



# **Regional / Subregional Environmental Cooperation in Asia**

**February 2001**

**IGES**

## *Preface*

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Many of the environmental problems we face today are increasingly complex in nature and widespread in extent, and cut across national boundaries or are of global scale in their effects. But they are rarely truly global in their causes or sources. Even the so-called global environmental problems are rooted in human activities taking place at local and national levels, and therefore best dealt with at those levels closest to the source, rather than at the global level, although in most cases they do simultaneously require some kind of regulatory action and/or cooperative effort at international levels. (Commonly referred to as the “subsidiarity principle” in international law/ international relations vernacular.)

However, this does not negate the importance of regional approaches to dealing with problems of the environment commonly shared by countries within a geographical or economic/geopolitical region. Among the various United Nations bodies, UNEP has long recognized the importance of this regional approach, and established regional offices in each of the five regions of the world where the UN regional economic commissions are located, and assisted them in setting up environmental coordinating units (all of which have by now become fully established and incorporated into the institutional structure of the regional commissions. ) The Regional Seas Programme has been hailed as one of the greatest achievements of UNEP to date.

In the Asia-Pacific region, a “Regional Strategy for Environmentally Sound and Sustainable Development (ESSD)” was adopted at the second Ministerial Conference of ESCAP in 1991, followed five years later by the adoption of the “Regional Action Programme (RAP), 1996-2000” at the third Ministerial Conference.

Because of the vastness and diversity of the region in terms of geography, topography, climatic, ecological, and other natural conditions as well as differences in socio-cultural, economic and political systems, intergovernmental initiatives for environmental cooperation were first taken at the subregional level, starting with the adoption of the ASEAN Sub-regional Environment Programme (ASEP) in 1977, followed by the establishment of the South Asia Cooperative Environment Programme (SACEP) in 1981, and the South Pacific Regional Environment Programme (SPREP) in 1982. Subsequently, various action plans and work programmes were developed in more specific issue areas and sectors, together with appropriate supporting mechanisms and institutions. The Northeast Asia Sub-regional Programme on Environmental Cooperation (NEASPEC) is the latest addition to the list of intergovernmental programmes of action and cooperation at the subregional level. Besides these official programmes, there are many other forums and networks for environmental cooperation supported by international organizations, local governments, NGOs and private businesses.

Agenda 21 adopted at the Rio Earth Summit in 1992 gave further impetus to promoting regional and subregional cooperation (See Chapter 38 of Agenda 21 on International institutional arrangements: I) Regional and subregional cooperation and implementation.)

From its very outset, the Environmental Governance project of IGES recognized the importance of promoting environmental cooperation at regional and subregional levels. In its project document it is stated that: “Environmental problem solving in the Asian region is made complex by differences in economic, political and cultural conditions. A challenge for the region is to develop governance mechanisms that can address both regional and global

environmental problems.” “Selected national and sub-regional environmental governance systems will be examined in a cross-sectoral and comparative manner.” “In undertaking this research, IGES will work with networks in selected countries to develop both national and sub-regional perspectives... [T]he project will then examine the same type of questions at the sub-regional level. The sub-regions selected are Northeast Asia, Southeast Asia and South Asia.” “Sub-regional studies will be undertaken, both generally and in relation to the three issue areas (of climate change, forest conservation, and urban environment).”

The present report is a compilation of the results of research work carried out by the Environmental Governance project of IGES under this framework, together with a final chapter presenting a synthesis of all the findings and conclusions drawn from individual working papers written by Ms. Wakana Takahashi and myself during the course of our studies into this very important and much needed subject of promoting international/regional environmental cooperation as well as improving the effectiveness of regional programmes and institutions for environmental governance. It is hoped that this report will contribute to deepening our understanding of the functioning of regional environmental institutions and that the readers will find it useful.

In closing, I wish to express, on behalf of Ms. Wakana Takahashi and myself, our sincere thanks to all those who have collaborated with us, readily agreed to being interviewed by us, and always kind enough to answer our questions or respond to our requests for more information.

February, 2001

Kazu Kato  
Project Leader,  
Environmental Governance,  
IGES

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## *Contributors*

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Kazu Kato

Professor, School of Law, Nagoya University  
Project Leader, IGES/Environmental Governance Project

Wakana Takahashi

Research Associate, IGES/Environmental Governance Project

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## *List of Acronyms and Abbreviations*

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AAECP	ASEAN/Australia Economic Cooperation Programme
AANEAA	Atmosphere Action Network East Asia
ACPTP	ASEAN Cooperation Plan on Transboundary Pollution
ADB	Asian Development Bank
AEGE	ASEAN Experts Group on the Environment
AFTA	ASEAN Free Trade Agreement
ALGAS	Asian Least-Cost Greenhouse Gas Abatement Strategy
AMM	ASEAN Ministerial Meeting (on Foreign Affairs)
AMME	ASEAN Ministerial Meeting on the Environment
AMMH	ASEAN Ministerial Meeting on Haze
APCEL	Asia-Pacific Center for Environmental Law
APEC	Asia-Pacific Economic Cooperation
APN	Asia-Pacific Network for Global Change Research
ASC	ASEAN Standing Committee
ASEAN	Association of Southeast Asian Nations
ASEP	ASEAN Environmental Programme
ASMC	ASEAN Specialized Meteorological Center
ASOEN	ASEAN Senior Officials on the Environment
ASPEN	ASEAN Strategic Plan of Action on the Environment
CBSS	Council of the Baltic Sea States
CEC	Commission of the European Communities
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
COMECOM	Council for Mutual Economic Assistance
COST	Committee on Science and Technology of ASEAN
CSCE	Conference on Security and Co-operation in Europe
CSU	Coordination and Support Unit (for ASEAN Regional Haze Action Plan)
DMCs	developing member countries
EANET	Acid Deposition Monitoring Network in East Asia
EAP-AP	Environment Assessment Programme for Asia and the Pacific
EAS	East Asian Seas Action Plan
ECO-ASIA	Environment Congress for Asia and Pacific
EMEP- LRTAP	Co-operative Programme for Monitoring and Evaluation of the Long-Range Transmission of Air Pollutants in Europe
EC	European Community
EEC	European Economic Community
EIA	Environmental Impact Assessment
EU	European Union
FAO	Food and Agriculture organization of the United Nations
GEF	Global Environment Facility
GMS	Greater Mekong Sub-region
HPA	Hanoi Plan of Action of ASEAN
HTTF	Haze Technical Task Force of ASEAN
IGES	Institute for Global Environmental Strategies
IMO	International Maritime Organization
IUCN	International Union for Conservation of Nature and Natural Resources
JICA	Japan International Cooperation Agency
LRTAP	Long-Ranged Transboundary Air Pollution



LTPP	Long-term perspective project (for ECO-ASIA)
KOICA	Korean International Cooperation Agency
MRC	Mekong River Commission
NAPEP	North Asia-Pacific Environment Partnership
NEAC	Northeast Asian Conference on Environmental Cooperation
NEANPEF	Northeast Asia and North Pacific Environmental Forum (now, renamed NAPEP)
NEASPEC	North-East Asian Subregional Programme of Environmental Cooperation
NETTLAP	Network for Environmental Training and Tertiary Level in Asia and the Pacific
NGOs	Non governmental organizations
NO <sub>x</sub>	nitrogen oxide
NORAD	Norwegian Agency for Development Cooperation
NOWPAP	Northwest Pacific Action Plan
ODA	Official Development Aid
OECD	Organization for Economic Cooperation and Development
RETA	Regional Technical Assistance
RHAP	Regional Haze Action Plan of ASEAN
SAARC	South Asian Association for Regional Cooperation
SACEP	South Asia Co-operative Environment Programmes
SAP	Strategic Action Programme (for TRADP)
SAS	South Asian Regional Seas Programme
SEI	Stockholm Environment Institute
SENRIC	SACEP Environmental and Natural Resources Information Center
SIDA	Swedish International Development Co-operation Agency
SMRC	SAARC Meteorological Research Centre
SO <sub>2</sub>	sulfur dioxide
SOM	Meeting of Senior Officials (for the NEASPEC)
SPREP	South Pacific Regional Environment Programme
SSP	SACEP's Strategy and Programme
TA	Technical Assistance
TEMM	Tripartite Environment Ministers Meeting (ROK, China, and Japan)
TERI	Tata Energy Research Institute
TRADP	Tumen River Area Development Programme
UNCSD	United Nations Commission on Sustainable Development
UNCED	United Nations Conference on Environment and Development
UN/ECE	United Nations Economic Commission for Europe
UN/ESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNDP	United Nations Development Programme
UNEP/EAP-AP	United Nations Environment Programme Environment Assessment Programme for Asia and the Pacific
UNEP/ROAP	United Nations Environment Programme Regional Office of Asia and Pacific
UNESCO	United Nations Educational, Scientific and Cultural Organization
WED	World Environment Day
WHO	World Health Organization
WWF	World Wide Fund for Nature





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## **An Analytical Framework for a Comparative Study of Subregional Environmental Programmes in Asia**

**Kazu Kato**

### 1.1 Introduction

Many of the environmental problems we face today are increasingly complex in nature and widespread in extent, and cut across national boundaries or even global in their impacts. But they are seldom truly global in their causes or sources of problems. Even the so-called “global environmental problems” are rooted in human activities taking place at local and national levels, and therefore best dealt with at those levels closest to the source, rather than at the global level, thus leading us to the more generalized expression of the “subsidiarity principle,” which is often cited as a principle of national conduct within a regional economic and/or political integration organization such as the European Union. Hence the importance of studying national and local environmental governance systems, as emphasized in the current work plan of IGES’ Strategic Research on Environmental Governance in Asia.

At the same time, however, it must also be recognized that in most cases they do require some kind of cooperative efforts at international levels, particularly in many developing countries of the region where national capacity to deal with these problems is limited, both financially and technologically as well as institutionally.

Furthermore, there are certain types of environmental issues which can only be resolved through cooperative efforts among the countries and areas concerned. This points to the significance of taking a regional approach to dealing with problems of the environment commonly shared by countries within a geographical or economic/geopolitical region.

Foremost among the various United Nations bodies, UNEP has long recognized the importance of this regional approach, and established regional offices in each of the five regions of the world where the UN regional economic commissions are located (plus a regional office for North America very recently established at the UN headquarters), and initially assisted the UN regional commissions with setting up environmental coordinating units in their secretariats. Furthermore, the Regional Seas Programme of UNEP, for instance, has often been hailed as one of the most successful examples of UNEP’s achievements to date, by scholars as well as by practitioners of international relations, law and development assistance.

In the Asia-Pacific region, an increasingly great emphasis has been placed on the need to promote regional cooperation for sustainable development, ever since the first Ministerial Conference on Environment and Development of the region was organized by UN/ESCAP in 1985. The ministerial conference has been held every five years since then, and a Regional Strategy for Sustainable Development was adopted for the first time in 1990, in preparation for the United Nations Conference on Environment and Development (UNCED, or the Rio Earth Summit) of 1992.

It was further elaborated in the form of a more detailed Regional Action Programme, (RAP, 1996-2000), adopted by the 3<sup>rd</sup> Ministerial Conference of ESCAP in 1995. In it, the need to actually implement the programme at all levels, but particularly at the domestic national level by the member countries themselves as well as through sub-regional cooperation, is highlighted. (The new RAP, 2001-2005, to be adopted at the 4<sup>th</sup> Ministerial Conference on Environment and Development to be held in Kitakyushu, Japan in August, 2000 is expected to put even greater emphasis on sub-regional delivery of programmes and projects within each priority area.)

## 1.2 Existing Sub-Regional Programmes of Environmental Cooperation in Asia

Adopted in the mid-1970s, both ASEP and SPREP were the earliest of sub-regional programmes of environmental cooperation in the region, and both have by now developed into an important component of the overall policy coordination mechanism among their member countries, with a relatively strong and stable institutional support provided by the member governments and with their own secretariats. In July 1993, the ASEAN Senior Officials on the Environment (ASOEN) agreed on the development of a new Strategic Plan of Action on the Environment for the 1994-98 period, which was later endorsed by an ASEAN summit meeting at the highest level of government. In light of the latest haze disaster, the Regional Haze Action Plan was also adopted in 1997. Environmental cooperation in this sub-region is broad-based and comprehensive, and may provide a model for other regional environmental action programmes.

Countries of the South Asia Cooperative Environment Programme (SACEP) implement an Action Plan called SACEP's Strategy and Programme (1992-96). Key areas of activity include capacity building and awareness raising; systematic information exchange and intra-regional technology transfer; training on environmental management and institutional development. With regard to air pollution, the Malé Declaration on Control and Prevention of Air Pollution and Its Likely Transboundary Effects for South Asia was agreed during the 7th SACEP Governing Council meeting in 1998.

The Mekong River Commission (MRC) is an intergovernmental organization responsible for cooperation and coordination in the use and development of water resources of the Lower Mekong Basin. It was defunct for many years, but a new agreement was signed in 1991 and the Commission was revived in 1991. An Environmental Unit was established within the Technical Support Division to deal with the environmental issues in this sub-region.

Northeast Asia witnessed the burgeoning emergence of multilateral as well as bilateral programmes and forums in the 1990s. Among such initiatives, the Northeast Asian Subregional Programme of Environmental Cooperation (NEASPEC) plays the central role as a comprehensive and intergovernmental programme in the subregion. The program identified three priority areas—energy and air pollution, ecosystem management and capacity building-- , and have been implemented several fundamental projects.

In addition, the International Centre for Integrated Mountain Development (ICIMOD) established in 1983 in Nepal, implements programmes to attain environmental stability, sustainability of mountain ecosystems, and poverty eradication in the Hindu Kush-Himalayas.

## 1.3. Regional Approaches in Environmental Regime Formation

Historically speaking, environmental issues began to emerge as an important area of international law and policy, only when they were related to, or associated with, the use and management of shared natural resources such as international rivers and other freshwater resources, fisheries, migratory birds and animals. However, with the advent of the contemporary modern age associated with accelerating industrialization, urbanization and motorization in some parts of the world, pollution-related issues began to enter the scene, and the need to establish international mechanisms to promote such coordination of policies and cooperation increased by leaps and bounds, and there was a proliferation of bilateral or multilateral environmental agreements.

Many of these treaty regimes were regional in scope. Even when an increasing number of global or multilateral environmental agreements (MEAs) began to be adopted, particularly since the 1972 Stockholm Conference on the Human Environment, they were built on the basis of an existing regional mechanism and often provided a framework for implementation at the regional level. Witness the various marine pollution prevention and fisheries conventions, UN/ECE Convention on Long-range Transboundary Air Pollution, the Bonn Convention on Migratory Species, the Desertification Convention, etc., etc.

With the growth of truly global environmental treaties, it is becoming increasingly difficult to implement and ensure compliance with treaty obligations. On the contrary, according to some observers of international environmental law, regional approaches will facilitate not only the process of new environmental regime formation but also in ensuring implementation and compliance. Regionalization is regarded by some as an essential element of innovation in international standard setting. "Custom-built asymmetrical regimes are, of course, more easily achieved among regional groups of countries, where economic and other tradeoffs can compensate for the asymmetries" (Sand, 1992).

In the Asia-Pacific region, however, there were very few legally binding regimes established to deal with environmental issues of common concern, except in the area of management of international waters and fisheries, and the establishment of nuclear-free zones. The Framework ASEAN Agreement on the Conservation of Nature and Natural Resources (ASEAN Agreement) of 1985 provides one of the few examples of such a comprehensive regime in the field of environment, but after 15 years of existence, it has yet to be ratified and enter into force.

#### 1.4 Approach and methodology

With these historical background and within such institutional structures, the research into programmes and mechanisms of environmental cooperation in the three sub-regions of Asia identified in the IGES Research Plan on Environmental Governance (namely, Southeast Asia, Northeast Asia, and South Asia) will be conducted, following the lines of enquiry and analysis adopted in the comparative study of national governance systems (Schreurs, 1998), with *mutatis mutandis* application of the same approach and methodology, to analysing the role of various of actors and processes of agenda setting, policy making and implementation.

##### The Environmental Issues to Focus on

- *Air pollution: acid rain and climate change*
- *River and marine pollution*
- *Deforestation*

##### Policy Process

##### Agenda Setting

##### International and Domestic Linkages

##### Implementation

##### The Actors and their Interests

#### 1.5 Paper Outline

More specifically, the following questions and issues will be addressed and analysed for each of the three sub-regional environmental programmes:

##### *(1) Legislative History*

- When was it adopted? With how long a time frame in mind?
- What is the form of agreement? (e.g. treaty, MoU or other forms of agreement between implementing agencies, ministerial declaration, resolution of an international conference, etc.)

- What is the level of commitment? (e.g. inter-governmental, inter-ministerial, inter-agency senior government officials, etc.?)
- Membership and composition of various bodies within the overall institutional structure.
- A brief history of development of programme contents and institutional arrangements since its inception.

*(2) Goals and Objectives*

- General statement of goals and objectives .
- Specific targets to be achieved within a time frame, if any.

*(3) Strategies and Priority Areas of Action/ Cooperation*

- Which country or which body within the institutional structure, sets the agenda?
- Are there any dominant actors in setting the agenda and priorities?
- How are they identified and selected? (i.e. through what kind of process and procedure?)
- How and to what extent are they linked to the goals, objectives and targets?
- How and to what extent they linked to environmental priorities of the countries of the sub-region?
- How and to what extent are they linked to global environmental issues?
- Sources of information and data used to determine priority areas of cooperation

*(4) Cross-sectoral Integration with National Policies*

- Economic (trade and industry) policies
- Fiscal and financial policies
- Energy supply and demand policies
- Agriculture and forestry policies
- Land use planning and control policies
- Water resource development and management policies
- Health and welfare (social security) policies
- Peace and security (military) policies

*(5) Modality of Cooperation*

- Information exchange/ networks
- Policy dialogue (e.g. regular meetings of policy makers/senior government officials)
- Technical cooperation (e.g. expert seminars, training workshops)
- Joint or cooperative environmental monitoring and assessment
- Implementation of project-based activities

*(6) Institutional Structure*

- Policy making bodies
- Subsidiary bodies, if any. (e.g. committees, working groups)
- Advisory bodies, if any. (groups of experts, scientific and technical panels, etc.)
- Working relationships with other sub-regional organizations/networks, including regional or international associations of local governments, NGOs, consumers unions/cooperatives, private businesses and trade unions.
- Secretariat: established on permanent or on rotational basis? Staffing, programme activity centers or project officers/offices

*(7) Implementation, Monitoring and Assessment*

- Who or which body within the institutional structure is responsible for overseeing the processes of implementation, monitoring and assessment, and follow-up?
- To what extent are actors other than the governments concerned (such as NGOs and private enterprises) involved in the process of implementation, monitoring and assessment of the programme?

