Northeast Asia Environmental Cooperation: Progress and Prospects

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1. INTRODUCTION

The Northeast Asian region is undergoing an unprecedented speed and scale of environmental degradation. The air qualities of major cities are worsening every year. The Yellow Sea, the East China Sea, and the East Sea are suffering from serious pollution and depletion of resources. Some areas are suffering from deforestation and decertification. Environmental pressure from the ever-growing population and fast industrialization process has reached a critical point.

As noted in the Rio Declaration, international cooperation at the regional or sub-regional level is crucial to building an effective control mechanism for environmental problems, especially for transboundary issues.

In the Asia-Pacific region, there are several sub-regional environmental cooperative institutions at intergovernmental levels. These include ASEAN Senior Officials on the Environment (ASOEN), South Asia Cooperative Environment Program (SACEP), South Pacific Regional Environment Programme (SPREP), and Lower Mekong Basin Development Environment Program (LMBDEP). However, in Northeast Asia, it was not until 1993 that an intergovernmental forum on environmental cooperation was established.

The main hindrance to the establishment of such a forum came from the military and political confrontation which had dominated international affairs in Northeast Asia. The end of the Cold War made it possible to form a forum for regional environmental cooperation. As a result its of aggressive "Northern Policy," the Republic of Korea established diplomatic ties with the USSR and the People's Republic of China. The participants in the Northeast Asia environmental cooperation, Republic of Korea, People's Republic of China, Japan, Russia, and Mongolia, now have diplomatic ties with each other. The regional environmental cooperation is emerging as one of the top priorities in the region. One reason, among others, is the potential seriousness of the transboundary pollution problem. As industrial activity grows and the amount of pollutants increases in each country, the pollutants which travel across borders also increases. This inevitably leads to a need for international coordination of policies regulating the emissions of pollutants.

Trends toward economic interdependency in Northeast Asia also have important implications for environmental cooperation in the region. As the economic interdependency within the region grows, Northeast Asian environmental cooperation is expected to get more impetus. At times, environmental cooperation is even considered a part of a broadly defined regional economic cooperation. The North America Free Trade Agreement was a precedent to this case. As the underdeveloped or undeveloped areas in Northeast Asia experience development, environmental degradation follows. For instance, the development of the coastal areas of China is induced by investment from Western countries, including Japan. Industrialization in this area, with lax environmental regulations and insufficient environmental investment, generated a highly pollution-intensive economy. In the Russian Far East, the development of forested areas by foreign firms may cause environmental damage to the ecosystem.

The regional environmental cooperation would be more effectively and efficiently achieved when it is integrated with economic cooperation. This paper attempts to understand the regional environmental issues in an economic context. It also attempts to predict the future of Northeast Asian environmental cooperation from the viewpoint of economic development and economic interdependency in the region.

2. THE ECONOMIC/ENVIRONMENTAL STATE OF COUNTRIES IN THE REGION

(1) THE REGION

Geographically and ecologically, Northeast Asian countries are mutually interdependent. According to the International Geosphere-Biosphere Programme (IGBP), the Asia-Pacific region is segmented into several ecological sub-regions: Temperate East Asia, Tropical Asia Monsoon Region, Central Arid Asia, and Oceania. These sub-regions roughly correspond to Northeast Asia, Southeast Asia, Central Asia, and the Oceania, respectively. Northeast Asia, composed of eastern, southern, and northeastern China, Eastern Siberia, the Korean Peninsula, and Japan, is the most vulnerable sub-region. This sub-region is not only in the midst of a rapid industrialization process, but also is one of

the most densely populated areas in the world. This may imply that this sub-region will be the most rapidly polluting area in the world.

(2) ECONOMIC/ENVIRONMENTAL OVERVIEW OF THE REGION

The environmental pollution level is determined by population, area, economic activity level, pollution intensity, and natural assimilative capacity.

