presented an optimistic scenario of economic conditions in the year 2176 and thought that human ingenuity and technological innovation would likely lead to solutions for environmental problems before natural limits to growth were reached (Kahn et al.

¹⁴ The book stated that uncontrolled pesticide use led to the deaths of not only animals, especially birds, but also humans. Its title was meant to evoke a spring season in which no bird songs could be heard, because they had all died from pesticides.

1976, Kahn and Simon 1984)

In the 1960s and 1970s, extensive and intensive growth of the global economy resulted in increased attention to environmental problems. New military and production technologies revolutionized the marketplace for products, labor, and services, accelerating the rate of exploitation of natural resources. In addition, the abrupt dislocations caused by the energy crisis suggested that environmental changes could occur suddenly and that these were not necessarily within the capacity of experts to predict or manage (Stavis and Assetto2001). Global scientific and political ecologists of the 1960s and 1970s called for action to achieve a balance between human society and nature.

The wave of decolonization in Asia and Africa from the late 1940s to the late 1960s put many newly independent colonies on the global stage. They were eager to join the global economic institution to promote economic growth. It was a time of optimism, and many countries believed that development (often understood as rapid industrialization and economic growth) would follow automatically from participation in the global economy. However, by the late 1960s and early 1970s, many of those “developing” countries realized that replicating the industrialization of developed countries could not bring them economic growth. Critics from developing countries began to argue that the postwar global economic infrastructure still reflected colonial and imperial interests. It is because the developed countries were dependent on the developing countries for cheap supplies of raw materials, while developing countries were dependent on capitalist patrons to help their countries. For those developing countries, earning enough from raw material exports to purchase the capital equipment necessary to industrialize is extremely difficult. These unequal terms between developed and developing countries influenced the development of environmental concerns (Clap and Dauvergne 2005).

Development could no longer be considered a technical, self-reproducing process, but rather one requiring conscious political direction from state governments and international institutions to cope with the many conflicting demands of developed countries and developing countries, environment and development (Stavis and Assetto2001). Therefore, the international conferences were held to become the vehicle to put those issues into global stage.

2.2.1 The Stockholm Conference and 1970s

The United Nations Conference on the Human Environment, held in Stockholm, Sweden in June 1972, was the first global-level UN conference on the environment as well as the first world conference on a single issue. The initial purpose of the conference, announced in 1968 by the UN General Assembly, was to discuss “problems of the human environment” and “identify those aspects of it that can only, or best be solved through international cooperation and agreements.”¹⁵ The focus issue was on environmental problems, such as oil pollution and heavy metals, nuclear war, as well as marine mammals (especially whales), arising from industrialization which was the particular concern of developed governments. However, the focus was expanded to include broader development concerns to gain support of developing countries which care more about poverty. Later, the focus at Stockholm was on how to reconcile the economic development demanded by the South with the perceived need of the North to protect the global environment (Clap and Dauvergne 2005). Having considered the need for a common outlook and for common principles to inspire and guide the peoples of the world in the preservation and enhancement of the human environment, the Stockholm Conference has a famous slogan "Only One Earth".

The 1972 Stockholm Conference laid a foundation for the integrated consideration of environment and development issues, established a substratum of understanding especially between developed and developing countries upon which future progress was built and called for co-operation between states and ‘co-ordination’ of activities within and outside the UN system. The consensus is that economic development was the answer to environmental problems in developing countries, but underdevelopment and poverty of such underlying problems have to be addressed before the environmental problems to be focused on. Before then, many developing countries had expressed fear that the environmental movement was a neo-imperialist ploy from the West. At least, Southern developmentalists accepted the environment as an important but subordinate dimension of development (McCormick 1989). Developing countries’ participation at the Stockholm Conference was based on the understanding that environmental commitments reached at the conference would not be used to inhibit their economic development efforts.

The Conference resulted in four major initiatives at the normative, institutional, programmatic, and financial levels. The first initiative was the adoption of Stockholm

¹⁵ UN Resolution 2398.