*(8) Finance*

- Self-financed or externally funded, or a combination of both?
- If self-financed, what is the formula for burden sharing?
- Major donors: UN and other international agencies, bilateral aid agencies, other private donors

*(9) Achievements to Date*

It would be difficult to evaluate the effectiveness of these cooperative programmes/ mechanisms against any reasonably acceptable measure of effectiveness. As a proxy, therefore, some physical measure of achievements (towards the goals, objectives and targets) will be used, such as:

- Action plans adopted in specific fields of activity, including an assessment of the progress made;
- Number and scale of projects carried out under each priority area, including an assessment of their impacts and effectiveness in achieving the goals, objectives and targets.

*(10) Evaluation of the Overall Effectiveness of Cooperative Programmes*

*(11) Conclusion*

- Provide an overall assessment of the present state and future prospects for the development of sub-regional environmental cooperation.
- Suggestions or policy recommendations, if any, for strengthening and improving the effectiveness of environmental cooperation at regional and sub-regional levels.

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## Environmental Cooperation in Northeast Asia\*

**Wakana Takahashi**

### 2.1 Introduction

Northeast Asia includes the People's Republic of China, the Republic of China (Taiwan), Japan, the Republic of Korea (South Korea), the Democratic People's Republic of Korea (North Korea), Mongolia, and the Russian Far East. The subregion extends from arctic to semi-tropical zones. High population density, high rate of consumption of natural resources and the pressures of rapid industrialization with inadequate environmental management have made Northeast Asia one of the most polluted subregions in the world. It has suffered environmental deterioration in terms of air pollution (including acid rain), coastal and inland water pollution, soil pollution, loss of biodiversity and desertification. Some of this damage has extended beyond national boundaries.

Northeast Asia lacked a centralizing political, economic or social force until the late 1980s due to a diversity of systems. Except for certain bilateral initiatives, there was little cooperation on environmental issues. The end of the Cold War, however, led to joint efforts to promote multilateral environmental cooperation. Agenda 21, agreed upon during the Rio Summit in 1992, helped to promote regional and subregional environmental cooperation: a number of cooperative programs, plans and forums have been advocated and extended through multiple channels. Those include Northeast Asian Conference on Environmental Cooperation (NEAC), North-East Asian Subregional Program on Environmental Cooperation (NEASPEC), Tripartite Environment Ministers Meeting (TEMM) and Northwest Pacific Action Plan (NOWPAP).

It is not surprising, however, that institutions of Northeast Asian environmental cooperation have drawn criticism in the last decade. Environmental institutions are often seen as weaker than institutions in other areas, such as trade or security (Tay, 2000). In addition, the mechanism for cooperation has been characterized as unsatisfactory, with insufficient links between initiatives. Another criticism is that some initiatives failed to clarify long-term goals. Few regional environmental initiatives have a structure or financial foundation.

It is high time for Northeast Asia to review the steps taken thus far and examine what should be the next step.

This paper is a study of the past and future of Northeast Asian environmental cooperation. In addition to delineating the major programs, forums, conferences and other initiatives in the region as well as in East Asia or Asia-Pacific as a whole, it will examine the actors, processes and institutions of subregional environmental cooperation. It questions by whom and how environmental cooperation has been addressed, identified and promoted; how does each actor interact with others; what is the nature of the basic subregional cooperative mechanisms to respond to environmental issues; and how the economic and political pictures of Northeast Asia have influenced the subregional environmental cooperation mechanisms. In this regard, a detailed analysis on NEASPEC will be given.

Through these examinations, this paper aims to expose the weaknesses and inadequacies of Northeast Asian environmental cooperation mechanisms, and to provide the future prospects. The conclusion offers suggestions for future.

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\* This paper was originally submitted and presented at the 9<sup>th</sup> Northeast Asian Conference on Environmental Cooperation (NEAC), July 26-28, 2000, Ulaanbaatar, Mongolia. This is the revised version.

## 2.2 Overview

Considering the geographical scope and the diverse economic and political systems of the Asia-Pacific region, UN organizations emphasized collaboration at subregional rather than regional levels. Plans and programs facilitated by such organizations are South Asia Co-operative Environment Programmes (SACEP), various environment plans and programs developed under the Association of South East Asian Nations (ASEAN), the Mekong River Commission (MRC) and the South Pacific Regional Environment Programme (SPREP).

Although lagging behind other subregions in the Asia-Pacific, Northeast Asia has begun to attach importance to promoting environmental cooperation. In the 1990s, the subregion began to show signs of progress on multilateral environmental cooperation (see Table 2.1).

This section provides an overview of cooperative initiatives being undertaken in Northeast Asia on both multilateral and bilateral bases.

**Table 2.1 Chronological table of major cooperation initiatives related to environment**

	Major Events/Action Plans/Programs
1988	Japan-Korea Environmental Symposium
1991	Establishment of Environment Congress for Asia and Pacific (ECO-ASIA)
1992	Northeast Asian Conference on Environmental Cooperation (NEAC)
	North-East Asian Sub-regional Program on Environmental Cooperation (NEASPEC)
1993	Adoption of Northwest Pacific Action Plan (NOWPAP)
	Adoption of an "APEC Environmental Vision Statement"
1994	Establishment of Asia-Pacific Network for Global Change Research (APN)
1995	Adoption of Memorandum on Understanding on Environmental Principles Governing the Tumen River Area Development Programme (TRADP)
1998	Inauguration of Tripartite Environment Ministers Meeting (TEMM)
	Preparatory activities of Acid Deposition Monitoring Network in East Asia (EANET)
2001	Full-operation of the EANET

Source: Author

### 2.2.1 Multilateral Cooperation within Northeast Asia

#### Northeast Asian Conference on Environmental Cooperation (NEAC)

The origins of multilateral cooperation in Northeast Asia can be traced back to the year 1988 when the Japan-Korea Environmental Symposium. The symposium was co-hosted by the respective environmental agencies in Japan and South Korea. UNEP cooperated, China participated, and the Soviet Union and Mongolia attended as observers. It thus developed into a forum for exchanging information and exploring the possibilities for regional cooperation between the five countries. With the Rio Summit in 1992 as a trigger, the symposium was renamed Northeast Asian Conference on Environmental Cooperation (NEAC).

NEAC provided environment ministries/agencies from five countries in Northeast Asia including Japan, South Korea, China, Mongolia and Russia and international organizations such as UNEP and UN/ESCAP with the chance to meet every year to exchange information, share experiences and discuss actions to be taken in the future. Researchers, local government officials and representatives of NGOs have been also invited to conferences. Various issues have been placed on the agenda, from global/local environmental issues to specific policy instruments. The conference itself does not create any projects or program-oriented activities. Member countries on a rotating basis have hosted the conference<sup>1</sup>.

<sup>1</sup> Japan, South Korea and China have hosted NEAC in turn, and Mongolia also hosted the ninth meeting for the first time in 2000.

#### North-East Asian Subregional Program on Environmental Cooperation (NEASPEC)

While NEAC is a forum for frank dialog on strategies between environmental government organizations, local governments and specialists, NEASPEC represents cooperation on environmental issues via foreign ministries (Oversea Environmental Cooperation Center, 1994).

The establishment of NEASPEC was agreed to on the first occasion of the Meeting of Senior Officials of Environmental Cooperation in North-East Asia (SOM) in 1993, hosted by UN/ESCAP. It's proponent was South Korea. Since then, the senior officials meeting was held every year or every two years to decide on program activities.

The three priority areas identified are energy and air pollution; ecosystem management; and capacity building. At the 3rd senior official meeting, held in 1996 in Mongolia, "the NEASPEC framework" was adopted and agreement was reached on basic structures and activities. Several fundamental projects on energy and air pollution have been identified and even implemented with the help of Asian Development Bank (ADB) financial aid.

NEASPEC aims to develop its own firm financial mechanisms rather than ad hoc project-based funding, and establishment of a core fund was agreed upon in March 2000. South Korea will contribute 100,000 dollars to the fund. NEASPEC is the only comprehensive environmental program that has been implemented in concrete ways in Northeast Asia. It is expected to fulfill a central role as a comprehensive and intergovernmental program in the subregion.

NEASPEC will be discussed in more detail in the latter part of this paper.

#### Northwest Pacific Action Plan (NOWPAP)

Collaboration focusing on a single subject also started following the Rio Summit. Problems related to the marine environment are under the purview of the Northwest Pacific Action Plan (NOWPAP). Unlike the NEASPEC and the NEAC, which were regional initiatives, the NOWPAP was advocated by UNEP<sup>2</sup>. Five Northeast Asian marine states participate: China, Japan, South Korea, Russia and North Korea<sup>3</sup>. The four countries adopted action plans at the first intergovernmental meeting held in Seoul in 1994.

#### Northeast Asian and North Pacific Environmental Forum (NEANPEF, renamed NAPEP)

A non-governmental regional network, the North Asia-Pacific Environment Partnership (NAPEP), was inaugurated in 1992 (originally named the Northeast Asia and North Pacific Environmental Forum). Comprised of environmental experts and NGOs from subregional countries, it has promoted exchanges of information and expertise between environmental NGOs through workshops and mobilization of resources to support specific projects, particularly for ecosystem management undertaken by member NGOs in the region.

Several workshops and conferences, attended by representatives of NPOs, governments, business, universities and think tanks from China, Mongolia, Russia, South Korea, Japan and the U.S. have been held.

Some participants at the workshops recommended joint research into sustainable ecological development in the Douman Jiang and Amur river regions and the establishment of an international advisory group consisting of an operating committee, a secretariat and expert groups to support NAPEP activities.

#### Tripartite Environment Ministers Meeting (TEMM)

A concerted effort at a ministerial level has also begun. Following a proposal from South Korea during the 6th United Nations Commission on Sustainable Development (UNCSD) in May 1998, the Tripartite Environment Ministers Meeting (TEMM) between China, Japan and South Korea has been

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<sup>2</sup> The Regional Sea Programs endorsed by UNEP took off from the regional level approach recommended at the 1972 Stockholm Conference and led to remarkable developments as subsequent action plans were formulated -- the Mediterranean Action Plan of 1975 and the Barcelona Convention of 1976. The approach has spread to other regions in the world, and there are now 14 Regional Sea Programs in operation, with more than 140 seacoast countries participating in various plans.

<sup>3</sup> North Korea is not an acting member, to date.

held annually since 1999.

At the first meeting, held in Seoul, January 1999, the three countries recognized the need to cooperate and to improve the level and quality of environmental cooperation in the subregion. They agreed on priority areas requiring increased cooperation: a) raising awareness of the three countries' "environmental community" and stimulating information exchange; b) strengthening cooperation on global environmental issues, such as biodiversity and global warming; c) preventing air pollution and protecting the marine environment; and d) enhancing cooperation on environmental technology, the environmental industry and environmental research. The need for more cooperation not only between their respective governments' environmental agencies, but also between NGOs, research organizations and local governments, was also emphasized.

The second ministerial meeting was held in Beijing in February 2000, where the ministers agreed to develop and work on specific projects, focusing particularly on raising the consciousness of the environmental community, preventing fresh water pollution and land-based marine pollution and cooperating in the field of environmental industry. The three countries have already begun designing the project proposals, and steps have been taken toward implementation.

#### Tumen River Area Development Programme (TRADP)

On the economic cooperation front, the Tumen River Area Development Programme (TRADP) is facilitated by UNDP. The objective of the program is to promote regional economic cooperation between China, South Korea, DPRK, Mongolia and Russia. This river area has achieved economic development at the expense of the environment and has been threatened by environmental degradation, namely, inland and coastal water pollution, biodiversity loss, deforestation and air pollution.

A Memorandum of Understanding on Environmental Principles governing the TRADP was thus adopted in 1995. Consequently, it was decided to create a strategic action program on environment for the purpose of developing an effective long-term regional strategy for dealing with international water pollution and loss of biodiversity. The Global Environment Facility (GEF) decided to sponsor the development of the action plan with 5 million dollars over a two-year period, and the project was launched in May 2000.

The Tumen Programme Environmental Action Plan was also developed in parallel, focusing on transborder pollution and other forms of regional environmental damage, such as trade in endangered species. The Action Plan identified four program areas with detailed project proposals. TRADP member states are currently seeking investment and donor assistance for implementing such projects.

#### North East Asian Crane Site Network Center

The North East Asian Crane Network Center was established in 1997, based on the "Asia-Pacific Migratory Waterbird Protection Strategy," which was adopted at the Seventh Meeting of the Conference of the Contracting Parties to the Convention on Wetlands (Ramsar). The network links eighteen important sites for the survival of cranes from six Northeast Asian countries, so that those who work at different sites can exchange information and share their experiences. The network also link researchers, conservationists, governmental officers and others concerned about crane protection, and provides a basis for joint research and conservation activities. The network is managed by Wetlands International-Asia Pacific.

The late 1990's also witnessed the establishment of two more waterbird network: the East Asian Australasian Shorebird Site Network, in which twenty-four sites from ten countries participate, and the East Asian Anatidae Site Network.

### *2.2.2 Multilateral Cooperation covering East Asia/ the Asia-Pacific region*

#### Acid Deposition Monitoring Network in East Asia (EANET)

Recognizing that adverse effects of acid deposition would become a critical problem in East Asia in the near future, Environment Agency of Japan (now Ministry of Environment) advocated an establishment of acid deposition monitoring network in East Asia (EANET). The Environment Agency held four expert meetings between 1993 to 1997, inviting experts from all interested countries in East Asia, where the establishment of the EANET was agreed upon, and technical manuals and

guidelines for monitoring acid deposition was adopted. The first intergovernmental meeting was thus held in 1998. Accordingly, the network began its preparatory-phase activities in 1998, and its regulatory activities in 2001.

The network links ten national governments and their monitoring sites. Using shared guidelines and technical manuals, the network has been collecting, compiling and evaluating monitoring data on acid deposition.

All the operating costs are paid by the Japanese Government. Japan also provides financial and technical assistance on monitoring activities to developing member countries through its official development assistance (ODA) channel. The network center is located in Japan, and Ministry of Environment of Japan administers and coordinates the network's activities as interim secretariat. The second intergovernmental meeting of the network, held in 2000, designated the UNEP as the Secretariat for the EANET after 2002 (Interim Secretariat [of EANET] and Interim Network Center [of EANET], 2000).

#### *Asia-Pacific Economic Cooperation (APEC)*

Covering a much broader geographical area of the Asia-Pacific, the Asia-Pacific Economic Cooperation (APEC) forum, inaugurated in 1989 and including 18 member economies, also began to work toward integrating environmental and economic concerns. The member economies from Northeast Asia include China, Japan, South Korea, Russia, and Taiwan.

The First Environmental Ministerial Meeting held in 1994 developed an "APEC Environmental Vision Statement." Since this statement and other declarations, APEC has developed a three-pronged environmental work program: namely, 1) integration of environmental and economic considerations in APEC's working groups; 2) attention to sustainable cities, clean technologies, and the marine environment; and 3) long-term focus on food, energy, environment, economic growth, and population.

#### *Asia-Pacific Network for Global Change Research (APN)*

On the scientific front, the Asia-Pacific Network for Global Change Research (APN) was established in 1995 for the purpose of strengthening links between the scientific community and policy makers in the Asia-Pacific Region. The intergovernmental network aims to promote, encourage and support research on long-term change in the earth's climate, ocean and terrestrial systems as well as research on related physical, chemical, biological and socioeconomic processes. Its member states from Northeast Asia are: China, Japan, South Korea, Mongolia and Russia.

#### *Environment Congress for Asia and Pacific (ECO-ASIA)*

Inspired by the Rio Summit, the Environment Agency of Japan initiated the Environment Congress for Asia and Pacific (ECO-ASIA), with the objective of fostering policy dialogue and cooperation among environmental ministers of participating countries.

While ECO-ASIA was originally intended as an informal forum of information exchange among ministers, it has developed "ECO-ASIA Long-term Perspective Project (LTPP)," which aims to identify environmental policies that can contribute to the long-term sustainable development of the Asia-Pacific region. The project identifies major environmental issues confronting the region, examines their connection to socioeconomic issues, and forecasts social economic and environmental issues that may arise from various development scenarios for the regions.

### *2.2.3 Bilateral Cooperation*

One feature of environmental cooperation in Northeast Asia is the predominance of initiatives undertaken between two countries rather than among more than two. Japan occupies a unique position in the region as a highly industrialized country that contributes development assistance and other aid to countries throughout the world. Japan's government now emphasizes environmental cooperation as an important part of economic cooperation and promotes bilateral environmental cooperation as a facet of development assistance<sup>4</sup>.

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<sup>4</sup> Adopted as a cabinet decision in June 1992, Japan's ODA Charter stipulates that one of four key factors to be

Most notable among such bilateral initiatives are those between Japan and China. In the 1990's, the volume and quality of cooperation on environmental matters rose. Grants, technical assistance and yen loans have been made through various organs of government and aid organizations<sup>5</sup>.

Since environmental projects often fail to contribute directly to economic growth, however, the governments of developing countries have been less than enthusiastic about asking for environment-related assistance, particularly when it comes to industrial pollution and global environment-related initiatives.

The Ministry of International Trade and Industry of Japan, therefore, developed in 1990 the "Green Aid Plan," which places importance on reducing industrial pollution and promoting efficient energy use (Economic Cooperation Division, Ministry of International Trade and Industry of Japan, 1997). In addition to Indonesia and the Philippines, China is considered high priority in this respect.