1) Per Capita GDP

As mentioned by many economists, environmental pollution is most severe in middle-income countries. Since low income countries are usually undeveloped countries, there exist few pollution problems stemming from industrialization. When an economy begins the process of industrialization, environmental degradation proceeds quickly, due to the fact that the implicit relative price of environmental service is low. More concretely, low income countries usually adopt a low level of technology with low energy efficiency and high pollution intensity, and also lack the institutional and financial capacity to cope with environmental problems. Therefore, countries in the initial stage of industrialization have high pollution intensity and high income elasticity of pollution, thus causing the environment to degrade even faster until a certain level of development and income is reached.

In this regard, a country's economic/environmental development has three stages. Stage I is characterized by low income, low economic growth rate, and low environmental pollution. Stage II is characterized by middle income, high economic growth rate, and high environmental pollution. Stage III is characterized by high income, low economic growth rate, and low or stabilized environmental degradation. Of course, this pattern does not apply to every pollutant. For global environmental issues such as CO2 emission, countries in Stage III have stabilized emission growth rates, but still are the most serious sources. This pattern fits well for the SOx and TSP in the air, and COD or BOD level of water.

Mongolia and the Russian Far East belong to Stage I, and Japan is in Stage III. Korea is just coming out of Stage II, while China is entering Stage II. Thus, Northeast Asia is very heterogeneous in its composition.

2) Population, Area, and Population Density

China is the largest in population, which implies that China is potentially the most important economic and environmental factor in the region. Since China's area is also the largest, China's population density, 118.6, is a medium level. However, China's population is concentrated in the coastal areas, and thus the population density in these regions is as high as other densely populated countries in the region. Korea is the smallest in area, but its population density is the highest in the region. High density of population implies that there is a high risk to human health from environmental pollution, all other things being equal.

3) Pollution Intensities (Pollutant Emissions/GDP)

Pollution intensities of an economy are defined as quantities of pollutant emissions divided by GDP. They indicate the economic-technical characteristics of an economy. Since we do not have a well-defined weighted average index of pollution, the pollution intensity is defined for each major pollutant, such as CO2, SOx, NOx, or TSP for air quality, and COD or BOD for water quality.

As shown in Table 2, the pollution intensities are very high for China. For China, the SOx intensity is 40.1 tons/$million, the TSP intensity is 57.7 tons/$million, the NOx intensity is 16.6 tons/$million, and the CO2 intensity is 1.4 tons/$thousand.

On the other hand, Japan has a quite low pollution intensity. Japan has an SOx intensity of 0.6 tons/$million, a TSP intensity of 0.1 tons/$million, an NOx intensity of 0.8 tons/$million, and a CO2 intensity of 0.2 tons/$thousand.

Korea is in the middle of the two countries. Korea's SOx intensity is 6.8 tons/$million, TSP intensity is 1.8 tons/$million, NOx intensity is 3.9 tons/$million, and CO2 intensity is 0.28 tons/$thousand.

(3) Brief Review of Each Country's Environment and Environmental Policy

1) China

China achieved rapid economic growth in the 1980s (average annual growth rate of 9.6%), and is experiencing serious environmental pollution and ecosystem degradation. Industrial liquid waste is the major source of water pollution. The treatment ratio of industrial liquid waste is 63.5%, while municipal sewage is discharged without treatment. The air is seriously polluted by the combustion of coal in industry and home heating. Most industrial waste and hazardous waste is dumped into sites located in suburbs and riversides, thus inducing secondary pollution. With regard to the ecosystem in China, the land is environmentally overloaded, grasslands are deteriorating, forests are in shortage, the marine environment is degrading, and the population of scarce and endangered species are decreasing.

The major cause of environmental pollution and degradation is rapid industrialization and urbanization. In 1989, 450 cities existed in China, and its non-agricultural population amounted to 150 million. The backwardness of industrial technology, low energy efficiency, unreasonable industrial location, and unsatisfactory corporate and environmental management have contributed to the environmental problems.

To combat environmental challenges, China has established environmental conservation as a backbone of national strategy, and environmental conservation is being integrated into the national planning of economic development. Specifically, pollution prevention is considered the top priority in decision making, and the policy of holding polluters responsible for environmental management has been adopted.