Declaration which intended to ‘inspire and guide the peoples of the world in the preservation and enhancement of the human environment’¹⁶. The second was the establishment of a new institution within the UN, the UN Environment Programme (UNEP)¹⁷. The third was the adoption of an Action Plan with over 100 recommendations on Environmental Assessment (Earthwatch), Environmental Management, and Support Measures for the development of environmental policy. The fourth was the institution, by voluntary contributions, of an Environment Fund (Birnie and Boyle 2002). These measures were all “soft” international law- means that they did not legally bind the signatory state – yet they did signal a growing concern among national governments over the global environment. Much of international environmental law owns its foundations to the Stockholm Declaration. Principal 21 of the Declaration maintained that “states have, in accordance with the Charter of the United Nations and the principles of international law... the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction” (UN Doc. A/Conf.48/14/Rev.1,1973). It recognized both sovereignty and developmental concerns, and it is clear that transboundary environmental harm must be controlled (Birnie and Boyle 2002). Another major accomplishments following Stockholm was the establishment of Environment Ministries in most governments, but they have usually been marginalized from real centers of power, and under-resourced.

The second oil shock accompanied by global recession and renewed militaristic politics in the North; economically, this period was also a disaster in the South. The economic turbulence of the 1970s, such as rising interest rates and energy costs accelerated debt loads, relegated environmental issues to the less priority. Yet states still negotiated important global environmental treaties in this period, partly as a result of processes set in motion by the Stockholm Conference. They include the Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matter (The London Convention, 1972), the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES, 1973), and the Convention for the Prevention of Pollution by Ships (MARPOL, 1973).

¹⁶ See the Final Report of the Working Group on the Declaration is in UN Doc. A/CONF.48/14/Rev.1/Annex II.

¹⁷ It’s the first UN agency to be headquartered in a Third World-Nairobi, Kenya-and the first UN agency whose main function is to focus solely on the environment.

2.2.2 The Brundtland Report and the 1980s

In the 1980s, oil supplies gradually increased and oil prices declined or held steady, weakening interest in resource scarcity and environmental problems. National and international attention to environmental problems reached new heights of intensity and worry in responses to a number of problems and events shifted attention away from pollution to broader issues of ecological management. Just some of these events included the acid rain debates between the United States and Canada, the Chernobyl nuclear reactor incident in the Soviet Union, discovery of a hole in the ozone layer over Antarctica, the Exxon tanker Valdez oil spill in Alaska, and the possibility of greenhouse warming effects on the earth (Balaam and Veseth 2005).

During the 1980s, a new political and developmental paradigm emerged which appeared to reconcile these conflicting objectives. The UN General Assembly established the World Commission on Environment and Development (WCED) in 1984 to examine the relationship between the environment and global economic development. In 1987, the Commission published a report entitled *Our Common Future* which is commonly known as the Bruntland Report because the chair of the WCED was Gro Harlem Bruntland, Norway's prime minister. The report proposed a global development and environment strategy designed to be satisfying to all. It did not see further economic growth and industrialization as necessarily harmful to the environment, and did not foresee any necessary "limits" to growth (Clap and Dauvergne 2005) which shifted more attention to the connection between the environment and the survival of developing nations. It linked hunger, debt, economic growth, and other issues to environmental problems, which were optimistically understood as manageable through higher levels of global cooperation. The best way it proposed to solve these problems was to promote economic growth- not the kind of growth seen in the 1960s and 1970s, but rather environmentally sustainable growth. Therefore, The concept of "sustainable development" was set in the report to give an integrated approach to policy and decision-making in which environmental protection and long-term economic growth are seen not as incompatible but as complementary, indeed mutually dependent: solving environmental problems requires resources which only economic growth can provide, while economic growth will falter if human health and natural resources are damaged by environmental

degradation¹⁸. The report became the preferred vehicle for the institutionalization of sustainable development.

The sustainable development defined in the report was to “meet the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987:8). The consensus claimed to ensure the sustainability of the global economy without the need to recognize the limits to growth.

The achievements of Stockholm and Brundtland in heightening awareness and creating urgency for global action should not be dismissed. The successes were not inevitable but rather were the outcomes of hard-fought struggles. The concept of sustainable development as outlined by the Brundtland Report thus represents a compromise on the most urgent and divisive questions of growth, development, equity, and ecology. Institutional changes, environmental agreements, such as 1985 Vienna Convention for the protection of the Ozone Layer, 1987 Montreal Protocol on Substances that deplete the Ozone layer, the 1989 Basel Convention on the transboundary movement of hazardous wastes and their disposal, as well as other regulatory actions, have, consequently, proceeded to grow in quantity but not necessarily in quality during the 1980s (Stavis and Assetto2001).

2.2.3. The Earth Summit and 1990s

In the twenty years after the 1972 Stockholm Conference, there were major changes in the way to deal with the issues of economic growth, human development and environmental protection. Two international conferences serve only as landmarks. Where Stockholm was the first major discussion of environmental issues at the international level and adopted an issue-oriented approach to pollution and non-renewable resource depletion, Rio, however, emphasized integrated strategies to promote human development through economic growth, based on sustainable management of the natural resource base.