The trend is growing towards cooperative projects undertaken between the local governments of China and Japan. The cities of Kita-kyushu and Hiroshima can be cited as encouraging examples of this. Cooperative projects initiated by the private sector are also developing, including technological projects<sup>6</sup>.

In parallel with the gaining momentum of various cooperative projects, the framework to support these activities are also evolving.

In March 1994, the Japan-China Environmental Conservation Cooperation Agreement was signed. The Japan-China Environmental Conservation Joint Committee has met annually since then in order to coordinate the overall activities stipulated in the agreement. The committee, which relevant government agencies attend, reviews the existing state of cooperative initiatives and considers new projects.

The Sino-Japan Friendship Center for Environmental Protection, established in Beijing in 1996, has performed a central role acting as a liaison on matters related to environmental cooperation. In 1996, the Japan-China Comprehensive Forum on Environmental Cooperation was started to exchange ideas.

Bilateral summits have also produced initiatives. At their summit in 1997, the leaders of Japan and China reached an agreement on environmental cooperation in the 21st century, including two major initiatives: "Japan-China Environmental Development Model City Plan"<sup>7</sup> and "Environmental Information Network"<sup>8</sup>.

Meanwhile, developmental and environmental assistance for China is a great concern for many donor countries. The China Council for International Cooperation on Environment and Development, a high-level non-governmental advisory body, was established in 1992. Its stated purpose is "to further strengthen cooperation and exchange between China and the international community in the field of environment and development." It was established with the objective of promoting cooperation in the field of environmentally sensitive development with China and the international community<sup>9</sup>.

Japan has sent members to the council and has participated enthusiastically. Japanese private sector groups have also participated.

Environmental cooperation between Japan and South Korea is not at the level of Japan-China

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considered is "pursuit in tandem of environmental conservation and development."

<sup>5</sup> For information related to environmental concerns and economic cooperation in Northeast Asia, see Fujikura (1998).

<sup>6</sup> For information on China-Japan Environmental cooperation, see the Overseas Environmental Cooperation Center (1999).

<sup>7</sup> The Model City Plan calls for the selection of model cities for environmental programs. Model cities include aggressive strengthening of environmental regulations, Japan's assistance (including ODA loans with preferential terms for environmental projects and technical assistance). These environmental measures, designed to reduce air pollution and acid rain, for example, should also be designed to generate successes that will encourage extension of conservation efforts and wider adoption of environmental policies throughout China. The three cities are currently Dalian, Chongjing and Guiyu. See <<http://www.mofa.go.jp/policy/oda/summary/1998/8.html>>.

<sup>8</sup> The project is to set up computers for processing environmental information at a hundred locations throughout the country, establishing a nationwide environmental network centered on the Sino-Japan Friendship Center for Environmental Protection located in Beijing.

<sup>9</sup> See Web site of China Council <<http://www.harbour.sfu.ca/dlam/index.html>>

cooperation in terms of quality or volume. The background to this gap is that yen loans and grant aid from Japan to South Korea recently ceased on the judgment that the Korean economy has already graduated from the stage of requiring assistance (Ministry of Foreign Affairs in Japan, 1998). The initiatives that do exist on environmental training, joint research cooperation and information exchange on environmental technology at the level of central and local governments are somewhat lackluster.

Nonetheless, there is a trend toward development of a framework supporting cooperation between Japan and South Korea. The Japan- South Korea Environmental Conservation Cooperation Agreement was signed in June 1993. The Japan-Republic of Korea Environmental Conservation Joint Committee meets annually based on the agreement. The committee's chief function is to coordinate and plan cooperative projects between the two countries, and currently 21 projects are under way<sup>10</sup>.

Summits began to address furthering environmental cooperation between the two countries. In one declaration (<http://www.mofa.go.jp/region/asia-paci/korea/joint9810.html>) adopted in October 1998, the two leaders agreed that both governments would cooperate closely on resolving various global issues that transcend national borders and that are becoming new threats to the security and welfare of the international community.

They also agreed that both countries would promote Japan- South Korea environmental policy dialogue in order to strengthen cooperation on various issues concerning the global environment, such as reducing greenhouse gas emissions and measures to fight acid rain.

A plan of action was created, specifying that the two nations investigate possibilities for communication and dialogue on environmental strategies, for strengthening environmental cooperation in the Northeast Asian region, for starting joint research on environmental hormones (endocrine disrupters) and environmental industry. Based on this declaration, the Japan International Cooperation Agency (JICA) and Korea International Cooperation Agency (KOICA) have developed a joint training program for improvement of the water environment, targeting neighboring developing countries in East Asia.

Joint environmental initiatives between Japan and Korea are moving from "assistance" to "an equal cooperative relationship". There is room for much further development in this new equal-footing relationship.

By contrast, environmental cooperation between Japan and Mongolia proceeds under Japanese leadership. An economic crisis struck Mongolia after the Council for Mutual Economic Assistance (COMECOM) under the former Soviet Union stopped extending assistance in 1991.

The urgency of Mongolia's need for assistance was recognized at a summit in London the same year, and Japan began increasing financial assistance, becoming Mongolia's largest donor country.

Japan-Mongolia relations have since experienced a considerable turn for the better in comparison to the Cold War era, and bilateral cooperation on the environment has gone smoothly. Cooperative projects range from technical cooperation, including hosting trainees and sending experts, to grant and yen loan projects in forestry management, subterranean water development and power generation plants.

Japan and Russia announced in 1993 an Economic Declaration to develop economic and trade relations. The Japanese government has increased the quality and volume of official development assistance (ODA) to assist Russia's reform efforts. The ODA ranges in use from emergency humanitarian assistance to technical and financial assistance.

The Russian Far East, in particular, has grown increasingly important to the deepening of Russian-Japanese relations. Almost half of Japanese humanitarian aid went to this region. There has been a little emphasis on environmental cooperation between the two countries. In April 1991, the Japan-Soviet Environmental Protection Cooperation Agreement was signed, and Russia agreed to inherit the terms of the agreement intact after the collapse of the Soviet Union. Although the agreement does not call for a joint committee as other bilateral agreements have done, a meeting between Japan and Russia was held in January 1994. The two sides agreed to start joint research on marine ecology in the Japan Sea.

There are basically no initiatives on the environmental front between Japan and DPRK, simply

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<sup>10</sup> Of the 21 projects so far, six are environment-related. (Environment Agency of Japan materials).



because they have no diplomatic relations.

Bilateral initiatives in Northeast Asia without Japan are emerging, most notably between South Korea and China.

South Korea has shifted from being a recipient to a donor country. The government established the Economic Development Cooperation Fund (EDCF) in 1987 and the Korean International Cooperation Agency (KOICA) in 1991. South Korea joined the Organization for Economic Cooperation and Development (OECD) in 1996. Main recipient countries are Asian, in particular China. Korean environmental ODA to China is expanding.

Environmental cooperation between South Korea and China does not necessarily center on ODA, however. In October 1993, an Agreement on Environmental Cooperation between the two countries was signed; they agreed to promote cooperation on the basis of equality and mutual benefit, in the areas of information exchange, technology transfer and joint research.

The Korea-China Environmental Cooperation Joint Committee has met each year in line with the agreement, and 12 bilateral projects have been launched. Major projects among the 12 include the Yellow Sea Large Marine Ecosystem Project. This comprehensive project includes Transboundary Diagnostic Analysis activities, a strategic action program and environmental improvements. The UNDP is also involved with this project and expenses are provided for by GEF<sup>11</sup>.

Thus, environmental cooperation initiatives between China and South Korea have been promoted based on equality and mutual benefit. This applies to statements during recent summits on environmental cooperation.

At their summit in China in 1999, the two countries agreed to raise the profile of their relationship from its present status as a cooperative friendship to a comprehensive partnership for the 21st century. Such a partnership would expand cooperation in a variety of fields including government, security, economy, culture, the environment and human communications.

Other bilateral cooperation agreements in the region include ones concluded between China and Mongolia and between South Korea and Russia.

## 2.3 The Case of NEASPEC

Among several subregional initiatives as mentioned above, North-East Asian Subregional Programme on Environmental Cooperation (NEASPEC) is the only comprehensive intergovernmental environmental program that has been implemented in concrete manner.

This section discusses about NEASPEC. It is believed that a detailed analysis on NEASPEC will be helpful for better understandings of the nature and essence of environmental cooperation mechanism of this subregion.

### 2.3.1 *Brief History and Objectives*

Since 1992, when Agenda 21, a global action plan for sustainable development, was adopted at the Rio Summit, almost all ESCAP member states have responded to it and initiated measures to improve their environmental administration. Among major means achieving the objectives of Agenda 21 was enhancement of regional cooperation.

Recognizing that there was little environmental cooperation but informal subregional talks in Northeast Asia, ESCAP responded the Agenda 21 and began to undertake initiative of facilitating the cooperation in the subregion and resulted in the 1<sup>st</sup> Meeting of Senior Officials (SOM1) on environment in Seoul, 1993. Its real proponent was South Korea. The meeting was attended by the senior officials from countries of Northeast Asia; namely China, Japan, Mongolia, the Republic of Korea and the Russian Federation and representatives from ESCAP, UNEP, UNDP, and ADB. The major issue discussed was the modalities and scope of their cooperation on environmental issues (UN/ESCAP, 1998a).

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<sup>11</sup> See Web-page of Ministry of Foreign Affairs and Trade, South Korea, <<http://www.mofat.go.kr/main/etop.html>>

The result of the SOM1 was publication of a recommendation to initiate a NEASPEC, in which priority areas were identified. The meeting also agreed to continue consultations on the Programme framework through their diplomatic channels. The ESCAP was requested to continue to provide professional and secretariat support for furthering the activities of regional cooperation till an appropriate time comes for establishment of a formal institutional arrangement (UN/ESCAP, 1999a).

The 2<sup>nd</sup> Meeting of Senior Officials (SOM2), held in Beijing in November 1994, with additional participation of DPRK, decided to draft a Framework for NEASPEC. It also furthered to elaborate the Programme by adopting five priority projects for implementation.

The 3<sup>rd</sup> Meeting of Senior Officials (SOM3), held in Ulaanbaatar in September 1997, opened a new stage of the cooperation by adopting “Framework for the Northeast Asian Subregional Programme on Environmental Cooperation.”

According to the Framework, the scope of participating countries identified include six participating subregional states, but other parties and relevant institutions that have interest and commitment in furthering cooperation in Northeast Asia may be invited to join in the Programme activities and provide financial support, as appropriate. International organizations including ESCAP, UNEP, UNDP, ADB, and the World Bank was required to provide professional, financial and technical support for furthering the activities of the program (UN/ESCAP, 199-).

The major objective of the NEASPEC, as identified by the “framework,” was to promote subregional environmental cooperation and sustainable development. It was clarified that activities under the program are aimed at strengthening their relevant technological and managerial capabilities in environmental management efforts through subregional cooperation.

Some important issues, such as institutional arrangement and financial mechanisms, remained provisional. The participants of the SOM 3 shared the idea that they should not rush to develop solid framework to improve NEASPEC structure, but should take step-by-step approach.

Right after the adoption of the Framework, a Technical Assistance (TA) project was developed and implemented, with financial assistance of ADB together with additional contributions from ESCAP and the participating countries. The 4<sup>th</sup> Meeting of Senior Officials (SOM 4) decided to develop the follow-up TA project.

In parallel, SOM 4 and the following 5<sup>th</sup> Meeting of Senior Officials (SOM 5), have continued to consider and discuss about institutional and financial mechanisms for NEASPEC after the interim period ends. At the 6<sup>th</sup> SOM, held in Seoul, 2000, the member states agreed to create a core fund for NEASPEC.

### 2.3.2 Institutional (Organizational) Structure

The Framework for NEASPEC adopted during SOM 3 designates the institutional arrangement for NEASPEC. According to it, the Meeting of Senior Officials on Environmental Cooperation in Northeast Asia (SOM) will act as the Governing Body for NEASPEC. SOM meets annually in principle, to provide overall policy guidance as well as policy decisions concerning substantive and financial matters, including budget and work plan of the Programme and projects<sup>12</sup>. The host country of SOM rotates. To date, SOM has met 6 times with the latest meeting held in Seoul in the year 2000<sup>13</sup>.

As for the secretariat, ESCAP is undertaken the responsibility as an interim secretariat up to 2002. This arrangement remains only provisional, and SOM has been working towards practical arrangements after the interim period ends. In particular, in SOM 5, ESCAP Secretariat prepared a discussion paper on options on institutional and financial mechanisms for NEASPEC, covering the issues of governance/ policymaking structure, the secretariat, program planning and implementation and cooperation/ coordination mechanisms. The result at SOM 5 was that there was “no need at

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<sup>12</sup> In details, SOM will: a) Keep the Programme under constant review, with a view to identifying further areas of cooperation and project-related activities; b) Review the progress in implementing the program/projects and evaluate the result achieved; c) Approve the budget and work plan of the program/projects; d) Attempt to formulate a common strategy on regional/international environmental issues; e) Review the institutional and financial arrangements for regional cooperation and suggest appropriate mechanisms; and f) Serve as a forum for policy and information exchange.

<sup>13</sup> With the latest meeting in Seoul, countries came into the second turn of the host, except North Korea.

present to extend the scope of such arrangement beyond those included in the Framework". It was because most participants of the SOM considered that it was premature to consider establishment of any new arrangement, in view of enhanced financial implications in the establishment of a secretariat and the current financial crisis in the participating countries. (UN/ESCAP, 1998b).

On the other hand, the Expert Group Meeting on environmental cooperation mechanisms in Northeast Asia, in particular NEASPEC and NOWPAP, as held in November 1999 in Seoul, recommended that the present framework of NEASPEC should be developed into a comprehensive program which should include institutional and financial matters as early as possible (UN/ESCAP, 1999c). After the negotiation under SOM 6, as held in Seoul, March 2000, was the recommendation to the ESCAP secretariat to continue providing secretariat support to NEASPEC, in cooperation with ADB, UNEP, UNDP and the World Bank. This, however, does not negate each country's willingness for further development of the present institutional arrangement: SOM 6 emphasized the need for further development of the present Framework, preferably by the 8<sup>th</sup> SOM, which will be held in 2002 (UN/ESCAP, 2000).

### 2.3.3 Activities

#### Modality of cooperation

The modality of cooperation for NEASPEC, in practical, varies from exchange views of experts, technical cooperation through demonstration seminars, training workshops and project-based activities. Those projects do not involve direct environmental improvement but assist capacity building of national environmental management.

NEASPEC is expecting no legally binding agreement or memorandum of understanding (MoU), as of today.

#### Selection (or Criteria) of the priority areas

The nature and scope of NEASPEC is comprehensive. There were three priority areas for cooperation identified at the SOM 1:

- A) Energy and air pollution,
- B) Ecosystem management, in particular deforestation and desertification, and
- C) Capacity building.

Based on the identified priority areas, SOM 2 adopted five priority projects for implementation:

- a) Training of operations and maintenance for reduction of sulfur dioxide in older coal-fired electricity generation,
- b) Demonstration of clean coal-fired power plant technology,
- c) Northeast Asian biodiversity management program,
- d) Northeast Asian seed research and information base for forests and grasslands, and
- e) Environmental pollution data collection, intercalibration, standardization and analysis.

Of the five, ADB selected the items a) b) and e), and elaborating the TA Project.

After implementing the first TA Project, SOM 4 decided to develop follow-up projects on:

- Pollution reduction in coal-fired power plants,
- Environmental monitoring, data collection, comparability and analysis,
- Efficiency improvement of electrostatic precipitators in existing power plants, and
- Demonstration of Dry Sorbent Duct Injection FGD technology.

In response, ADB approved its new TA Project in October 1999, which contains three major components: (i) regional training for reducing pollution from coal-fired power plants, (ii) regional network for transboundary environmental monitoring, and (iii) action plans for improving the efficiency of particulate abatement systems in existing power plants (ADB, 1999).

#### Implementation, (monitoring and assessment) of the projects

The first TA Project consists of three subprojects; (I) Training for Sulfur Dioxide Reduction in Coal-Fired Plants; (II) Demonstration of Low-Air-Pollution, Coal-Fired Power Plants Technology; and (III) Environmental Pollution Data Collection, Comparability, and Analysis.

The Subproject I was expected to increase human capacities for efficient operation and improve

environmental control in existing power plants in the Northeast Asian subregion. The first phase of the subproject was to convene a Conference of Electric Utility Plant Operations Experts on Reduction of Sulfur Dioxide in Older Coal-fired Power Plants. The Conference was held in June 1999, in Ulaanbaatar, Mongolia, and attended by the representatives from the NE Asian countries with experience in operational practices at electricity utility plants. The Conference discussed about various techniques and technologies that might be applied to older coal-fired power plants for reducing sulfur dioxide emissions in the near-term and mid-term. Also, several recommendations regarding capacity and institution building, application of clean coal technologies and financial and economic aspects were offered in the Conference.

As for Subproject II, six technology demonstration and on-site workshops were conducted in Tong Liao, China; Ulaanbaatar, Mongolia; Taejon, Republic of Korea; Nanjing, China; Moscow, Russian Federation; and Yokohama, Japan. The series of workshops resulted in successful demonstration and discussion of a wide range of technologies and techniques. Also, recommendations for the Subproject was developed into the five categories: upgrading particulate matter removal capabilities, enhancing regional monitoring capabilities, promoting appropriate clean coal technologies, improving operation and maintenance (O&M) at power plants, and developing institutions through specialized training.

Furthermore, based on the discussions and recommendations of the conference of Subproject I and six workshops of Subproject II, the proposal for a continuation of Subproject I, titled, "Pollution Reduction in Coal-Fired Power Plants" was developed, and submitted SOM 4. SOM 4 endorsed the project proposal and requested the ESCAP Secretariat to seek funding for the implementation of the project. In response, ADB developed new TA Project in October 1999. In the new TA, ADB will fund for continuation of Subproject I by supporting training courses with on-site demonstration for increasing efficiency of coal-fired power plants and decreasing emissions of air pollutants by cost-effective means, and by helping to establish the regional training centers.