As a more action-oriented policy, the "Three Stage Simultaneous Action System" was established and implemented. This policy dictates that for all new construction, innovation, and expansion projects, pollution prevention and control facilities should be designed, built, and operated simultaneously. Other policies include a responsibility system for environmental protection targets, a quantitative check-up system on the protection and improvement of the urban environment, a pollutant discharge permit system, a centralized pollution control system, and a deadline system for pollution control.

2) Japan

During the 1960s and 1970s, rapid growth within the heavy and chemical industries served as the primary driving force of economic growth, resulting in serious environmental pollution and damage to the natural environment throughout the country. These included the Minamata disease and Yokaichi asthma.

To cope with the environmental crisis, control measures were gradually introduced. First, they were led by the initiatives of the local governments and the citizens, by promulgating bylaws and agreements regarding the control and prevention of pollution, or by obtaining court judgements favorable to the pollution victims.

Following these initiatives and movements, in early 1970s a framework for environmental administration at the national level was established. It included the enactment of numerous pollution-related laws by the "Pollution Diet" of December, 1970, and the establishment of the Environment Agency in July, 1971, in order to execute administrative measures in an unified way.

In addition, industries also made important efforts in order to meet the imposed regulations, as well as to improve their manufacturing process into an environmentally sound style.

Presently, the environmental status of Japan is greatly improved. Japan has established a remarkable record, combining substantial improvements in its domestic environment with unprecedented levels of economic growth.

3) Korea

During the 1960s and 1970s, Korea's economic policy focused on rapid growth through industrialization. This gave rise to various environmental problems, because the harmony between economic progress and environmental preservation was neglected. When pollution became serious in the 1970s, the government decided to set up an agency dedicated to environmental issues, and in 1990, the Environmental Agency was established. At the same time, the government introduced or revised relevant laws and regulations, and increased investment for the environment. However, the pollution problem continued to worsen while the demand for a comfortable environment continued to rise. In response, the government inaugurated the Ministry of Environment in 1990.

The government worked hard to improve water quality, air quality, and waste management, and achieved remarkable results. However, the environmental status of Korea still needs to be improved. First, there is pollution of rivers and water resources. Korea has 600 water sources, half of which are dams or main rivers. They are polluted by industrial, household, and agricultural activities, including livestock raising. Recently, resort areas, which are usually located at the upstream areas of rivers, have aggravated the situation.

Second, Korea has an air pollution problem in large cities and industrial complexes. The SOx and NOx emitted from factories, home heating, and the rapidly increasing number of automobiles are the main culprits of air pollution. In fact, coal briquettes account for the largest portion of home heating in Korea, and as many as 36% of Korean automobiles burn light fuel oil, both significant sources of air pollution.

The third is the problem of waste treatment. Korea has the highest per capita rate of waste production (2.32 kg/person/day, 1991). This is due to the fact that a disproportionate number of Korean households still depend on coal briquettes for heating, and that the use of disposable containers and packaging has increased as a result of higher income. As of the end of 1990, approximately 61,000 tons of industrial waste was generated in Korea every day. For urban areas, it is hard to secure sufficient landfill areas for industrial waste.

To create conditions for economic growth while guaranteeing a comfortable environment for the people, the government set up the medium-term comprehensive plan for environmental improvement. Up through 1996, 8.7 trillion won will be invested in various fields of environmental preservation, including air, water, and waste management.

4) Mongolia

The environment of Mongolia has been deteriorating during its 30 years of rapid economic development. Mongolia's environmental concerns are the preservation of water and air quality, land

conservation and management, and the conservation of biodiversity. Mongolia's special interest lies in the protection of pasture land area.

5) Russia

Russia's environment problem is serious, especially in air pollution and waste management. Air pollution in industrial and urban areas is serious; in the 84 cities in the Russian Federation, air pollution exceeds ten times the environmental standard. Air pollution causes 20-30% of industrial illness.

Russia set major policy goals for ecosystem preservation, focused on institutional restructuring. It includes the strengthening of the environmental legal system, gradual improvement of its processes and products toward international standards, an economic incentive system to promote the introduction of new technologies in resource and nuclear power, and environmental impact assessments on all projects.