In 1989, the UN General Assembly, following the recommendations of the Brundtland Report, passed a resolution to hold another world conference on the Environment and Development (UNCED). The conference held in 1992 in Rio De Janeiro, Brazil and popularly known as the Earth Summit planned to address the issues included the ongoing debt crisis in

¹⁸Anonymous, Development and environment: From Stockholm to Rio. United Nations Chronicle. New York: 1997. Vol. 34, Iss. 2; pg. 36, 6 pgs

the developing countries, the collapse of the Eastern Bloc, and the accelerating pace of economic globalization.

During the conference, 179 national delegates, 115 heads of state, and more than 15,000 environmental NGO representatives primarily focused on sustainable development or ways to generate wealth and development while preserving the environment. Many developing countries worried about taking on additional environmental commitments without concrete assurances of economic assistance from developed countries to fund environmentally sustainable growth. They also wanted to ensure environmental technologies transfer without extra cost, as well as to ensure that industrialized countries would not be able to use environmental regulations to restrict developing-country exports. Debates over financial assistance and technologies transfers for sustainable development split along North-South Lines. Most countries in the North are industrial and rich countries, which have been the principal generators of industrial residues and also have been the main beneficiaries. Countries of the South also agree that global environmental problems need to be addressed, but they typically argue that the North should take the lead role in addressing global environmental problems. Thus, the Northern countries should provide additional assistance to help countries of South to avoid environmental problems (Anand 2004).

Most analysts agree that the UNCED did achieve some notable success, especially in terms of raising environmental awareness among the general public in both the North and South of the world, although the North and South have different concerns. After the 1992 World Summit, Northern countries pay attention to environmental pollution, ozone layer depletion, and the control of hazardous waste; however, Southern countries care more about capital, technology, and transboundary hazard transportation to third world nations.

Several important principles, such as sustainable development and common but differentiated responsibilities, laid down in the Declaration of the 1992 Rio Conference started as parts of soft law and are now evolving into international norms.

The main outcome of the 1992 Rio Conference was putting together environment, development, and global environment problems on the agendas of global leaders. Participating governments adopted and signed the Rio Declaration on Environment and Development, a set of twenty-seven principles outlining the rights and responsibilities of states regarding the promotion of environment and development. Agenda 21 (a plan of action

for the achievement of sustainable development and reaffirmed the Brundtland Report's central message: socio-economic development and environmental protection are intimately linked and effective policy-making must tackle them together), a 300 page action program to promote sustainable development, laid out plans for states, IOs, NGOs, and private sector groups to achieve new goals in a variety of different issue areas connected to environment. The Rio Summit also produced a treaty on climate (UNFCCC) that seeks to reduce greenhouse gas emissions, a treaty on biological diversity (Convention on Biological Diversity), and a nonbinding Statement of Forest Principle. Further, the conference established the UN Commission on Sustainable development (CSD) to implement the Rio accords into action. Not Until then did sustainable development secure general support as the leading concept of international environmental policy. Most experts also agree that those important agreements, such as the CBD and UNFCCC, have resulted in limited progress toward the objective of sustainable development.

2.2.4. Johannesburg and Beyond

Economic globalization accelerated in the years following the Rio Earth Summit. Trade and investment as a proportion of the economies of both rich and poor countries grew notably. World Trade Organization (WTO), established in 1995, has more power to enforce decisions in dispute settlement. It seems that trade goal has priority above other issues in the global arena. Economic inequalities have grown since Rio as well, in the view of some a direct result of globalization (Clap and Dauvergne 2005). A global coalition of non governmental forces emerged in the late 1990s to oppose globalization. The antiglobalization sentiments of activists, as well as the steadfast support for globalization among governments and international economic institution, were continually in the background during the preparations for the 2002 World Summit on Sustainable Development (WSSD) (Clap and Dauvergne 2005).

The goal of the WSSD (commonly called Rio+10), held in Johannesburg, South Africa, 10 years after the Rio Earth Summit, was to continue examining the sustainable agendas, promises and proposals made in the 1992 Rio Conference. Over 180 nations and 100 heads of state, as well as over 10,000 delegates, 8,000 civil-society representatives, 4,000 members of the press, and countless numbers of ordinary citizens attended the meeting.