The Subproject III was objected to augment and establish the process, methodology, and comparable techniques for environmental pollution data collection, comparability, and analysis for regional air and water pollution data in Northeast Asia. The key activity of the subproject implementation under the TA Project was a meeting of experts on pollution monitoring and analysis. The workshop was held in Seoul in July 1997. Main discussion points include the state of environmental quality monitoring, ambient air quality and stack standards, guidelines on monitoring methodologies for air and water pollutants in the countries of the subregion, and various instruments available for monitoring stack emissions including issues of purchase costs and operating costs. Also, the Meeting recommended the use of a network of ambient air quality monitoring stations consisting of a few selected stations in each country, and that training should be conducted on the principles and operation of the monitoring equipment used in the Northeast Asian countries. Based on the discussions and recommendations, the proposal for continuation of the Subproject and establishing regional network for transboundary environmental monitoring was developed. In addition, the subproject decided establishment of a subregional clearinghouse center to be located at the National Institute for Environmental Research (NIER) in the South Korea. The proposal was submitted to the SOM, and ADB approved the execution of the work programme by including the proposal in the ADB's new TA.

As for the second phase of the TA Project, the Project commenced after ADB decided to finance it in October 1999<sup>14</sup>. It is expected to complete within 30 months (ADB, 1999a).

#### *2.3.4 Finance*

According to the Framework for NEASPEC, as adopted in 1996, financial support for the activities of NEASPEC was expected to come from the following sources: (a) voluntary contributions from the Participating Parties in cash or in kind or both; (b) Collaborating agencies on a project-funding basis; (c) Contributions from bilateral and multilateral donors; (d) The private sector on a project-funding basis; and (e) other contributions. Accordingly, organization cost of annual SOM

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<sup>14</sup> ADB announced its decision to finance US\$350,000 on a grant basis, with co-finance of participating countries (China, South Korea, Japan and Mongolia) and international organizations (UNEP and ESCAP) in October 1999.

were provided by UNDP or voluntarily contributed by host countries in principle, and project implementation cost was provided by ADB (especially from the Japan Special Fund) in main. Also, Japan and South Korea provided wide-ranged assistance through their cooperation funds with ESCAP and on a voluntary basis for the NEASPEC activities.

Yet, SOM5 agreed that there is a need for NEASPEC to elaborate on financial arrangements. Thereupon, the ESCAP Secretariat worked on a paper, suggesting a creation of a new financial mechanism called “Northeast Asia Environmental Cooperation Fund (NEAECF)” to attract sizeable funding support from different sources, including the participating governments as well as other donor participating countries. As for the level of contributions of the participating governments, the ESCAP Secretariat suggested three options. They are: (I) all the participating governments should contribute to the NEAECF according to the United Nations scale of assessment agreed upon by the General Assembly of the United Nations; (ii) A fixed percentage of the NEAECF’s (such as 60 percent) should be covered by the participating governments at equal shares. The remaining percentage (such as 40 percent) should be contributed according to the United Nations assessment scale. (iii) All participating governments contribute on a voluntary basis.

Although other possible ways were also presented, SOM5 did not reach on any consensus on the issue, since divergent views were expressed by participating countries. The ESCAP secretariat was requested to further elaborate for options and alternatives for financial arrangements for consideration at SOM6.

Thereafter, at the Expert Group Meeting held in Seoul, November 1999, ESCAP proposed establishment of a core fund based on voluntary contribution. The meeting concluded that the core fund would function as a seed to attract additional funding from different donors, and should be further developed as early as possible to enhance effectiveness of NEASPEC activities. Also the meeting recommended that the senior officials might consider a non-binding formula as guidelines for contribution (UN/ESCAP, 1999c). The recommendations raised by the Expert Meeting were brought to SOM6 in March 2000.

The SOM 6 agreed an establishment of a “core fund for North-East Asian Environmental Cooperation,” to which one or more participating countries make voluntary contribution for promoting subregional environmental cooperation. The fund is expected to be utilized for projects adopted by SOMs. At SOM 6, South Korea expressed its voluntary contribution of US\$ 100,000 to the core fund.

### *2.3.5 Relevancy with National Policies*

NEASPEC has given high priority to a deal in the issue of energy and air pollution, which has taken on significance in national environmental policies of most countries in the subregion.

Chinese government has recognized that air pollution is one of the primary environmental issues, since it causes evident damages on human health, agriculture and great economic loss<sup>15</sup>. In China, major pollutants are SO<sub>2</sub> and smoke dust due to the dominant share of coal (75%) in consumption of primary energy. SO<sub>2</sub> emissions from thermal power plants were responsible for 35% of the total emissions in 1995. It is estimated that SO<sub>2</sub> emissions of the power plant sector in 2000 would reach to half of the total emissions, due to the increase in total capacity of thermal power plants. Therefore, SO<sub>2</sub> emission control by thermal power industry is vital for a successful SO<sub>2</sub> reduction (Zhou, 1999). Thus, the Ministry of Electricity requires new plants to facilitate desulfurization equipment if sulfur content of coal is more than 1%. Also, existing plants are also required to take measures for SO<sub>2</sub> emission control and complete the installation of desulfurization equipment by the year 2010.

However, implementation of such regulations for air pollution prevention and control is not effective. In addition, availability on both economically and technologically efficient technologies for air pollution control are limited.

As for Mongolia, air pollution is worsening in Ulaanbaatar and other cities. Major emission sources are the thermal power plants and stoves in gers in which about half citizens use as their house

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<sup>15</sup> For example, Yihong (1997) evaluates that all national losses of air pollution from health of human body, agriculture, and damage of goods by economical methods reaches nearly 3.65 % of GNP, 5.29 % of National Income.

(Oversea Environmental Cooperation Center, 1997). Thus, Mongolia enacted the law on air in 1955, and Programme for Protection of the Air was adopted in 1999 for the purpose of ensuring enforcement of the law on air. In order to meet the programme, it is necessary to facilitate desulfurization equipment in both new and existing power plants.

Thus, Subprojects I-II under the TA project of NEASPEC provided a good opportunity for China and Mongolia to acquire information on such technologies. In particular, Mongolian power plants managers and operators require technical assistance from NEASPEC, with plant upgrade decisions regarding proposed improvements to increase plant efficiency and environmental protection measures, especially in terms of project identification and evaluation of outside proposals. Similarly, TA is useful for China in terms of capacity building to evaluate option upgrades and retrofit options from an economic and financial perspective. In this way, TA project of NEASPEC is likely to meet the national policy's requirement of China and Mongolia.

On the contrary, South Korea and Japan have committed the TA project from different aspect.

As for South Korea, due to low supply of sulfur fuel and the mandatory use of clean fuel, SO<sub>2</sub> pollution has rapidly decreased since 1990. To date, no regions have exceeded short-term environmental WHO-recommended standards (Ministry of Environment, Republic of Korea, 1999). Likewise, air pollution caused by sulfur dioxide had been remarkably improved due to regulations on emissions from stationary sources and on the sulfur content of fossil fuels in Japan.

However, the East Asia region is now facing threats from air pollution and acid deposition. It is because the region is expecting rapid energy driving industrialization, which is based on coals of high sulfur content (Environmental Agency, Government of Japan, 1997). Moreover, the industrial pollution and environmental deterioration would cause negative impacts on not only within the borders of these countries but also in terms of the global environment in the form of global warming and acid rain. Hence, Japan and South Korea have explored many aid projects to use the environmental technologies possessed by their public and private sectors for assisting the efforts of developing countries in the subregion to tackle energy and environmental problems.

The NEASPEC projects provide an opportunity for technology transfer from these two countries to developing countries in Northeast Asia. For example, both Japan and South Korea held demonstration and on-site workshops on Low-air-pollution Coal-fired Power Plant Technology under Subproject II of the TA project for NEASPEC. In particular, in the Third Workshop, as held in Taejeon, South Korea, in July 1997, South Korea provided information on the advanced research and development ongoing in South Korea and its application in power plants. The meeting recognized that Korea Electric Power Research Institute (KEPRI) and Korea Electric Power Company (KEPCO) have a wealth of information to share. Thus, establishment of a clean coal technology center of learning open to power plant experts from across Northeast Asia in South Korea was recommended in the meeting (UN/ESCAP, 1999b).

### *2.3.6 Future Direction*

Since its inauguration in 1993, NEASPEC has expanded its scope and activities in a modest manner. After adopting the Framework for NEASPEC, two TA projects have been identified and implemented with financial assistance from ADB, UNEP, ESCAP and some participating countries. Although it is likely that long time is needed for participating countries to agree to solid institutional/financial arrangements for NEASPEC, SOM 6 in 2000 opened a new stage of NEASPEC by creating a core fund.

NEASPEC, however, has drawn some criticisms: NEASPEC has limited capacity on project-finding processes and its implementation for project-oriented frameworks. Although NEASPEC has identified ecosystem management, in particular deforestation and desertification as one of the three priorities, no project has been identified on the issue. It seems there are a number of bilateral/ multilateral activities on air quality and energy, which is highest priority of the NEASPEC's, there has been little coordination between NEASPEC and other initiatives. Accordingly, NEASPEC and other initiatives might contain considerable redundancy.

Considering the situation, it will be indispensable for NEASPEC to draw out its long-term vision and consider a good coordination with other forums/ programmes on environmental cooperation

endorsed by both multilateral and bilateral levels. This coordination should be carefully designed in a strategic manner after assessing advantages and disadvantages of each forum/ environmental program<sup>16</sup>.

## 2.4 An Assessment

### 2.4.1 Major Features

The mechanisms for environmental cooperation can be summarized as follows:

a) Parallel institutions: Several institutions for environmental cooperation were established through different channels, including environmental ministries, official diplomatic channels, officers of environmental agencies and ministries, NGOs, and academics, with little coordination between the various channels (see Table 2.2). Consequently, some initiatives contain material that is redundant.

b) Multi-layer structure: Geographical coverage of environmental cooperation initiatives ranges from global, broader-than-regional to subregional. Some multilateral initiatives target Northeast Asia,

while some target the whole region of East Asia or, even more broadly, Asia and the Pacific. The evidence shows that South Korea tends to favor a focus on Northeast Asia, whereas Japan focuses on the broader region (East Asia), or the entire Asia-Pacific region.

c) Different membership: The status of participating states differs from one initiative to another, depending on diplomatic relations between countries and on the international membership of the host organization<sup>17</sup>.

d) Weak institutional/financial structure: Since most of the regional environmental initiatives have little organizational structure and a weak financial foundation, cooperation has made only slow progress. Although the assistance of international organizations such as UN/ESCAP, UNEP, UNDP and the ADB has been beneficial in facilitating such cooperative initiatives, in the absence of regional organizations which can administer regional environmental plans and programs, each initiative must start negotiations from scratch. Some initiatives have stagnated in terms of institutional and financial development.

e) Different environmental priorities: Environmental issues identified as priority include air pollution (acid rain), inland and coastal water pollution, loss of biodiversity and deforestation. Although

**Table 2.2 Major Environmental Cooperation Initiatives in Northeast Asia**

Issue \ Channel	Comprehensive	Sectoral
Ministerial	TEMM	
Diplomatic	NEASPEC	NOWPAP EANET
Environmental Ministries	NEAC	
Citizens/ NGOs	NAPEP	

Source: Author

<sup>16</sup> NEASPEC has an advantage in that it is an intergovernmental program endorsed by many international organizations and it enables to mobilize diplomatic channels among participating countries and the network of ESCAP and the other institutions. Therefore, national-level requirements from each participating country could be easily reflected on agenda setting of NEASPEC. Also, NEASPEC could utilize financial support from ADB and other multilateral/ bilateral donors favorably. On the other hand, NEASPEC has weakness in that public participation has been not assured in the decision-making process because of its highly formal procedures. In this point, less formal forums: NEAC and NAPEP, might complement the weakness of the NEASPEC function.

<sup>17</sup> For example, North Korea does not attend most subregional programs, except those hosted by UN Organizations. North Korea cannot receive assistance from the ADB, to which it does not belong. Taiwan has no access to many initiatives because its position in international politics is uncertain although it is a member of APEC and ADB.



countries in the subregion have attached importance to the first three issues, there seems little interest from governments, civil society or NGOs in combating desertification (UNEP, 2000)<sup>18</sup>. Transboundary pollution has been not seen as immediate a threat as domestic problems, and most countries in the subregion consider it a future threat rather than a present emergency. There has been little scientific consensus on the issue. So, governments have had little incentive to deal with transboundary pollution. The trend is changing recently, however.

Subregional cooperation in Northeast Asia has existed for less than a decade. In contrast, European cooperation has more than 30 years of history; and ASEAN, more than 20 years. Northeast Asia has only established permanent policy-dialogue forums and identified issues to be tackled jointly. Some of the initiatives are approaching the second stage -- collecting scientific data through environmental monitoring. It may be too early to judge the appropriateness and effectiveness of current environmental cooperative mechanisms.

Nevertheless, it might safely be said that the progress of environmental cooperation has been slow. Some of the multilateral initiatives have stagnated in terms of institutional and financial development. The economic and political situations of Northeast Asia have constrained the development of environmental cooperation mechanisms, resulting in stagnation.

#### 2.4.2 Actors

##### Regional organizations

The EC/EU has seen a number of successes on environmental cooperation, such as efforts in unifying environmental standards in connection with economic activity in trade and manufacturing. As for long-ranged transboundary air pollution (LRTAP) control, the LRTAP Convention itself was facilitated and coordinated by the United Nations Economic Commission for Europe (UN/ECE), which has provided minimal secretariat services to its member states. And, compliance has been very high.

It should be pointed out that EC/EU financial and technology transfer mechanisms have official and unofficial links with the LRTAP Convention. This apparently made it easier for the member states to comply with the LRTAP Convention and its protocols.

It should also be pointed out that EC/ EU directives on regulating air pollutant emissions have encouraged certain countries to comply with the Convention.

Unlike the EC/EU, ASEAN did not create a strong central bureaucracy but provided minimal and largely administrative support to member states through the ASEAN Secretariat (Tay, 2000). It has developed many regional environmental action plans, three ASEAN environmental programs (1978-1992), two strategic action plans (1994-), and transboundary pollution action plans (1995-) (ASEAN Secretariat, 1994, 1995).

The institution supporting those plans and programs is well-structured, consisting of ASEAN (ASEAN Senior Officials on the Environment), ASEAN Ministerial Meeting on the Environment (AMME), ASEAN Ministerial Meeting (AMM, Meeting of ASEAN Foreign Ministers) and the ASEAN Summit meetings (Kato and Takahashi, 2000). Consequently, ASEAN has managed to develop a comprehensive and strategic environmental cooperative framework with few redundancies.

Northeast Asia, however, is characterized by the fact that no comprehensive regional organization equivalent to EC/EU or ASEAN exists.

There has been virtually no one to coordinate the initiatives on environmental cooperation. The functions and activities of each subregional program, plan and forum may overlap. In fact, redundancies seem inevitable in Northeast Asia. For example, the role of NEASPEC and NEAC resembled each other at their primary stages, although the situation has improved since<sup>19</sup>.

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<sup>18</sup> Yet countries in the subregion are trying to strengthen their national policies individually. China, after experiencing severe floods mostly due to destruction of natural forests, has expressed deep concern on the issue. Much international assistance has been spent on afforestation.

<sup>19</sup> NEASPEC later began to implement a small number of technical assistance projects on air pollution control, and it has played a central role in Northeast Asia as an official intergovernmental program for subregional environmental cooperation. NEAC, on the other hand, has provided a frank forum for exchange of information and

Many now point out that Northeast Asia needs to coordinate all the initiatives systematically and thereby create a synergy for strengthening cooperation.

The absence of a regional organization also affects the institutional and financial arrangements of each program and its plans.

For example, the location of the secretariat ranges from UN/ESCAP, to UNEP, to China, and to Japan, or on a rotating basis. Accordingly, the status of participating states differs from one initiative to another, depending on diplomatic relations between countries within the region, and the international membership of the host organizations<sup>20</sup>.

Most initiatives in Northeast Asia have had shaky financial foundations. The costs of implementing the EC's environmental plans have been covered by sturdy financial mechanisms. ASEAN, unlike the EC, has not covered the costs of implementing the environmental cooperation plans and programs but has instead sought to attract and coordinate external funding. Northeast Asia, by contrast, has no regional organization to provide such services. So, most environmental cooperative initiatives have suffered a scarcity of financial resources.

One exception is EANET: its preparatory activities have been sponsored by the government of Japan, a promoter of the program. The government also has provided financial assistance on monitoring activities to developing member countries through its official development assistance<sup>21</sup>. Yet, the government of Japan prefers that every member state either share the financial burden to some extent or ask for donations from Japan.

### UN Organizations

The absence of a powerful regional organization resulted in enhancement of the role of UN organizations in facilitating and catalyzing subregional environmental cooperation in Northeast Asia.

UN/ESCAP has placed one priority on promoting subregional cooperation on the environment. For Northeast Asia, it has played the role of interim secretariat of NEASPEC. It has also striven to promote communication and has sometimes endeavored to persuade the ADB to provide funding for implementing NEASPEC projects.

Along with UN/ESCAP, UNEP has also attached importance to the subregional approach, and has provided technical assistance for a number of projects developed under subregional environmental programs.

The most notable contribution of the UNEP in promoting subregional cooperation lies in its catalytic and coordinating role to initiate the Regional Seas Programme, which includes NOWPAP and East Asian Seas (EAS) Action Plan.

The UNDP's main task is to assist developing countries adopt integrated approaches focusing on managing natural resources to improve the livelihoods of people living in poverty. It also provides financial and technical assistance to subregional environmental initiatives in the developing world. GEF has provided technical assistance grants to projects proposed for Northeast Asia in the areas of biodiversity and climate change, including a project on preparation for a Strategic Action Programme for the TRADP.

In this way, UN organizations have conducted various activities underlining their catalytic and coordinating role in promoting regional and subregional cooperation on environment. There is, however, a limit to the role of UN organizations.

UN/ESCAP and UNEP-ROAP are tasked with covering the entire Asia-Pacific region with limited human and financial resources, meaning they are very limited when it comes to what they can offer the subregion of Northeast Asia.