3. THE PROGRESS IN THE NORTHEAST ASIAN ENVIRONMENTAL COOPERATION

(1) OVERVIEW

Environmental cooperation in Northeast Asia is being pursued in three different channels.

1) Fully Intergovernmental (Diplomatic) Channel

This channel was established by the initiation of the Ministry of Foreign Affairs of the Republic of Korea and the ESCAP. The first meeting was held in February, 1993. There has not been much progress in this channel of cooperation.

2) Cooperation Among Environmental Agencies

The first meeting was held in October, 1992, in Niigata, Japan, and the second meeting was held in Seoul in September, 1993. The third meeting is scheduled for September 28-30, 1994, in Hyogo, Japan.

3) Non-governmental Channel

This is an offspring of the 1992 Seoul International Environmental Symposium held in September, 1992. The second symposium was held in Irkutsk, Russia, and the third meeting was held in Alaska in August, 1994.

(2) HISTORICAL DEVELOPMENT

1) Korea-Japan Symposium on Environmental Science and Technology

The necessity of environmental cooperation in the Northeast Asian region was initiated in the Korea-Japan Environmental Symposium on Science and Technology, which was held three times during the period of 1988-1991. The first meeting of the Korea- Japan Symposium was held in Seoul, Korea in October, 1988, and the second meeting was held in Kitakyushu, Japan in April, 1990. Although the main theme of the symposium was the exchange of scientific and technological information, it undoubtedly contributed to the development of a more comprehensive mechanism for Northeast Asian environmental cooperation. Chinese environmental scientists participated in the symposium and presented papers on indoor air pollution problems in China. In the third meeting, held in Seoul in May, 1990, health experts of Mongolia, USSR, and China participated through the mediation of

WHO. It was the first incident where environmental experts from governments or non-governmental agencies of five countries gathered together. A Korean participant suggested creating an institutional mechanism for Northeast Asian environmental cooperation. However, an official of the Ministry of Environment of Japan suggested that existing institutions such as ESCAP or APEC could deal with the issues.

2) Korea's Initiative

In 1992, the concept of Northeast Asian environmental cooperation took on new impetus. The new circumstances were brought about by the collapse of USSR and the advent of the non- communist Russian Federation, Korea's newly established diplomatic ties with China and Russia, and the active facilitation of UNEP and UNDP. Also the active role of Korea, located at the geographical center of Northeast Asia, cannot be underestimated. In the Rio Conference in 1992, Prime Minister Chung Won-Shik of Korea emphasized that a Northeast Asian environmental cooperative body is necessary to address environmental problems in the region.

3) Non-governmental Symposium (1992 Seoul Symposium and 1993 Irkutsk Symposium)

In August, 1992, the Seoul Symposium on UNCED and Prospect on the Environmental Regime in the 21st Century, a follow-up action to the Korean Prime Minister's initiative in Rio, was held in Seoul, Korea. The Seoul Symposium was hosted by the Korea Environmental Science Research Council, a non-governmental institution. The third day of the conference was dedicated to discussions on Northeast Asian environmental cooperation. At the end of the conference, Korea, Japan, China, Mongolia, and Russia adopted a declaration concerning an informal network for Northeast Asian environmental cooperation and other matters.

In August, 1993, the second meeting of the Symposium on Northeast Asian Environmental Cooperation was held in Irkutsk, Russia.

4) The Northeast Asian Conference on Environmental Cooperation (NEACEC)

In October, 1992, the first meeting of the Northeast Asian Conference on Environmental Cooperation was held in Niigata, Japan. In this conference, the parties agreed to hold the Northeast Asian Conference on Environmental Cooperation every year. The second meeting was held in September, 1993, in Seoul, Korea.

5) Northwest Pacific Action Plan (NOWPAP)

The first experts' meeting of NOWPAP was held at Vladivostock. Korea, Japan, the USSR, and China participated. The parties confirmed the water area applicable for the NOWPAP, and also agreed to submit their respective reports on the state of the marine environment. The second NOWPAP expert meeting was held in Beijing in October, 1992, and the third meeting was held in Bangkok in November, 1993. North Korea participated in the second and third meetings. The first intergovernmental meeting and the fourth expert meeting was held in Seoul in September, 1994.