Although there still remain disputes between the UN members in how to implement those agendas in the conference, consequently, two important documents have finally been passed in the process to be the framework for states to promote sustainable development policy: one is Johannesburg Declaration on Sustainable Development, which outlined both the challenges and general commitments for the global community, and the other is the Johannesburg Plan of Implementation, an action plan for implementing these goals. The Commission on Sustainable Development (CSD), created after Rio, was reaffirmed as the agency that would monitor progress on this implementation. A number of governments have since adopted sustainable development as their national development objective. The evolution of international environmental discourse influences domestic environmental consciousness development, and later environmental policy.

Since the 1992 Earth Summit, relations between the economy and the environment have received increased attention, as reflected in the debates over the World Trade Organization (WTO) and the proposed Multilateral Agreement on Investment (MAI) (Stavis and Assetto 2001).

2.3. North-South environmental debates

In light of the stark differences between the North and South¹⁹ countries in their quality of life indicators and income discrepancies, there should be a large divergence in their standpoint regarding the international environmental issues, just as Koenig's model shows the difference between the developmental and ecological agendas of the North and South (Koenig 1995). Environmental problems of the North are the result of "over-development, extravagant consumption of fossil fuels, and unrestrained demands for ever larger quantities of goods and services," and in contrast environmental problems in the South are a result of Poverty (Dwivedi and Vajpeyi 1995). According to Koenig, while countries of the North focus on protecting monetary interests, affluence of lifestyles and the welfare stage, countries of the South aim at overcoming poverty and achieving ecological agendas (see Koenig's

¹⁹ The term 'South' and 'North' are adopted from Anand's definition. 'South' is not just a geographic term, e.g. countries of Asian, Africa and Latin America, but is a term that reflects the determined social and economic conditions resulting from their colonial and imperial past. The relationship between the South and North countries is that the South is economically weaker and more vulnerable to the economics of the world system. Due to their subservient economic standing vis-a-vis the North, they are also politically weak. see Anand (2004,p1)

model in table 2.2)

Table 2.2: Northern and Southern Agenda

	Development Agenda	Ecological Agenda
Northern Agenda	Safeguard monetary interests, affluent lifestyles and the welfare state	Prevent environmental catastrophe
Southern Agenda	Overcome poverty, achieve high Standards of living	Sustain local environment

Source: Koenig (1995)

Inequality in wealth and prosperity between the North and South became the centerpiece of the new problems and issues in the post-war international economic order and the negotiation of the international environmental problem (Anand 2004). The problems stemming from incompatible North-South ecological and development agendas are accentuated in a global capitalist economy, dominated by neo-liberal ideals-some of these principles are: growth in GNP (Gross-national product) and free unregulated markets. After the 1950s, decolonization in various countries in Asia, Africa and Latin America resulted in those countries - experiencing tremendous and complex social, economic and political problems which can now be attributed to either the devastating social and economic impacts of colonialism or the dependent relation with their former colonizers. This led to the embeddedness of the South in a world economic system where they stand on unequal political and economic grounds.

The global environmental agenda, spearheaded by the countries of the North which have dominating positions in the globalized economy, has been more concerned with issues that affect Northern countries most directly. Issues such as marine pollution, ozone depletion, global climate change, biodiversity and deforestation are at the top of their list. On the other hand, countries of the South have not very successful in gaining prominence on environmental problems that directly affect them (Hurrell and Kingsbury 1992). However, each of these debates addressed the question of the coexistence of environmentalism and economic growth and the need for cooperation, fairness and equity between North and South

countries.

These interest divergences and inequities of economic power between the North and South are reflected in many international areas including the functioning of international negotiation on environmental issues. There has been tremendous opposition to many international global agreements and efforts since they do not adequately mirror the interests of countries of the South. There arises a need at the international level to evaluate the process of agenda setting from the perspective of countries of the South, which have been distanced from the mainstream economic and international law-making system of the whole world.

Besides, countries of the South typically argue that the North should afford more responsibilities to address global environmental problems. Their argument is backed by the claim that developed countries have been the principal generators of those industrial residues (such as carbon dioxide emissions and hazardous wastes) since the industrial revolution, and they have also been the main beneficiaries. Countries in the South have made a case for receiving assistance from the North in order to avoid diverting their limited resources from development to environmental issues. Countries of the South are now searching for the link between environment and development as the foundation for a just and equitable international environmental order (Hurrell and Kingsbury 1992). Recently, almost all international environmental conferences can consider the different conditions of the North and South and put concerns of the North and South on the negotiation table to call for more countries to join the efforts to protect global environment.