For example, UN/ESCAP has played a significant role in establishing and facilitating subregional

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views on a wide range of topics, including the use of innovative techniques and policy instruments and the role of local governments.

<sup>20</sup> For example, North Korea does not attend most subregional programs, except those hosted by UN Organizations. North Korea cannot receive assistance from the ADB, to which it does not belong. Taiwan has no access to many initiatives because its position in international politics is uncertain although it is a member of APEC and ADB.

<sup>21</sup> Japan published "Initiative for Sustainable Development (ISD) at the dawn of the 21st Century" in 1997, which stated that Japanese ODA provides financial and technical aid to developing countries in the region for use in EANET activities.

environmental programs, namely, SACEP, ASEAN programs, SPREP and NEASPEC. Once such subregional programs are fully established, however, the UN/ESCAP hopes they come to stand on their own feet with the support of the countries in the subregion.

In the case of NEASPEC, UN/ESCAP has acted as interim secretariat since 1997. Most countries in the subregion want UN/ESCAP to continue to take the responsibility, while the UN/ESCAP wants to give up the position.

#### National governments

Northeast Asian countries have significant differences in their viewpoints and approaches to environmental cooperation.

China has suffered devastating environmental deterioration, including heavy industrial pollution, desertification, inland water and coastal pollution. China believes subregional cooperation should be focused on these issues.

China is quite sensitive to the use of the term “transboundary” as it does not wish to be seen by other countries as causing pollution that threatens environmental conditions in territories outside its borders.

Since most countries in East Asia are developing ones with limited resources in terms of science, personnel and finances, China believes developed countries in the subregion should offer substantial financial support for the establishment and operation of environmental programs as well as technical assistance to projects in their priority areas.

Japan has long worked to satisfy China’s demands through financing and implementing a number of environmental projects in China as part of its ODA, as earlier mentioned.

Japan apparently believes multilateral initiatives should not overlap with its bilateral and existing multilateral assistance projects but instead focus on monitoring of the state of the environment and transboundary pollution. Japan also appears wary of multilateral initiatives out of concern that such an initiative could become another channel for development assistance. Japan has suggested that subregional countries should share the burden to some extent.

Japan places priority for multilateral programs on areas such as marine pollution, acid rain, air and water pollution. Japan has recently expressed deep concern for climate change.

South Korea is keener to promote multilateral environmental cooperation in Northeast Asia. It apparently believes that multilateral initiatives should include both technical projects as preferred by China and monitoring-type environmental management projects as preferred by Japan (Valencia, 1998).

So, South Korea has tried to mediate between China and Japan by proposing priority projects of NEASPEC be energy and air pollution. It seems that South Korea prefers the presence of international organizations in such multilateral initiatives. It has suggested coordinating mechanisms for environmental cooperation be channeled by financial and technical assistance from international organizations including UNDP, UN/ESCAP and ADB.

Russia and Mongolia need financial and technical assistance to protect their environments. The priorities for Russia include ecosystem management and more practical and action-oriented programs (Valencia, 1998), whereas Mongolia attaches importance on natural disaster (drought), nature and wildlife protection, and air pollution.

In addition to different viewpoints expressed by each country, it should be pointed out that, even in a single country, there exist divergent and sometimes competing viewpoints. These days, not only environment ministries/agencies but trade, energy, agriculture, foreign affairs, fisheries, transportation and other ministries have taken action regarding the environment. Officials from different ministries have different perspectives, their own jurisdictions and their own interests.

Although a number of attempts have been made to strengthen multilateral initiatives on environmental cooperation, such attempts have been hindered by competing interests.

#### Citizens, NGOs and academics

International NGOs and NGO networks are among the newly emerging actors in regional/subregional environmental cooperation field in Asia.

In Northeast Asia, at the domestic level, the role of the public and NGOs in environmental

activities has been significant, in the case of civil society movements against industrial pollution as observed in Japan and South Korea, and nature and wildlife conservation activities. Some critics suggests that there lack appropriate mechanisms for bringing the public and NGOs into full play, though.

Nevertheless, each country attempts to introduce certain mechanisms to promote public participation in environmental protection activities. In most countries, the media have played a significant role in increasing public awareness of environmental conditions, and have worked with NGOs to get official responses.

NGOs' participation in multilateral environmental cooperation has been limited in Northeast Asia thus far. One exception is nature and wildlife conservation. The Northeast Asian Crane Site Network, launched in 1997, welcomes public participation, and has encouraged information exchange and sharing of the experience of wetlands sites important to cranes. The network was facilitated by an international NGO, the Wetlands International Asia Pacific and Wetlands International. A number of NGOs in the subregion as well as governmental organizations collaborated on the network. In other important areas, Some NGOs are linked to regional institutions endorsed by international and regional organizations and national governments, and the role of citizens and NGOs in environmental protection has been limited.

Academics—universities, research institutes and also individual technical and scientific specialists—are another newly emerging actor in the field of regional environmental cooperation in Asia. Academics play significant roles in identifying environmental threats, drafting action plans and agreements and monitoring the implementation of the agreements, in cooperation with officials of international organizations and national governments.

This is not to say that such efforts are enough to create transnational “epistemic communities,” or communities of experts sharing common values and approaches to policy problems<sup>22</sup>. Haas (1990) attributes the success of the regional efforts to control marine pollution in the Mediterranean Sea to “the involvement of ecologists and marine scientists who set the international agenda and directed their own states’ support to international efforts and toward the introduction of strong pollution control measures at home.” It seems the time has not yet come for the emergence of such a community in Northeast Asia.

On the contrary, the evidence shows that most links between international and governmental organizations and academics, or between academics and other academics are on an ad-hoc basis. These insufficient links sometimes cause friction between scientists, and also between policymakers of different countries. In several cases, some have criticized the fact that scientists from only a single country consulted with decision-makers on regional initiatives, and took over the decision-making process.

#### *2.4.3 Future Prospects*

##### *Need to further subregional environmental cooperation*

Considering the weaknesses of environmental cooperative mechanisms, enhancing cooperation in Northeast Asia may be difficult. Nevertheless, the need exists and can be summarized as follows:

In Northeast Asia, transboundary acidic precipitation, coastal and inland water pollution, will likely become critical problems in the future, although there is little consensus yet among scientists of the countries concerned on the geographic extent and scale of such transboundary flux and its adverse effects. The subregion has also faced desertification and loss of biodiversity. The size of the subregion seems to offer an appropriate framework for rational utilization of the region's natural resources and mitigation of the effects of environmental degradation. Cooperation is needed to tackle the issues.

In Northeast Asia, there was little observable trend toward regional economic integration until the 1990s, when there was some economic cooperation, such as TRADP. These opportunities underscore the need for environmental cooperation in the subregion.

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<sup>22</sup> According to Haas (1990), an “epistemic community” is “a professional group that believes in the same cause-and-effect relationships, tests to assess them, and shares common values. As well as sharing an acceptance of a common body of facts, its members share a common interpretive framework, or ‘consensual knowledge,’ from which they convert facts or observations to policy-relevant conclusions.”

Northeast Asia was separated into West-East camps during the Cold War era, and memories of the hot as well as cold wars remained. Northeast Asia has no mechanisms in place for maintaining its own regional peace and security. Some countries have been unable to establish normal diplomatic relations with each other. Several cases of territorial disputes remain unsolved. Considering these circumstances, the belief that regional stability and peace can be enhanced through the development of a framework for environmental cooperation is intuitively appealing (Schreurs & Pirages eds., 1998; Matsushita et al., 2000; Yonemoto, 1998).

However, It should be noted that environmental cooperation does not automatically result in the promotion of peace and security. In fact, states don't always participate in ongoing initiatives in the subregion due to certain political obstacles. In order to promote regional stability through the development of environmental cooperation, programs need to be carefully designed with special consideration given to the existing geopolitical dynamics in the subregion.

#### Lessons from the European experience

The experience in other regions of furthering subregional environmental cooperation offers a good guide for Northeast Asia.

The long-ranged transboundary air pollution control in Europe is one of the most successful cases in the world. Agenda 21, as adopted at the Rio Summit, suggests the experience of the Europeans with their programs needs to be shared with other regions of the world.

The brief history is as follows: In Europe, the OECD responded to a request from Scandinavian countries to inaugurate a multilateral monitoring program of acid rain in 1972. The OECD program was taken over by UN/ECE in 1977, and renamed the Co-operative Programme for Monitoring and Evaluation of the Long-Range Transmission of Air Pollutants in Europe (EMEP-LRTAP).

The LRTAP Convention was agreed upon in 1979. Although the convention itself regulated no air pollutants, protocols on 30% reduction of sulfur emission and on NO<sub>x</sub> emission control were adopted in 1984 and 1988.

The Second Sulfur Protocol was agreed upon in 1992. Calculation using a computer model enabled the protocol to set a different target of emission reduction for each country.

As for scientific fact-finding processes, Northeast Asia apparently tries to follow the footsteps of Europe. In fact, EANET has invited EMEP experts to their meetings for advice and information. The current stage of EANET is roughly equivalent to the middle of the 1970s when the OECD program was initiated. This region needs to develop a scientific consensus on emissions monitoring and estimation of the transmission of air pollutants.

As for institutional arrangements and processes, however, it might be too early to judge whether East Asia will follow the European experience because Northeast Asia has less than 10 years of experience.

There are many differences between the two regions. East Asia apparently has more difficulty than Europe reaching a consensus, due to a lack of economic, political and social homogeneity. As mentioned earlier, the LRTAP Convention has been well maintained by strong links to EU policies and aid programs, whereas there is no regional organizations equivalent to the EC/EU in East Asia. Also, a byproduct of the political goal of improving East-West relations during the Cold War was the promotion of the establishment of the LRTAP in Europe. These regional characteristics of Europe assisted the enhancement of multilateral cooperation.

Considering these factors, it is improbable that East Asia will follow in Europe's footsteps. It does not, however, mean that there are few lessons to be learned from the European experience. In Europe, EC/EU environment aid programs have been formally and informally linked with EU common policies on environment and other regional policies such as the LRTAP Convention.

It is also observed in the Baltic Sea region. Although the subregion has no legally-binding environmental policies equivalent to EC/EU directives, there are several multilateral cooperative frameworks. Such frameworks include the Council of the Baltic Sea States (CBSS)<sup>23</sup>, the Nordic

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<sup>23</sup> CBSS is attended by the foreign ministers of 11 countries -- Denmark, Estonia, Finland, Germany, Iceland, Latvia, Lithuania, Norway, Poland, Russia and Sweden -- and the European Commission. Aiming to promote

Council<sup>24</sup>, and the Helsinki Commission<sup>25</sup>. This linkage approach would be applicable to Northeast Asia.

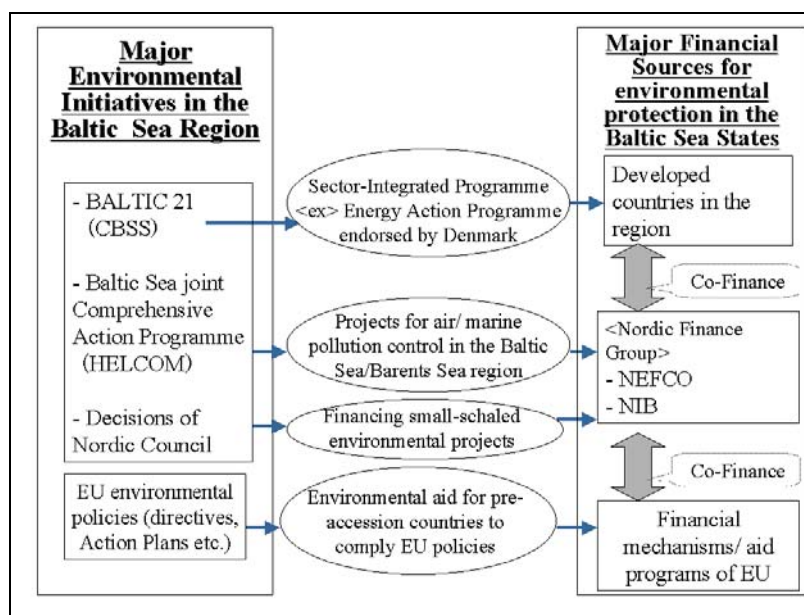
Each framework has made its own objectives clear and worked out various environmental action plans and programs. Such decisions have been efficiently linked with multilateral and bilateral environmental aid of Scandinavian countries (See Figure 2.1).

It is expected that Northeast Asia can draw more lessons from the Baltic Sea region (than from the EC/EU) since there are similarities between the two subregions. That is, countries within the two subregions differ widely in terms of economic, social and environmental preconditions.

The Baltic Sea region's experience may be applied to Northeast Asia in the following ways:

- Linkage between regional common policies and aid programs<sup>26</sup>: regional/subregional (multilateral) initiatives are based on the spontaneous cooperation among countries in the region. Sharing of the financial burden between member states is desirable, in principle. Since it is difficult, however, for the developing countries in a region to implement such programs or plans, financial and technical assistance from developed countries and international institutions are indispensable.
- Linkage between bilateral and multilateral aid: Bilateral aid is based upon the diplomatic judgment of the two countries concerned. On the other hand, multilateral aid can attach importance to regional priorities<sup>27</sup>. However, multilateral aid has little capacity to finish on its own due to financial constraints, so it requires maintaining ties with bilateral aid and

**Figure 2.1 Linkages between environmental initiatives and environmental aid in Baltic Sea Region**



Source: Author

sustainable development in the region, the CBSS worked out Agenda 21 for the Baltic Sea Region (named 'Baltic 21') and its action program. Baltic 21 was adopted by the Foreign Ministers of the CBSS in 1998 (Baltic 21 Secretariat, 1999).

<sup>24</sup> The Nordic Council is a forum for co-operation between Nordic parliamentarians and between parliamentarians and governments in the Nordic region. It was established in 1952 and is attended by Denmark, Finland, Iceland, Norway and Sweden.

<sup>25</sup> The Convention on the Protection of the Marine Environment of the Baltic Sea Area, the Helsinki Convention was signed in 1974. Through the Convention, the Baltic Sea States established a commission, the Baltic Marine Environment Protection Commission, known as the Helsinki Commission (HELCOM). It is participated by the nine Baltic Sea States, Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland, Russia, and also the European Economic Community (EEC). Recognizing the importance of a long-term perspective, Helsinki Commission adopted "the Baltic Sea Joint Comprehensive Environmental Action Programme" in 1992.

<sup>26</sup> For example, the Baltic 21 Action Programme focused on several sectors of crucial importance to the region--agriculture, energy, fisheries, forests, industry, tourism and transport - and on spatial planning (Baltic 21 Secretariat, 1999). Each sector has one or two lead parties. For the energy sector, Denmark takes responsibility and uses its ODA to implement the program.

<sup>27</sup> In the past, there was little multilateral assistance targeting Northeast Asia expect for the aid provided through international institutions/banks. In recent years, however, Japan, United States and South Korea have expanded trilateral initiatives on multilateral development aid projects. This trend is expected to continue.

private investment.

- Application of sector-integrated approach and multi-effect approach: These approaches are applied to environmental action programs in Europe and the Baltic Sea region. The multi-effect approach recognizes the fact that the same pollutant is often relevant for several of the environmental problems. Reduction of emissions to address one problem will help to address others. For example, reductions of CO<sub>2</sub> emissions to address climate change also reduce SO<sub>2</sub>, NO<sub>x</sub> and CO emissions, hence reducing acidification, and improving tropospheric ozone and urban air quality (CEC, 1997). It is therefore important to take this into consideration when working out programs for effectively reducing pollutants. Although priorities for developed countries and developing countries differ, the application of a multi-lateral approach may possibly reconcile their interests.

On the other hand, the sector-integrated approach suggests that “rather than be directed solely at each environmental issue, the strategy of action program ... [needs to] create a new interplay between the main groups of actors (government, enterprises, the public) and the principle economic sectors ... through the use of an extended, and integrated range of instruments” (CEC, 1993). This can most efficiently be done within the overall framework within which all activities are integrated and coordinated.

As mentioned earlier, several cooperative efforts in various issue-specific fields with the involvement of several countries concerned coexist and are well coordinated in the Baltic Sea region. (These initiatives vary in their member states.) This concept is called “modular multilateralism” (Ivanov, 1999) – “each ‘module’ entails more than individual bilateral and multilateral cooperation.” That is, “each ‘module’ may encompass a number of common or shared interests that cannot be effectively secured” through a cooperative effort. It is assumed that this concept is applicable to Northeast Asia, where no comprehensive and overall initiatives exist, but several cooperative initiatives exist.

## 2.5 Conclusion: Suggestions for Furthering Cooperation

It is relatively easy to show the difference between Northeast Asia and other regions such as the Baltic Sea region and Europe. More difficult is the task of offering constructive lessons to be drawn from Northeast Asia’s precursors, while recognizing the different economic, social and political realities. Northeast Asia is a unique subregion in terms of political, economic and social variety, so the region cannot shape its future only by borrowing know-how from other region/subregions’ experience.

Northeast Asia needs to create systematic coordination between all the initiatives, in particular initiatives undertaking similar or related subjects. To make it easier, the first step to be taken should be to set up a system that maintains transparency and full disclosure. Recently, some regional and subregional initiatives have set up their own web pages on the Internet<sup>28</sup>. This trend should grow and be further enhanced.

The evidence shows that weaknesses and inadequacies of environmental cooperation schemes in Northeast and East Asia, as analyzed in this paper, have hindered the progress of regional cooperation on single issues such as acid rain and marine pollution control<sup>29</sup>. Nevertheless, it might safely be said that a large amount of collaboration has already taken place in Northeast Asia through a large amount of environmental investment via both Official Development Assistance (ODA) and foreign private investment. Much of this collaboration is, unfortunately, undertaken fragmentally.

Therefore, the region needs to form links between individual initiatives and financial mechanisms, between bilateral and multilateral aid programs, between donor agencies, and between regional cooperation initiatives and financial aid mechanisms, as the Baltic Sea region has done. Each initiative has faced financial constraints. Considering the fact that regional cooperation is based on spontaneous

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<sup>28</sup> Those include: EANET, TEMM, TRDAP and the Crane Network. Collaborative activities of NEASPEC are also introduced in UN/ESCAP homepage.