6) The First Senior Official's Meeting on Environmental Cooperation in Northeast Asia (SOM-ECNEA)

In the late 1980s, Northeast Asian environmental cooperation started as a loose, informal dialogue which was not at a fully intergovernmental level. A fully intergovernmental level forum was established when the Senior Officials Meeting on Environmental Cooperation in Northeast Asia was held in February, 1993, in Seoul. It was the first intergovernmental dialogue to establish a comprehensive mechanism for environmental cooperation in Northeast Asia. It intended to establish

an integrated cooperative mechanism to give assistance to UNDP, UNEP, and national projects in the region. The meeting adopted three priority areas: energy and air pollution, ecosystem management, and capacity building. In the recommendation finally adopted, the parties strongly supported the promotion of a mechanism for Northeast Asian environmental cooperation, and recognized that the cooperation should be matched to the characteristics of the region, and mentioned that more concrete projects are expected to be proposed by the participating countries. After the meeting, the participating countries submitted their proposals for projects for the three priority areas based on the recommendation. The ESCAP Secretariat received those proposals and prepared a report.

4. EACH COUNTRY'S POSITION ON NORTHEAST ASIAN ENVIRONMENTAL COOPERATION

(1) CHINA

1) The First NEACEC (Niigata, October, 1992)

According to Xia (1992), China's position is based on the five principles for international cooperation in environmental issues and development, as addressed by Premier Li Peng in Rio: the integration of economic development and environmental cooperation; common but differentiated responsibilities for global environmental conservation; respect of sovereignty in international cooperation; the emphasis on world peace in attaining economic development and environmental conservation; and the simultaneous consideration of the short-term interests of each country and long-term global interests.

With regard to Northeast Asian environmental cooperation, it was emphasized that both bilateral and multilateral forms of cooperation should be strengthened. The cooperation activity should be focused on the urgent regional environmental issues of industrial pollution, soil erosion, decertification, decrease of crops, marine pollution, and depletion of marine resources. All the countries in the region are responsible for environmental conservation in the region, but Japan should contribute more technical and financial assistance for the regional environment.

China suggested several projects for regional environmental cooperation:

1. An informal mechanism for regional cooperation and communication - this mechanism would facilitate periodic meetings, exchange of environmental information and experience, review of progress in cooperation, etc.
2. Enhancement of exchange of information and personnel - this includes the areas of environmental management, legislation, pollution control, monitoring and data collection, resource accounting, pricing policy, and economic incentives.
3. Joint research program - hazardous wastes, acid rain, and environmental management.
4. Pilot project - It was suggested that pilot environmental projects be established in developing countries with financial assistance from developed countries. Projects may include desulphurization facilities in power plants, toxic and hazardous wastes treatment facilities, and the prevention and control of lake eutrophication.

China also suggested cooperation in marine pollution prevention, to be financed by international institutions and developed countries.

2) The First SOM Meeting (February, 1993)

In the Senior Official's Meeting in 1993, China welcomed the establishment of a dialogue channel for

environmental cooperation in Northeast Asia and hoped that such a dialogue would be continued and further developed. However, China was quite sensitive to transboundary environmental issues. China was more interested in technology transfer and financial assistance mechanism building, rather than joint research and monitoring systems for transboundary air pollution, in which Korea and Japan showed interest. China emphasized the spirit of Agenda 21, and insisted that private firms should also be encouraged to transfer their technology to developing countries. China proposed a joint research project for clean coal combustion technology. China also suggested that the participation of North Korea would be desirable at the next SOM meeting.

3) The Second NEACEC (Seoul, September, 1993)

Following Mr. Cheng Weixu of NEPA of China, NEPA is very positive on regional environmental cooperation. Specifically, the official channel among environmental agencies will be emphasized. He indicated that China's priority issues for regional environmental cooperation in Northeast Asia are environmental management (especially policy implementation for economic incentives), clean coal combustion technology, and joint research on air pollution and acid rain.

(2) JAPAN

1) The First NEACEC (Niigata, October, 1992)

A Japanese delegation explained that environmental issues and development are the most appropriate and ideal areas of international cooperation that Japan can contribute to. At the Rio Conference, Japan promised to give 900-1,000 billion yen of environmental ODA to support environmental projects in developing countries for the next five years. Japan is already carrying out various projects of cooperation in environmental technology, such as the training of environmental personnel of developing countries, and dispatching Japanese environmental experts to developing countries, facilitated by the Ministry of Foreign Affairs and JICA.

With regard to the establishment of a forum for regional environmental cooperation in Northeast Asia, Japan preferred to start with the exchange of information and knowledge, and then to gradually move to policy-oriented dialogue on common environmental concerns and other issues on sustainable development. It was suggested that a central secretariat be established for efficient administration, and that operation of meetings and sub-committees be organized to handle concrete issues. Japan suggested that the establishment of a framework for the implementation of regional cooperation would take several years, and would not be accomplished in a short period.

Japan suggested four priority areas: regional marine conservation, acid rain, natural conservation, and air/water pollution. Japan proposed establishing a regional network on the environment. It would provide long-term, continuous, close and voluntary multilateral communication systems. A Japanese delegation indicated that a secretariat for this network is desirable in the long run, to publish periodical newsletters, to administer an operating committee, to prepare databases, etc.

2) The First SOM Meeting (Seoul, February, 1993)

The government of Japan welcomed the intergovernmental meeting and recognized the necessity of having a continuously open channel on the Northeast Asian environmental cooperation. It was also sympathetic to the need for regional cooperation based on global consensus, according to Agenda 21, the Rio Declaration, and the United Nations General Assembly Resolution.

However, Japan expressed the view that a regional environmental cooperative body should not become just another channel of finance and/or assistance. Rather, according to Japan, it should deal

with projects such as joint monitoring of the regional state of the environment and transfrontier pollution problems in order to satisfy the mutual interests. Also, Japan emphasized that such projects should not duplicate Japan's existing bilateral or multilateral assistance projects. Participating countries in the region should not act as donors or recipients of assistance; rather, each participating country should bear equally the responsibility for regional environmental cooperation.

With regard to the Niigata Conference in October, 1992, the Japanese delegation (Ministry of Foreign Affairs) declared that the proposal of the official of the Ministry of Environment of Japan did not represent the official position of Japan. Furthermore, the Japanese delegation opposed a forum on regional environmental cooperation composed of officials of environmental agencies, because regional environmental cooperation cannot be performed without consulting the economic departments of each country.

However, Japan stated that environmental concerns are considered a top priority when ODA is provided. The UNEP Environmental Technology Center in Osaka and Shiga, Japan, can be utilized for technical cooperation in the region. When environmental projects are implemented, it is necessary to avoid redundancies with existing bilateral and/or multilateral projects.

Regarding the First SOM Meeting, Japan emphasized the importance of pollution prevention rather than pollution control and treatment, and expressed the view that discussions on a new institutional mechanism is premature. Japan suggested that it was desirable to plan and implement feasible joint programs, such as transfrontier air pollution, acid rain, marine pollution, joint monitoring, information exchange network, and other joint research.

Japan reserved its opinion on the enhancement of non- governmental dialogue. Japan opposed the strengthening of the forum among environmental agencies.

3) The Second NEACEC (Seoul, September, 1993)

Japan (Ministry of Environment) refrained from comments on institutional mechanisms; rather, it concentrated on the specific projects that it considers priority areas. With regard to financial and technical assistance, it explained the activity of JICA.

For regional cooperation in Northeast Asia, Japan appreciated the accomplishments of ECOASIA. Also, Japan announced that an Expert Group on Acid Rain Monitoring Network in East Asia would be organized for September 26-28, 1993. Japan emphasized the importance of promoting the monitoring of acid rain . The conference will focus on reviewing current policies and measures on the acid precipitation problem, the state of acid precipitation and its effects on ecosystems, methods of monitoring acid precipitation, and the exploration of ways to promote regional cooperation with a view to forming a monitoring network in East Asia.