<sup>29</sup> See Takahashi (2000a) and Takahashi & Asuka (2000) for the case of acid rain, and see Valencia (1998) and Haas (1998) for the case of marine pollution control.

initiatives among the countries, sharing the financial burden is a necessity. Countries need to continue negotiations with patience. Thus far the willingness of a country to share some of the financial burden has depended on the country's enthusiasm for the initiative and its ability to pay. Taking developing countries' difficulties into consideration, developed countries and international institutions need to provide financial and technical assistance.

In the long-term, a comprehensive and strategic environmental action plan should be developed for medium and long-term objectives. Such action plans have already succeeded in other regions and subregions such as the EU, the Baltic Sea region and ASEAN. It is also recommended that the plan (program) applies the above-mentioned "multi-effect approach" and the "sector-integrated approach." It would be better if the plan can identify not only major measures but also concrete instruments, the time frame, sectors/actors concerned, and financial mechanisms, as the Fifth EU environmental action program did. In a sense, the ECO-ASIA long-term perspective project tries to draw out such a plan. For the working process of such an action plan, highly official (ministerial leveled) meetings such as TEMM, ESCAP ministerial meeting and "Rio + 10" will offer an important opportunity.

One long-term objective also should be for Northeast Asia to create a framework which all parties in the subregion attend. For the time being, the subregion needs to keep enhancing environmental cooperation based on the above-mentioned 'modular multilateralism,' since this objective will not be easily achieved because of the political security situation in the subregion. There has been some reason for optimism, such as realization of North-South Korea summit and North Korea's expected participation in ARF. South Korea is attempting to invite North Korea to the NEAC in 2001. Efforts are needed to make each 'module' more than an individual initiative. International organizations and NGOs must act for the countries of the subregion for this purpose. Apart from the UN/ESCAP, UNDP and UNEP, it is expected that the ADB and APEC will play a significant role in this area. Taiwan, whose status in international law is unstable, participates in both ADB and APEC as "Chinese Taipei." If Russia and North Korea join, the ADB could be a good medium linking all countries in the subregion. On the other hand, NGOs have played a big role promoting regional cooperation in the area of ecosystem conservation. International NGOs and NGO networks have promoted the North East Asian Crane Site Network, in which 18 sites from six countries in the subregion including North Korea and Japan participate. Taiwan participates in Atmosphere Action Network East Asia (AANE), a network of NGOs in East Asia, in which NGOs from seven countries including China, Taiwan and Hong Kong participate<sup>30</sup>. It is worth remembering that only NGOs can link all countries in Northeast Asia.

In addition, countries in this region need to improve their expertise, to manage the difficult political situation. This is particularly true for Japan and South Korea. Although the two countries have much in common with each other in that they are willing to promote and lead environmental cooperation, they are working in different directions, resulting in the inconsistent emergence of several independent institutions and the stagnation of other institutions. Both countries need to develop strategies for regional cooperation which incorporate their own interests, the other's interests and regional common interests.

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<sup>30</sup> The countries include: China, Hong Kong, Japan, Korea, Mongolia, Russia and Taiwan.



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# Environmental Cooperation in Southeast Asia (ASEAN)

**Wakana Takahashi**

### 3.1 Introduction

Southeast Asia, as referred here, embraces the 10 countries of the Association of Southeast Asian Nations (ASEAN). Although the environments are diverse, a large part of the subregion lies within the tropics. Rapid economic growth in the 1970s and 1980s has made Southeast Asia the most populous and developed part of the tropics in the world (Brookfield, 1993) with megacities and intensively used agricultural land. With high rates of production and consumption, cities in the area are responsible for environmental degradation in terms of air pollution, inland water pollution and coastal pollution (Tai-Chee, 1999). What uninhabited and unlogged rain forest remains has been seriously damaged by commercial logging with insufficient oversight, plantation agriculture, fuelwood extraction and a lack of land security for upland dwellers (AESAN, 1997).

Deforestation causes massive soil erosion, increased sedimentation of lakes, reservoirs and irrigation systems, reduced recharge to groundwater, loss of biodiversity, flooding and the destruction of agricultural lands and coastal areas. In the 1990s, smoke haze arising from land and forest fires has spread across national borders to become a common threat to the subregion. Marine biodiversity is also endangered by over-fishing as well as land-based/marine-based pollution. Such environmental damage poses a region-wide threat, not just a local or national threat.

Southeast Asia has a longer history of subregional environmental cooperation than other subregions in Asia. This has a great deal to do with its geopolitical picture. In the 1960s, the subregion was divided by ideological conflict and war. These political disturbances gave impetus to five non-communist countries<sup>31</sup> to join forces in friendship and cooperation on security and peace. ASEAN was thus established in 1967. Its primary concern was security rather than economic cooperation. In order to enhance regional stability, it has promoted active collaboration and mutual assistance on matters of common interest in economic, social, cultural, technical, scientific and administrative fields. In addition to cooperation on political security and economic issues, ASEAN emphasized "functional cooperation" between member states, including on science and technology, culture and information, social development, drugs and narcotics control, civil service, and the environment (ASEAN Secretariat, 1995).

Cooperation on the environment began in 1977 with the 1<sup>st</sup> ASEAN Environmental Program (ASEP). Since then, several programs, plans, declarations and resolutions have been adopted and implemented. The organizational structure for the cooperation has developed gradually.

That is not to say that the collective activities have always been implemented effectively and sufficiently. In fact, implementation of the plans and programs has often run into serious financial difficulties, and a large number of projects that failed to attract external funding have simply not been implemented. The overall effectiveness of the entire plan has been thus limited. An assessment of the implementation and effectiveness of subregional environmental cooperation in Southeast Asia is called for.

This paper is such an assessment, describing not only the cooperative plans and programs themselves but also the actors, processes and institutions involved. It addresses the following questions: By whom and how has environmental cooperation been addressed, identified and promoted? How do actors interact? How have basic subregional cooperative mechanisms been

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<sup>31</sup> Those include: Indonesia, Malaysia, Philippines, Singapore and Thailand.

developed? How do the mechanisms respond to environmental issues?

### 3.2 Overview

The conclusion of the ASEAN Environmental Programme (ASEP) in 1977 marked the start of ASEAN subregional cooperation. Since then, a number of declarations, resolutions and an agreement have been adopted, and several action plans and programs have been developed and implemented. Table 3.1 shows major events and collective initiatives on the environment, together with major action plans and programs.

**Table 3.1 Chronological table of major ASEAN initiatives on environment**

	Major Events/ /Declarations	Action Plans/Programs
1978	First ASEAN Expert Group Meeting on Environment	ASEAN Environmental Programme (ASEP) I (1978-82)
1981	First Ministerial Meeting on Environment Manila Declaration Jakarta Consensus on Tropical Forestry	
1984	ASEAN Declaration on Heritage Parks and Reserves Bangkok Declaration	ASEP II (1983-87)
1985	Adoption of Agreement on the Conservation of Nature and Natural Resources	
1987	Jakarta Resolution on Sustainable Development	ASEP III (1988-92)
1990	First Senior Officials meeting on Environment Kuala Lumpur Accord on the Environment and Development ASEAN Common Stand on UNCED	
1992	Singapore Resolution on Environment and Development	
1994	Bandar Seri Begawan Resolution on Environment and Development	ASEAN Strategic Plan of Action on Environment (ASPEN) I (1994-98)
1995	Establishment of Haze Technical Task Force	ASEAN Cooperation Plan on Transboundary Pollution (1995-)
1997	Jakarta Declaration on Environment and Development First Ministerial Meeting on Haze	Regional Haze Action Plan (1997-)
2000	Kota Kinabalu Resolution on the Environment	ASEAN Environmental Education action Plan (2000-5)

Source: Author

### ASEAN Environmental Programme (ASEP) I: 1978-1982

The ASEP I marks the beginning of ASEAN environmental cooperation. The UNEP (United Nations Environment Programme) Regional Advisory visited all five ASEAN countries in 1977 in order to consult with each government, and developed a draft program containing a list of recommended areas of collaboration. The nature and scope of ASEP I was comprehensive. The program identified six priority areas and listed a number of projects and activities. The priority areas cover marine environment; environmental management, including environmental impact assessment; nature conservation and terrestrial ecosystems; industry and the environment; environmental education and training; and environmental information.

In 1978, the draft program was submitted to the 1<sup>st</sup> Meeting of the ASEAN Experts Group on the Environment (AEGE), where experts from all five ASEAN countries met. Participants at the meeting selected priority areas and began some activities, such as developing and testing new methodologies in environmental impact assessment, building an inventory of endangered species, and conducting surveys of the urban air/water quality monitoring capabilities of national governments.

Under ASEP I, emphasis was placed on identifying activities which would benefit the ASEAN subregion and its member states. A series of technical meetings and workshops were held during this period with the participation of expert from member countries, international organizations and NGOs such as UNEP, ESCAP, Food and Agriculture Organization (FAO), International Union for Conservation of Nature and Natural Resources (IUCN), and World Wide Fund for Nature (WWF).

In the case of marine environment, UNEP took initiatives to develop the East Asian Sea Programme. It provided direct financial support to FAO, United Nations Educational, Scientific and Cultural Organization (UNESCO), World Health Organization (WHO), International Maritime organization (IMO), ESCAP and other UN agencies to undertake studies on various aspects of the marine environment. Based on the studies, UNEP prepared a draft action plan. With regard to nature conservation, IUCN and UNEP drafted an action plan, which was formally adopted in 1981. An action plan on environmental education and training was drafted by UNESCO/UNEP and adopted in 1983.

With regard to institutional arrangements, the AEGE meeting was held annually, acting as a decision-making body. In 1980, the AEGE became a sub-committee of the ASEAN Committee on Science and Technology (COST). Each country was required in turn (by alphabetical order) to serve as interim coordinator in implementing the program.

The 1<sup>st</sup> ASEAN Ministerial Meeting on Environment (AMME) was held in 1981. Participants at the AMME published the Manila Declaration on the ASEAN Environment, which approved ASEP and recommended its further endorsement. Thereafter, the AMME has been held every three years.

### ASEP II: 1983-1987

ASEP II was developed through the continual implementation and reviewing of ASEP I. Recognizing a general increase in the awareness of environmental issues in ASEAN countries, member states considered that ASEP I succeeded in fostering an exemplary spirit of environmental cooperation among ASEAN countries. ASEP II was designed to be more action-oriented, emphasizing demonstration projects. Table 3.2 shows the major activities and achievements under ASEP I and the major activities planned during ASEP II.

The program was approved at the 7<sup>th</sup> AEGE meeting in 1984. In addition to the five original countries of ASEAN, a new member, Brunei Darussalam also joined the 7th AEGE and agreed to consider participating in the various activities of the ASEP II.

Although the nature of ASEP I was comprehensive, the implementation of the program had been ad hoc depending mostly on the contribution of UNEP as the only major external financial source. The result was that ASEP I failed to take a systematic approach. Recognizing the constraints, contact with potential donor sources was promoted under ASEP II. To this end, ASEAN itself has established various formal dialogues bilaterally and multilaterally. It was thus envisaged that the ASEAN Committee on Science and Technology (COST), an parent committee of AEGE, was to share the responsibility of AEGE in acquiring additional external financial resources to implement parts of ASEP II (Koh, 1997).

**Table 3.2 Major activities under ASEP I and II**

Priority areas	Major activities/ achievements under ASEP I	Major activities/projects Planned for ASEP II
Environmental management including environmental impact assessment (EIA)	Succeeded in confirming the interest and willingness of ASEAN countries in employing EIA as a management tool.	<ul style="list-style-type: none"> <li>● Development of environmental planning methodologies</li> <li>● Demonstration projects on environmentally sound development</li> <li>● Development of EIA guidelines and its application in industrial projects</li> <li>● Development of a regional network of institutions related</li> </ul>
Nature conservation	An Action Plan, adopted by AEGE in 1981	<ul style="list-style-type: none"> <li>● Implementation of the Action Plan: espec.</li> <li>● Development and promotion of a regional network of selected protected areas of significance</li> <li>● Promotion of scientific and systematic training program</li> <li>● Implementation of a regional instrument in regulating international trade in endangered species of flora and fauna.</li> </ul>
Industry and environment	Recognizing that the urban environmental quality management of Singapore could serve as a model for other countries, promoted sharing of its experience	<ul style="list-style-type: none"> <li>● Technology Transfer in organo-industrial pollution control (funded by UNDP)</li> <li>● Upgrading ASEAN capability in air pollution control and monitoring (with financial/technical support of EEC)</li> <li>● Preparation of policy guidelines on transportation, collection treatment and disposal of hazardous substances</li> </ul>
Environmental education and training	An Action Plan prepared by UNESCO and adopted by AEGE in 1983	Promoting environmental education through: <ul style="list-style-type: none"> <li>● Development of curriculum materials for formal/non-formal education</li> <li>● Training on pollution control/wastewater control/hazardous waste treatment/nature conservation</li> </ul>
Environmental information & environmental data	<ul style="list-style-type: none"> <li>● Developed country profiles on environmental situation,</li> <li>● Publication of ASEAN news-letter,</li> <li>● Promotion of World Environment Day (WED)</li> </ul>	<ul style="list-style-type: none"> <li>● Training workshops for journalists</li> <li>● Training workshops for NGOS</li> <li>● ASEAN newsletter</li> <li>● Regional Collaboration on WED</li> <li>● Environmental information &amp; data collection</li> </ul>
Marine environment	An East Asian Sea (EAS) Action Plan prepared by UNEP and reviewed by AEGE in 1980	The 6 <sup>th</sup> ASEAN Standing Committee in 1981 decided that the EAS should be considered as a UNEP Program. Thereafter, AEGE has only monitored the progress of the program.

Source: Author

*ASEP III: 1988-1992*

ASEP III was prepared by the AEGE with the assistance of the UNEP-ROAP and the Bureau of Science and Technology of the ASEAN secretariat. The program was circulated to all six ASEAN member countries, endorsed by the 10<sup>th</sup> AEGE meeting, and adopted by the 3<sup>rd</sup> AMME held in 1987.

ASEP III set the goals, objectives, programs and activities for ASEAN environmental cooperation from 1988 to 1992. The program was developed through continual implementation and reviewing of ASEP I and II. In addition to the six priority areas selected for ASEP I and II, the area of

urban environment was added to the list since ASEAN countries recognized multifarious environmental problems in the urban centers of ASEAN -- problems which are not necessarily related to industry but associated with rapidly growing populations and inadequate urban management.

*Agreement on the Conservation of Nature and Natural Resources: signed in 1985*

The Agreement on the Conservation of Nature and Natural Resources, signed in 1985, is ASEAN's only environmental treaty to date.

Since the early stages of ASEAN environmental cooperation, member nations have attached importance to conservation of nature with particular emphasis on tropical forestry and issued a number of declarations and communiqués. Those include the Jakarta Consensus on ASEAN Tropical Forestry published at the third Meeting of ASEAN Economic Ministers on Agriculture and Forestry and the ASEAN Declaration on Heritage Parks and Reserves adopted at the 2nd AMME in 1984.

Convinced that agreements were key to coordinated action on nature conservation, ASEP II organizers placed laying the groundwork for an agreement high on the agenda. The Joint Communiqué of the 2nd AMME also endorsed the preparations.

The objective of the agreement is to promote individual and joint action for the conservation and management of living resources and other natural elements on which ASEAN member states depend. Being fully aware of the inter-relationship between nature conservation and socio-economic development, the agreement requires each participating country to develop and implement a comprehensive strategy to be coordinated within the framework of a strategy for the region.

The agreement was signed by the foreign ministers of all six then ASEAN members. Indonesia, the Philippines and Thailand ratified it in 1986, but Brunei Darussalam, Malaysia and Singapore have not. So, the agreement has not been put into force.

Singapore, Malaysia and Brunei Darussalam have made no official statements explaining their refusal to ratify. Other ASEAN member states have not pressed the issue.

Tay (1999) believes that the international environment experts who drafted the agreement seemed to have "given insufficient attention to either the ASEAN way, or the ASEAN response to international and Western approaches international the to environmental protection"<sup>32</sup>. He also argues that the principles of the agreement, suggesting that one ASEAN country might be under obligation to fund other ASEAN members to help conserve the region's natural heritage, has no precedent in ASEAN's history.

Koh (1995) points out that the agreement "was, perhaps, ironically too progressive for its immediate ratification and implementation," considering the Singapore situation in 1985<sup>33</sup>. She wonders, however, if the time is not now ripe for ratification.

In 1999, the ASEAN Secretariat urged non-ratified states together with new-member countries to state their intention concerning ratification of the agreement (Sunchindah, 1999). The stance of each country has not been made clear, however.

*ASEAN Strategic Plan of Action on Environment (ASPEN): 1994-1998*

After the conclusion and implementation of a series of ASEPs, it was recognized that a new ASEAN action plan should be developed taking into account new developments following the outcome of UNCED held in 1992.

A new ASEAN Strategic Plan of Action on Environment was subsequently prepared with the support of UNEP and ESCAP and in consultation with all member countries. Agreed upon in 1994, the plan consisted of 10 main strategic points and 27 supporting actions. The plan will be discussed in more detail in the latter part of this paper.

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<sup>32</sup> In fact, ASEAN has had very few binding agreements among member countries, not only in environmental areas.

<sup>33</sup> Koh points out that, although needs to compile data on endangered flora and fauna and to run an inventory of biodiversity was stated by the agreement, it was not until 1994 that Singapore first published these data. She concludes that, "rather than ratifying [the agreement] and allowing some of the important provisions to remain a dead letter, Singapore may have chosen not ratify it."

ASEAN Cooperation Plan on Transboundary Pollution (ACPTP): 1995-

The issue of transboundary pollution was first highlighted at the 4<sup>th</sup> AMME and was identified as among the major environmental concerns of ASEAN by leaders attending the 1992 ASEAN Summit in Singapore.

At the Informal ASEAN Ministerial Meeting on the Environment held in 1994, the ministers also discussed the problems and agreed that ASEAN should actively collaborate to build up the expertise and capacity of member countries to address the problems and minimize their impact. The result was the conclusion and adoption of an ASEAN Cooperation Plan on Transboundary Pollution at AMME in 1995.