The Japanese delegation categorized the issues of Northeast Asia's environmental cooperation into two groups: the transboundary pollution problem, and the domestic experiences to be shared.

(3) KOREA

1) The First NEACEC (Niigata, Japan)

Korea appreciated the Korea-Japan Environmental Symposium and the establishment of an informal network for Northeast Asian environmental cooperation in the Seoul Symposium of 1992. Korea also emphasized the importance of cooperation among the countries in the region to attain sustainable development in Northeast Asia.

2) The First SOM Meeting (Seoul, February, 1993)

Korea expressed deep concerns about the environmental situation in the Northeast Asia, and emphasized the necessity of regional cooperation to cope with global environmental problems and to improve the environment in the region. Korea recognized that regional cooperation should include both technical cooperation projects, as preferred by China, and environmental management projects such as a joint survey of the environment, as preferred by Japan. Korea attempted to arbitrate between China and Japan, inducing a compromise agreement on the top priority area of "energy and air pollution," which combined China's energy technology projects and Japan's air pollution projects. Korea expressed its wish to establish a coordination mechanism for environmental assessment and management and mutual interests. Korea suggested that such a program would assure financial resources and an institutional mechanism for the implementation of regional cooperation projects, and expected the active participation of international institutions such as UNDP and ADB in the initial stage of financial resource mobilization. Korea's priority areas included transboundary air pollution, marine pollution, capacity building, technical cooperation, and waste management. The Korean government encouraged informal or non- governmental channels for environmental cooperation in the region.

3) The Second NEACEC (Seoul, September, 1993)

Korea suggested that the many conferences and symposia on Northeast Asian environmental cooperation should be harmonized. Korea also recognized that, despite frequent discussions, there have been no concrete results as of yet. In this regard, the conference, "Exploration of Joint Research Topics and the Way of Pursuing Them," deserves special attention.

(4) RUSSIAN FEDERATION

1) The First NEACEC (Niigata, October, 1992)

Russia emphasized the importance of marine environmental preservation. Russia will participate in the NOWPAP program, with its advanced technology, manpower, and equipment. However, Russia requires financial assistance from foreign countries in order to effectively utilize its resources.

2) The First SOM Meeting (Seoul, February, 1993)

Russia preferred ecosystem management as its top priority area. Russia emphasized more practical and action-oriented regional cooperation programs.

3) The Second NEACEC (Seoul, September, 1993)

Russia did not suggest a proposal or preference.

(5) MONGOLIA

1) The First NEACEC (Niigata, October, 1992)

Mongolia suggested the establishment of a regional environmental monitoring network, the development of environmental standard setting methods, and technical cooperation to establish an air monitoring network.

2) The First SOM Meeting (Seoul, February, 1993)

Mongolia expressed interest in ecosystem management as a priority area.

3) The Second NEACEC (Seoul, September, 1993)

Mongolia stressed that the sub-regional environmental cooperation such as the Tumen River Development Programme's working group on environment or UNDP's Air Pollution from the Combustion of Coal under Northeast Asia Sub-Regional Programme also deserve attention.

5. DISCUSSIONS

(1) INCONSISTENCIES OF THE POSITIONS

China's proposals in the first and second Northeast Asian Conference on Environmental Cooperation are notable in that they included a proposal for a joint research project on acid rain. However, China's attitude toward Northeast Asian environmental cooperation has several different faces, depending upon the characteristics of the forum. In the intergovernmental forum (SOM Meeting), China opposed the idea of joint research or joint monitoring for air pollution. China argued that they are unnecessary, since the GEMS program of WHO is already working toward such a purpose. Therefore, it is unclear what the real position of the Chinese government actually is.

Like the case of China, there were some inconsistencies between the positions of Japan in different fora. The Japanese government (especially Ministry of Foreign Affairs) seemed to be keen on financial implications, since Japan is the only country that can afford to provide financial and technical resources.