The plan consists of three program areas -- transboundary atmospheric pollution, transboundary ship-borne pollution and transboundary movement of hazardous wastes. The plan elaborates the objectives, strategies, activities and institutional arrangements in each program area and lists potential sources of technical expertise and financial assistance that are available or can be mobilized to assist the plan's implementation.

The plan also outlines the steps required for its implementation and for evaluation of progress.

Regional Haze Action Plan (RHAP): 1997-

In 1991, 1994 and 1997, smoke haze from land and forest fires spread across national boundaries. Brunei, Indonesia, Malaysia, and Singapore were particularly hurt by the haze.

In light of the haze disaster, environment ministers of ASEAN countries agreed on the Regional Haze Action Plan in 1997. The plan sets out cooperative measures needed among ASEAN member countries to address the problem of smoke haze in the region arising from land and forest fires.

The plan will be discussed in more detail in the latter part of this paper.

Hanoi Plan of Action: 1998-

In parallel with the above initiatives, the Hanoi Plan of Action, the first in a series of comprehensive long-term visions adopted at the ASEAN Summit in 1998, identified 15 activities for environmental protection and sustainable development to be undertaken, with emphasis on transboundary haze control. Box 3.1 shows a list of the activities.

**Box 3.1 Activities to Protect the Environment and Promote Sustainable Development**

1. Fully implement the ASEAN Cooperation Plan on Transboundary Pollution with particular emphasis on the Regional Haze Action Plan by the year 2001.
2. Strengthen the ASEAN Specialized Meteorological Centre with emphasis on the ability to monitor forest and land fires and provide early warning on transboundary haze by the year 2001.
3. Establish the ASEAN Regional Research and Training Centre for Land and Forest Fire Management by the year 2004.
4. Strengthen the ASEAN Regional Centre for Biodiversity Conservation by establishing networks of relevant institutions and implement collaborative training and research activities by the year 2001.
5. Promote regional coordination for the protection of the ASEAN Heritage Parks and Reserves.
6. Develop a framework and improve regional coordination for the integrated protection and management of coastal zones by the year 2001.
7. Strengthen institutional and legal capacities to implement Agenda 21 and other international environmental agreements by the year 2001.
8. Harmonise the environmental databases of Member Countries by the year 2001.
9. Implement an ASEAN regional water conservation programme by the year 2001.
10. Establish a regional centre or network for the promotion of environmentally sound technologies by the year 2004.
11. Formulate and adopt an ASEAN Protocol on access to genetic resources by the year 2004.
12. Develop a Regional Action Plan for the Protection of the Marine Environment from Land-based and Sea-based Activities by the year 2004.
13. Implement the Framework to Achieve Long-Term Environmental Goals for Ambient Air and River Water Qualities for ASEAN Countries.
14. Enhance regional efforts in addressing climatic change.
15. Enhance public information and education in awareness of and participation in environmental and sustainable development issues.



#### ASEAN Environmental Education Action Plan: 2000-5

Since the mid-1970s, ASEAN member countries have pursued various efforts on environmental cooperation. There have been, however, certain difficulties and program gaps in implementing those activities between ASEAN member countries. There was no specific regional action plan on the matter. Accordingly, the ASEAN Environmental Education Action Plan was adopted in October 2000. The plan is expected to serve as a framework for the development and implementation of environmental education activities in ASEAN. The plan covers formal and non-formal education, manpower capacity building, networking, collaboration and communication (ASEAN, 2000).

This initiative was made possible by financial support from the Hanns Seidel Foundation and by technical support from UNEP Regional Office for Asia and the Pacific (ROAP).

#### ASEAN Strategic Plan of Action for the Environment (II): 1999-2004

In order to carry out the 15 objectives for environment cooperation enunciated in the Ha Noi Plan of Action issued at the Summit in 1998, the Strategic Plan of Action for the Environment, 1999-2004, was adopted.

### 3.3 The Case of ASEAN Strategic Plan of Action (1994-98)

The 1990s have witnessed further enhanced ASEAN environmental cooperation.

After the conclusion of a series of ASEAN Environmental Programmes (ASEPs), ASEAN countries recognized that those programs provided a solid basis for furthering the cooperation. They figured the most significant contribution of the programs was "the maturing of the environmental agencies in the respective ASEAN countries" (ASEAN Secretariat, 1994). It was recognized, however, that the implementation and effectiveness of the programs were influenced by "inadequacy of financing to support the activities," "institutional deficiencies," and "inadequate follow-up mechanisms." So, ASEAN countries came to realize the need to strengthen the cooperative mechanism.

On the other hand, ASEAN and its member countries recognized the need to take ASEAN in a new direction, to address the environmental implications of the ASEAN Free Trade Agreement (AFTA) and to establish ASEAN's position in an international forum such as the Commission on Sustainable Development. Taking all the above into consideration, the ASEAN Strategic Plan of Action (ASPEN) was created in 1994.

The plan, together with the Regional Haze Action Plan (RHAP), took a leading part in ASEAN environmental cooperation in the 1990s.

This section discusses about ASEAN Strategic Plan of Action on Environment. It is believed that careful observation of the plan will deepen understanding of ASEAN environmental cooperation mechanisms as a whole.

#### *3.3.1 Brief history and Objectives*

##### History

It was at the 4<sup>th</sup> ASEAN Ministerial Meeting on Environment (AMME) in 1990 that a new stage of the enhanced environmental cooperation began. The major decisions of the meeting were to:

- Upgrade the status of the ASEAN Expert Group to the level of ASEAN Senior Officials on the environment (ASOEN).
- Adopt the Kuala Lumpur Accord on Environment and Development
- Adopt Common ASEAN Stand on major global environmental issues<sup>34</sup>.

The establishment of ASOEN signifies the importance that ASEAN attaches to environmental concerns: ASOEN is to contribute to strengthening ASEAN cooperation on the exchange of

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<sup>34</sup> The Common Stand was developed for the purpose of preparing for ASEAN's participation at future ministerial meetings such as the UNCED in 1992.

information, technology, resources and manpower in dealing with international environmental concerns. ASOEN was also mandated to help ensure the integration of environmental dimensions in the decisions of other ASEAN Committees.

Another step was taken with the recommendation to formulate an ASEAN strategy and action plan for improving and strengthening cooperation, as emphasized in the Kuala Lumpur Accord. Environment ministers of ASEAN countries also stated that a new strategic action plan should respond to new agenda such as ASEAN free trade agreement and global issues.

In response, senior officials at ASOEN in 1993 decided to prepare a new ASEAN Action Plan and entrusted the task to the ASEAN Secretariat. With support provided by UNEP and ESCAP and in consultation with all the member countries, the ASEAN Strategic Plan of Action on Environment (ASPEN) was drafted. The plan was adopted at the 6<sup>th</sup> AMME in 1994.

Objectives

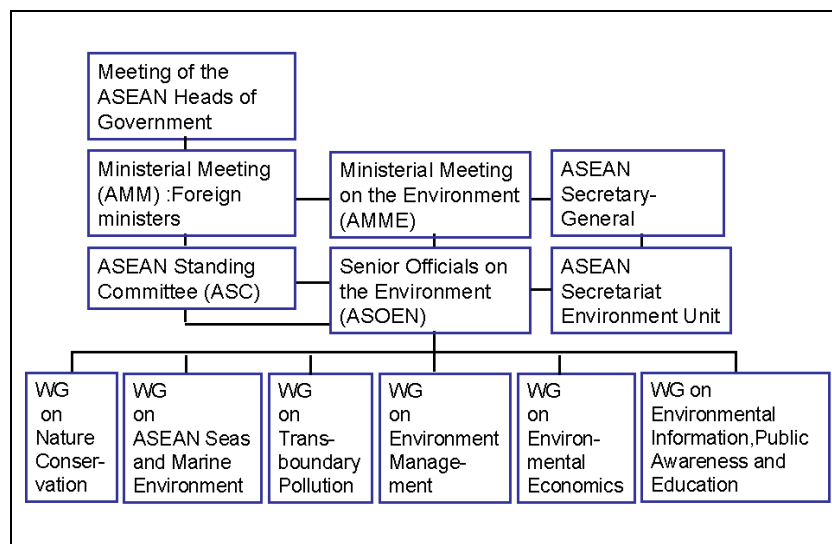
The ASPEN has the following five objectives:

- to respond to specific recommendations of Agenda 21 requiring priority action in ASEAN;
- to introduce policy measures and promote institutional development that encourage the integration of environmental factors in all developmental processes both at the national and regional levels;
- to establish long term goals on environmental quality and work towards harmonized environmental quality standards for the ASEAN region;
- to harmonize policy directions and enhance operational and technical cooperation on environmental matters, and undertake joint actions to address common environmental problems; and
- to study the implications of AFTA on the environment and take steps to integrate sound trade policies with sound environmental policies.

3.3.2 An institutional (organizational) structure

When the Expert Group (AEGE) was elevated to become the Senior Officials (ASOEN) in 1989, the basic institutional structure for ASEAN environmental cooperation began taking the shape it has today (the structure is shown in Figure 3.1). The main actors are the ASEAN Senior Officials Meeting on the Environment

**Figure 3.1 Organizational Chart of ASEAN Environmental Cooperation**



Source: Koh (1997)

(ASOEN) and its subsidiary bodies (Working Groups), ASEAN Ministerial Meeting on the Environment (AMME), and the ASEAN Secretariat.

ASEAN Ministerial Meeting on the Environment (AMME)

The AMME is attended by ministers in charge of the environment from all ASEAN countries and

the ASEAN Secretariat. Since its inauguration in 1981, AMME has been held at least once every three years. Host AMME countries rotate in alphabetical order.

The major functions and responsibilities of AMME are to promote ASEAN environmental cooperation and to ensure the implementation of the environmental decisions made by the heads of government. Decisions and policy recommendations made by AMME are released to the public as a declaration, resolution or accord.

ASEAN Strategic Plan of Action was adopted at the 6<sup>th</sup> AMME, held in 1994. The meeting also issued "Bandar Seri Begawan Resolution on Environment and Development."

In between the normal three-year intervals for the AMME, informal meetings of ASEAN environment ministers have been held almost every year since 1994. With the enlargement of ASEAN, senior officials of new member countries began attending the meeting. After "ASEAN 10"--the long-cherished goal of ASEAN since its establishment-- was realized by Cambodia's accession in 1999, environment ministers from all 10 countries attended the informal AMME for the first time in 2000.

At informal AMME, ministers exchange views on a wide range of regional and international issues. The results are released to the public as joint statements.

#### ASEAN Senior Officials on the Environment (ASOEN)

ASOEN is attended by senior environmental officials from all ASEAN countries and the ASEAN Secretariat. The presidency of the ASOEN rotates. The ASOEN has met once a year since 1990, and generally meets just prior to AMME's meetings, which take place once every three years.

ASOEN has the following functions and responsibilities:

- to recommend policy guidelines and, in general, provide "catalytic impetus" towards the implementation of the principles of sustainable development to ASEAN Governments and relevant ASEAN committees;
- to facilitate the incorporation of environmental considerations into the programmes and activities of ASEAN committees;
- to monitor the state of ASEAN's natural resources and the quality of the ASEAN environment;
- to promote ASEAN cooperation on regional environmental matters, focusing upon ASEAN's common seas and resources, land resources and land-based pollution, tropical forest, air quality, urban and rural pollution; and maintenance of genetic diversity;
- to promote ASEAN cooperation in international for a through a common stand for the purpose of promoting the transfer of clean technology and solving common global environmental problems, in cooperation with other government agencies, the private/business sectors, professional associations, NGOs, and other organizations; and
- to assist in obtaining financial support for ASEAN activities from within and outside ASEAN.

As a matter of procedure, the reports of the ASOEN meetings are submitted to the ASEAN Standing Committee, which in turn sends the reports to the Ministerial Meeting of the Foreign Ministers.

With regard to ASEAN Strategic Plan of Action, at the 4<sup>th</sup> ASOEN in 1993, an agreement was reached on the need for developing the Strategic Plan of Action, and the task was entrusted to the ASEAN Secretariat.

At the 5<sup>th</sup> ASOEN in 1994, the participants decided to endorse the drafted action plan, and submitted it to the ministerial meeting. ASOEN Meetings have since then reviewed the activities in the plan and have provided guidance in the development of future programs/projects. The ASOEN participants have reviewed the working group reports on the progress of the activities/projects under the Strategic Action Plan, and have provided operational policy guidance on the various environmental programs being pursued.

#### ASOEN Subsidiary Bodies (Working Groups)

In order to implement the Strategic Plan of Action, six working groups were established under the

auspices of the ASEAN Senior Officials on the Environment. The groups meet annually. Each group is chaired by an ASEAN country. The areas and chairmanship of each Working Group are as follows:

- Working Group on Nature Conservation (chaired by the Philippines)
- Working Group on ASEAN Seas and Marine Environment (chaired by Indonesia)
- Working Group on Transboundary Pollution (chaired by Thailand)
- Working Group on Environmental Management (chaired by Vietnam)
- Working Group on Environmental Economics (chaired by Malaysia)
- Working Group on Environmental Information Public Awareness and Education (chaired by Brunei)

#### ASEAN Secretariat

Issues relating to environmental cooperation in ASEAN fall under the purview of the Environment Unit of the Functional Cooperation Bureau of the ASEAN Secretariat. The services provided by ASEAN Secretariat include: attending each meeting related to environmental cooperation (such as AMMEs, ASOEN meetings and working groups) as resource specialist and rapporteur, and assisting each environmental cooperation-related organization with input into the planning, coordination, implementation and monitoring of the various cooperative projects on environment undertaken (Sunchindah, 1998).

#### 3.3.3 Activities

##### Modality of cooperation

The modality of cooperation for the plan varies in practice from policy dialogue, technical cooperation to project-based activities.

ASEAN environmental cooperation involves several channels through which authorities meet regularly, including summit level, foreign minister level, environment minister level, senior official level, and expert level.

A structured relationship among the channels has been established.

Practical implementation of the activities/projects under the action plan is coordinated by each expert group. The activities include environmental monitoring and technical cooperation such as expert meetings and training workshops/seminars for information exchange and technology transfer.

Those projects often involve little direct environmental improvement but assist capacity building for national environmental management.

##### Selection of the priority areas

The plan identified 10 strategic points and 27 supporting actions (see Box 3.2).

#### **Box 3.2 Strategic Thrusts and Actions**

Strategy 1: Support the development of a regional framework for integrating environment and development concerns in the decision-making process.

- 1.1 Continue support in the documentation of regional EIA experiences leading towards the harmonization of procedures;
- 1.2 Initiate activities that will make use of natural resource and environmental accounting studies and approaches; and
- 1.3 Establish procedures that would initiate the integration of environmental concerns in the various ASEAN programmes activities.

Strategy 2: Promote government-private sector interactions that lead towards the development of policies that mutually support the thrust of each sector.

- 2.1 Initiate studies on development of environmental and trade policies which are supported to the principles of sustainable development;
- 2.2 Establish mechanisms that encourage government and private sectors to adopt appropriate environmental standards backed up by sufficient economic incentives; and

2.3 Set up government-private sector information linkages/networks to include information on technology, expertise and facilities for environmental management.

Strategy 3: Strengthen the knowledge and information data base on environmental matters.

- 3.1 Pursue the establishment of basic environmental quality standards leading to the setting up of harmonized quality standards in the region;
- 3.2 Identify centers of excellence for environmental R&D and eventually build them as focal points of environmental networks; and
- 3.3 Establish a mechanism for the preparation of periodic reports on the state of the region's environment.

Strategy 4: Strengthen institutional and legal capacities to implement international agreements on environment.

- 4.1 Undertake a comparative study on the institutional structure and legislation structure and legislation on environmental management;
- 4.2 Establish capacities to support regional efforts to implement international agreements and participate effectively in the negotiation of new or revised agreements; and
- 4.3 Enhance collaboration with international bodies overseeing the implementation of international agreements and cooperation.

Strategy 5: Establish a regional framework on biological diversity conservation and sustainable utilization of its components.

- 5.1 Promote the development of a framework for the protection and conservation of heritage areas and endangered species; and
- 5.2 Strengthen capacities for R&D to enhance biodiversity conservation in the region.

Strategy 6: Promote the protection and management of coastal zones and marine resources.

- 6.1 Improve regional marine and coastal environmental coordination; and
- 6.2 Develop a framework for the integrated management of regional coastal zones.

Strategy 7: Promote environmentally sound management of toxic chemicals and hazardous wastes, and control of transboundary movement of hazardous wastes.

- 7.1 Establish a regional guidelines for assessing highly pollutive industries and safe handling of potentially harmful chemicals entering the ASEAN region; and
- 7.2 Strengthen the information network on the transboundary movement of toxic chemicals and hazardous waste.

Strategy 8: Develop a system for the promotion of environmentally sound technologies.

- 8.1 Establish linkages with existing clearing houses on environmentally sound technologies;
- 8.2 Establish mechanisms that identify end users of R&D results and encourage the participation of private sector;
- 8.3 Strengthen linkage and coordination with other ASEAN committees such as COST doing related R&D work on the environment; and
- 8.4 Support the promotion of indigenous technology or technologies that have been adapted to regional needs.

Strategy 9: Promote regional activities that strengthen the role of major groups in sustainable development.

- 9.1 Support the publication of regional environmental magazine and newsletters;
- 9.2 Strengthen regional information network and promote exchange of expertise on environmental education programmes; and
- 9.3 Develop strategic programmes of action that will strengthen the role and participation of major groups on environmental management and decision making.

Strategy 10: Strengthen the coordinative mechanism for the implementation and management of regional environment programmes.

10.1 Establish an operational system at the ASEAN Secretariat that could plan, monitor and facilitate the implementation of environmental projects; and

10.2 Source and match funding requirements for proposed projects.

Source: ASEAN Strategic Plan of Action (1994)

#### *Implementation (monitoring and assessment) of projects*

Implementation of the activities/projects, unfortunately, has been unsatisfactory. Of projects begun during the ASPEN period from 1994 to 1998, seven projects have been completed, eight are on-going today, and twenty-four projects are pending. Box 3.3 shows the list of on-going projects.