(2) HARMONIZATION OF VARIOUS FORA

As noted by Kim (1993), the harmonization or arrangement among the various fora of Northeast Asian environmental cooperation is desirable. As shown in Table 3, there are various fora of regional environmental cooperation in the Northeast Asia. At this stage, it seems that less formal fora are more efficient, since they do not produce highly binding mechanisms. The most formal forum (SOM) revealed sharp disparities in the interests. In the non-governmental or inter-agency meetings comprising experts, the discussions were generally productive and friendly.

However, it seems that a division of roles is gradually emerging. Although some inconsistencies are to be found, this may imply that the different fora, as a whole, are playing complementary roles to each other toward the establishment of an efficient cooperative mechanism in the region.

(3) THE FUTURE OF NORTHEAST ASIAN ENVIRONMENTAL COOPERATION

For the following reasons, regional environmental cooperation in Northeast Asia will receive more and more attention.

1) Economic Development/Environmental Degradation Will Be Aggravated
2) Economic Gaps Persist
3) Economic Interdependency Increases
4) Political Tension Is Reduced

References

Cheng, Weixu, "Exploration of the Joint Research Topics and Its Implementation," The Second Northeast Asian Conference on Environmental Cooperation, Seoul, Korea, September 15-17, 1993.

Kim, In-Hwan, "Exploration of the Methods to Enhance the Environmental Cooperation in the NEA

Region," Keynote Speech, The Second Northeast Asian Conference on Environmental Cooperation, Seoul, Korea, September 15-17, 1993.

Ministry of Foreign Affairs, Directorate of International Economy, Republic of Korea, The Report on the Senior Officials Meeting of Northeast Asia Environmental Cooperation (February 8-11, Seoul), February, 1993 (in Korean).

Lee, Sang-Don and Sang-Eun Lee, The Proposals for Concrete Action Program for Northeast Asian Environmental Cooperation and the Activation of Cooperative Network, Korea Environmental Science Research Council, July 1994 (in Korean).

Han, Chung, Rhee, Shim and Yoo, A Study on Korea-China Environmental Cooperation, Korea Institute for International Economic Policy, September 1993 (in Korean).

The International Geosphere-Biosphere Programme: A Study of Global Change, International Council of Scientific Unions, Global Change: Reducing Uncertainties, 1992.

World Bank, World Development Report 1992.

Grossman, Gene and Anne Krueger, "Environmental Impacts of a North American Free Trade Agreement," Working Paper #3914, National Bureau of Economic Research, 1992.

Xia, Kun-Bao, Director of Foreign Affairs of National Environmental Protection Agency of China, "Keynote Speech," Northeast Asian Conference on Environmental Cooperation, Niigata, Japan, October 13-16, 1992.

ENDNOTES:

1. North Korea still has no diplomatic ties with Korea and Japan. Although North Korea is not a participant, it is expected that it will join sooner or later.

2. For more detail, see Han, Chung, Lee, Shim, and Yoo (1993), A Study on Korea-China Environmental Cooperation, Korea Institute for International Economic Policy (in Korean).

3. Environmental pollution per unit area = per capita GDP x population density x pollution intensity x natural assimilative coefficient. Pollution intensity is defined as the amount of weighted index of pollutant emission divided by GDP. Natural assimilative capacity is the ratio of naturally assimilated quantity of pollutants. If 10% of a pollutant is naturally assimilated, then the natural assimilative coefficient is 0.9.

4. See Grossman and Krueger (1992) and World Bank (1992).

5. In terms of per capita GNP or GDP when computed using a purchasing power parity exchange rate, Russia is classified as a middle-income country. The per capita GNP of Russia in 1990 (2,807 ruble), however, falls in the category of low income group when converted into dollar terms using a market exchange rate. For the implications regarding physical economic activity, using a PPP exchange rate would be more relevant. However, for financial implication, using a market exchange rate would be more relevant.

6. For more detail, see Xia (1992).

7. See Lee and Lee (1994)

8. Mr. Zhong Shukong, Special Adviser on Environment to the Ministry of Foreign Affairs of China, denied the assertion that China is the source of transboundary acid rain problem in Northeast Asia, in the SOM meeting in Seoul in February 1993 and in the ESCAP/CESD meeting in Bangkok in October 1993.

9. Cheng (19923).

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