#### **Box 3.3 On-going Projects under the ASPEN**

- Management Plan for ASEAN Heritage Parks and Reserves
- Management of Transfrontier Parks and Protected Areas in the ASEAN Region
- Establishment of ASEAN Regional Centre for Biodiversity Conservation
- Regional Technical Assistance (RETA): Strengthening the capacity of ASEAN to prevent and mitigate transboundary atmospheric pollution
- ASEAN Cooperation on the Management and Control of Transboundary Movements of Hazardous Wastes within the ASEAN Region
- Booklet on ASEAN Achievements and Future Directions in Pollution Control
- AAACP (ASEAN/Australia Economic Cooperation Programme) Phase III : Waste Water Treatment Technology Transfer and Cleaner Production Demonstration Project
- ASEAN Environmental Education Action Plan

Source: ASEAN web-site <<http://www.aseansec.org/>>

Major actors involved in the implementation processes include: national governmental agencies of the member states, international organizations such as UNEP, ESCAP and UNDP, and donor agencies such as Australia, USA and EU. It seems participation from local government and civil society has been limited.

#### *3.3.4 Finance*

Recognizing that insufficient funds to support the various ASEAN environmental programs and plans has consistently afflicted the progress of ASEAN environmental cooperation, the strategic plan of action suggests exploring both internal and external funding to diminish financial uncertainty.

There has been little progress in that regard, however.

ASEAN has mostly relied on external financial support for implementing its environmental activities/projects. Those funds have been provided mostly on a project-by-project basis.

Much of such funding comes from international organizations such as UNEP, UNDP, GEF, ADB and the World Bank according to the donor's preference. UNEP has funded many workshops, seminars study tours and training programs. UNDP supported projects on transboundary pollution problems and environmental education.

Australia, Canada, the USA and New Zealand have provided financial support to ASEAN on bilateral bases. Australian assistance was provided to projects related to environmental management and marine environment, while the U.S. focused on funding projects on environmental management. New Zealand has assisted projects pertaining to transboundary pollution.

The result was that a number of project proposals that did not attract donor's attention have not been carried out.

Some implemented and completed projects with external funds have also fallen short of the initial goals. One big reason is that percentages of funds by external donors against the total contribution to

the programs/projects have been low.

For instance, Australia accounts for 5%; USA, 9%; and UNDP, 12%. Thus, ASEAN expects the donor agencies to raise the contribution percentage, whereas some of them have also expressed the need for ASEAN countries to increase their own contribution to collaborative projects through cost-sharing or co-financing schemes.

### *3.3.5 Relevancy with National Policies*

Taking into consideration that many of the projects implemented under the plan involve cooperation on information exchange and training workshops/seminars, it is believed that the projects are helpful to improve technical, legal and institutional capacities for better environmental management at national levels.

Non-binding plans rather than enforceable treaties and agreements has meant that the environmental policies rarely interfere in the domestic affairs of ASEAN member countries.

### *3.3.6 Overall Performance Review and Future Direction*

The beginning of the 1990s witnessed several signs of enhanced environmental cooperation within ASEAN. The institutional structure for the cooperation has been elaborated, and a comprehensive and strategic action plan was developed.

The implementation and effectiveness of the plan was, however, rather a disappointment. Criticism concerning "inadequacy of financing to support the activities," and "inadequate follow-up mechanisms" have long been conceded, but the new action plan was unable to bridge the gap.

The biggest challenge would be to find a way to secure the funding necessary for implementation of the plans. It should also be pointed out that the ongoing action plans are perhaps too ambitiously designed to achieve intended results.

ASEAN needs to focus more sharply on priority areas by reducing the number of project proposals that require external funding.

It seems that ASEAN has recognized the criticism and is changing course. The ASOEN decided to restructure its working groups from six to three in 1999 after the ASPEN period ended. The three restructured groups include:

- a) Working Group on Nature Conservation and Biodiversity (chaired by Philippines)
- b) Working Group on Coastal and Marine Environment (chaired by Thailand)
- c) Working Group on Multilateral Environmental Agreements (chaired by Malaysia)

Apart from the inadequacy of ASEAN environmental cooperation mechanisms, it should be pointed out that the political and economic situations of the region have prevented enhanced environmental cooperation.

The 1990s were a challenging decade for ASEAN in terms of financial crisis and political instability in several member countries. Such challenges may have diverted government and popular attention away from environmental protection and sustainable development.

Despite the impact of the recent economic crisis on the natural resources and environmental conditions, ASEAN environment ministers discussed the importance of maintaining a commitment to environmental protection and sustainable development.

The ASEAN Strategic Plan of Action on the Environment for 1999-2004 was thus developed and adopted at the 5<sup>th</sup> Informal ASEAN Ministerial Meeting on the Environment (AMME). The plan consists of the key activities to be implemented by ASOEN and its subsidiary bodies over the next 5 years. Priority areas identified for the plan include: transboundary haze; coastal and marine; nature conservation and biodiversity; and multilateral environmental agreements.

Recognizing the need for external support in fulfilling their goals, the ministers noted that "ASEAN has forged co-operative arrangements with several UN agencies including UNEP, UNDP, UNESCO, ESCAP and CSD. The meeting agreed on the need to intensify such collaboration with the UN agencies and extend collaboration with other regional and other inter-governmental organizations as well as other donors in the future." The collaborative programs include the Greater Mekong Sub-region (GMS) and the East Asian Seas (EAS), both of which are new initiatives that the ASEAN

member countries identified as important to pursue (ASEAN, 2000).

### 3.4 The Case of ASEAN Regional Haze Action Plan

#### 3.4.1 Brief history and Objectives

##### Brief History

The smoke and haze from forest fires in Indonesia in 1991, 1994 and 1997 have devastated the bio-physical and socio-economic environments of Southeast Asia, particularly Brunei, Indonesia, Malaysia and Singapore. The fires were set intentionally to clear land, fanned by the long dry season associated with El-Nino, and eventually blazed out of control.

The 1994 haze and smoke spurred ASEAN environment ministers to adopt in 1995 a Cooperation Plan on Transboundary Pollution. The Haze Technical Task Force was established at the 6th ASOEN in 1995 to implement the plan, but little has been done (Tay, 1998).

The severity and extent of the haze in 1997 was unprecedented, with enormous economic loss to several countries<sup>35</sup>. President Suharto apologized to neighboring countries at the 7th AMME held in September 1997 and asked for the extensive cooperation of other ASEAN countries in coping with the disaster. The Regional Haze Action Plan was created as an elaboration on the first ASEAN Ministerial Meeting on Haze in 1997.

##### Objectives

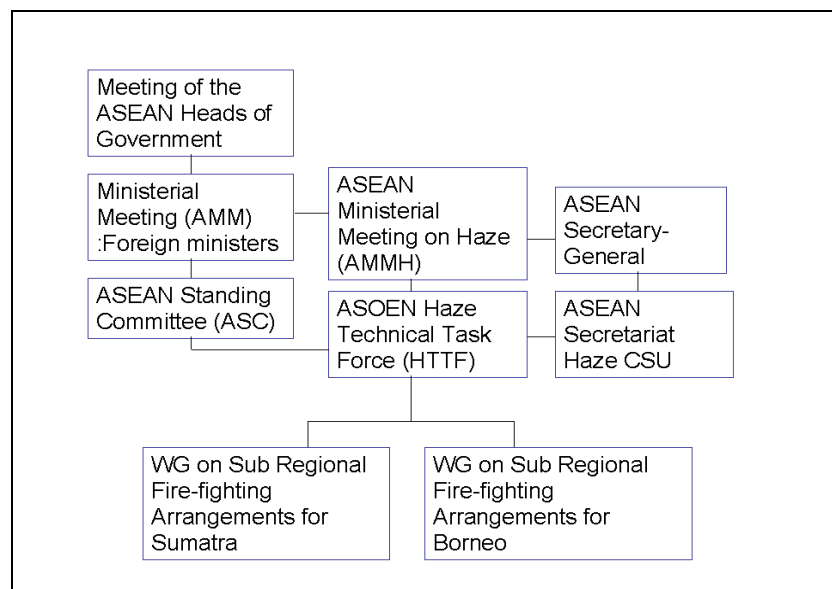
The primary objectives of the plan are:

- a) to prevent land and forest fires through better management policies and enforcement
- b) to establish operational mechanisms to monitor land and forest fires
- c) to strengthen regional land and forest fire-fighting capability and other mitigation measures

#### 3.4.2 Institutional (organizational) structure

Since adoption of the ASEAN Cooperation Plan on Transboundary Pollution in 1995, ASEAN has developed an institutional structure exclusively devoted to the issue of fire-caused haze and smoke. The ASEAN Ministerial Meeting on Haze (AMMH), ASOEN Haze Technical Force (HTTF), Working Group on Sub Regional Fire-fighting Arrangements and Coordination and Support Unit are among the important organs.

**Figure 3.2 Organizational Structure of ASEAN Cooperation on Haze**



Source: Sunchindah (1998), (1999)

<sup>35</sup> According to the study of Economy and Environment Program for Southeast Asia (EEPSEA) and WWF-Indonesia, the economic value of haze damage in Southeast Asia amounted to over US\$ 1.3 Billion (EEPSEA & WWF, 1998).



The structure for haze mirrors the basic organizational chart for ASEAN environmental cooperation. The organizational structure for ASEAN cooperation on haze is shown in Figure 3.2.

#### ASEAN Ministerial Meeting on Haze (AMMH)

As earlier mentioned, ASEAN Ministerial Meeting on Environment (AMME) meets regularly every three years, with informal meetings nearly annually since 1994. In order to further cooperation on the haze problem, ASEAN Ministerial Meetings on Haze have been held since December 1997.

AMMH meets regularly every one or two months, providing overall direction and guidance to the Haze Technical Task Force (HTTF) on the implementation of the RHAP.

#### ASOEN Haze Technical Task Force (HTTF)

The ASOEN Haze Technical Task Force (HTTF) was set up in 1995 to implement the measures recommended in the ASEAN Cooperation Plan on Transboundary relating to atmospheric pollution. The HTTF meets monthly. After the RHAP was developed in 1997, HTTF is tasked to review progress on implementation of the RHAP.

The HTTF has been chaired by Indonesia and originally comprised relevant senior officials from Brunei, Indonesia, Malaysia and Singapore. Since the third meeting, all remaining ASEAN member countries were also invited to attend.

#### Coordination and Support Unit (CSU)

When the RHAP was adopted in 1997, the Asian Development Bank (ADB) approached the ASEAN Secretariat with an offer to finance a Regional Technical Assistance (RETA) project for mitigating transboundary haze. The HTTF and the AMMH prepared a one-year project proposal for RETA entitled "strengthening ASEAN's capacity to prevent and mitigate transboundary atmospheric pollution." The ADB accepted the proposal and extended a US \$1 million grant.

A project management team of experts with a large staff was established at the ASEAN Secretariat for the purpose of coordinating and implementing the RETA. The team played a significant role in developing detailed implementation plans - at both the national and regional level, and developing a partnership with and getting funding and technical assistance from several sources in support of the RHAP. Following the phase-out of the RETA project, the Coordination and Support Unit (CSU) was established within the ASEAN Secretariat to take over the core functions of the RETA management team.

#### Working Group on Sub Regional Fire-fighting Arrangements for Sumatra and Borneo

To further regional efforts on forest fires and haze problems, two working groups on Sub-Regional Fire-Fighting Arrangements (SRFAs) for Borneo and Sumatra have been established. The SRFA for Borneo covers Indonesia, Malaysia, Singapore and Brunei Darussalam, and the SRFA for Sumatra covers Indonesia, Malaysia and Singapore.

### 3.4.3 Activities

#### Modalities of cooperation

Modalities of cooperation for the RHAP range from policy dialogue, information exchange and dissemination, training, financial cooperation, joint monitoring, activities related to policy coordination for fire mitigation.

#### Selection of the Priority areas

RHAP has three priority areas: prevention of land and forest fires, establishing operational mechanisms for monitoring, and strengthening regional land and forest fire-fighting capability.

- 1) Preventive Measures: to develop national plans which contain the following common elements: policies and strategies to curb activities that may lead to land and forest fires such as air quality legislation that bans open-air fires, strict enforcement of such laws, implementation of air quality monitoring and reporting regimes, surveillance, and establishment of a national task force.
- 2) Regional Monitoring Mechanisms: to strengthen the capacity of the ASEAN Specialized

Meteorological Center (ASMC) in Singapore, to compile and analyze available ground, atmospheric and data gathered by remote control on land and forest fires, haze, related climate and weather patterns and other relevant parameters, in collaboration with national meteorological agencies. The mechanisms also aim to disseminate information, including early detection and warning.

- 3) Fire Fighting Capacity: to prepare an inventory of land and the forest fire-fighting capabilities of each country, to formulate a program to strengthen the capacity, and to identify potential sources of technical assistance for strengthening the capacity. ASEAN adopted a "zero-burning" policy as a preventive measure and urged all member countries to create the necessary legislation and regulations to enforce it in 1999.

#### *Implementation (monitoring and assessment) of projects*

With regard to regional monitoring mechanisms, data from the ASMC is currently accessible to all ASEAN countries. Provisions for more detailed information such as areas affected by fires, persistency of hotspots and advanced warnings of fires are being explored. The haze situation has been monitored daily and on a region-wide basis - made public through the Internet at a site called "the ASEAN Haze Action Online".

With regard to fire fighting capability, fire suppression mobilization plans on specific geographic areas such as Sumatra and Borneo were drawn up. The plans emphasize training and increasing fire-fighting capacity. The Research and Training Center for Land and Forest Fire Management will be established at the University of Palangkaraya in Central Kalimantan to support the plans, with financial support from the World Bank.

Among the major progress on preventive measures was that forums for plantation companies have been organized as a preventative measure to inform and raise awareness on zero burning practices and techniques in both Indonesia and Malaysia.

#### *3.4.4 Finance*

A US\$ 1 million RETA project for the year from April 1998, funded by the ADB, helped get the RHAP off the ground. Since the RETA was completed, there have been no consistent funding mechanisms within the ASEAN for implementing the RHAP.

Yet, the RETA management team, now the CSU, has devoted a great deal of energy to attracting and coordinating external funding for RHAP activities. Each ASEAN country has also called to a number of donor agencies and countries for technical and financial assistance.

Large amounts of funds have gone to ASEAN and its member states -- particularly to Indonesia -- on both bilateral and multilateral bases since the haze disaster drew worldwide attention. Donors include the ADB, UNEP, GEF, Australia, the U.S., Canada, France, Germany, and Japan.

#### *3.4.5 Relevancy with National Policies*

The primary emphasis of the RHAP, like other ASEAN environmental action plans, is to put on national plans and capabilities.

Among the tasks assigned to individual countries, the most difficult and challenging is preventive measures. The ASEAN transboundary haze pollution issue is a negative side-effect of the process of land conversion, which has been promoted in these countries because national-level policymakers see it as a vital contribution to the economic development process. Therefore, in the early stage, the RHAP emphasized preventing transboundary haze pollution and the economic damage that results from it, not on preventing the fires themselves. Later, the AMMH switched to a zero-burning policy.

The preventive measures identified under the RHAP can be categorized as follows:

- (a) Command and control measures
- (b) Economic policy reform aimed at altering behaviors that contribute to transboundary haze pollution
- (c) Moral suasion
- (d) Public education on the consequences to large-scale wildlife

A number of collective efforts have been taken to implement these measures in ASEAN countries, through workshops, dialogue with stakeholders etc. There have been, however, a number of illegal burning cases, particularly in Indonesia. AMMH has repeatedly stressed that each government should consider including provisions in national laws to discourage land owners from allowing open burning activities to take place on their land.

But, the stringency of existing command-and control measures varies, and compliance with laws and policies depends on such measures. In the case of Indonesia, there is little hope of introducing strict zero-burning legislation any time soon. Even if it were, compliance would be threatened by the country's political uncertainties.

### *3.4.6 Overall Performance Review and Future Direction*

Transboundary haze pollution was a trial ground for ASEAN. Bucking the trend, the so-called ASEAN way---non-interference in the domestic affairs of member countries---, several member countries criticized Indonesia explicitly for causing such sufferings to neighboring countries and for not taking prompt and effective countermeasures.

The crisis was resolved by Indonesia's formal apology to its neighbors, consequently fostering unprecedented regional collaboration between member countries and related international organizations. The collaboration is based on joint monitoring and policy coordination. Most activities endorsed have been undertaken at a national level. The countries have promoted technical and financial cooperation in recognition of the fact that some member countries have already had well-developed national policies, and some lag behind.

Some critics point out the limited effectiveness of RHAP. First of all, it is non-binding and holds no state liable to others (Tay, 1998). Moreover, as early mentioned, the political instability of Indonesia could hinder the progress of needed counter-measurements. Indonesia's recent economic crisis has also hampered its ability to mobilize internal financial and technical resources to cope with the forest fires and haze.

ASEAN and its member states have been struggling to improve the situation. It is unlikely that there is a single perfect solution, but one possible answer is to reach a legally-binding agreement. The ASEAN Ministers for the Environment met 2000 and agreed to start negotiations toward an ASEAN agreement on transboundary haze. In collaboration with UNEP/ROAP, ASEAN conducted a feasibility study and is currently working on a draft of such an agreement. If concluded, it would be the first such international agreement on transboundary atmospheric pollution in the Asia-Pacific region.

Another notable trend is the activities of a GEF project entitled "emergency response to combat forest fires in Indonesia to prevent haze in Southeast Asia" (UNEP, 1998). The many efforts undertaken to cope with the forest fire and haze issues through various channels--directly to Indonesia and its neighboring countries, or ASEAN secretariat, on both bilateral and multilateral bases-- have been piecemeal and fragmented. Recognizing the need to coordinate all existing regional and international efforts so as to ensure the best use of available resources for strengthening the fire-fighting and fire-prevention capacity of the Southeast Asian countries, donors and international agencies plan to meet back to back with a group of experts to discuss the GEF project.

## 3.5 Conclusion

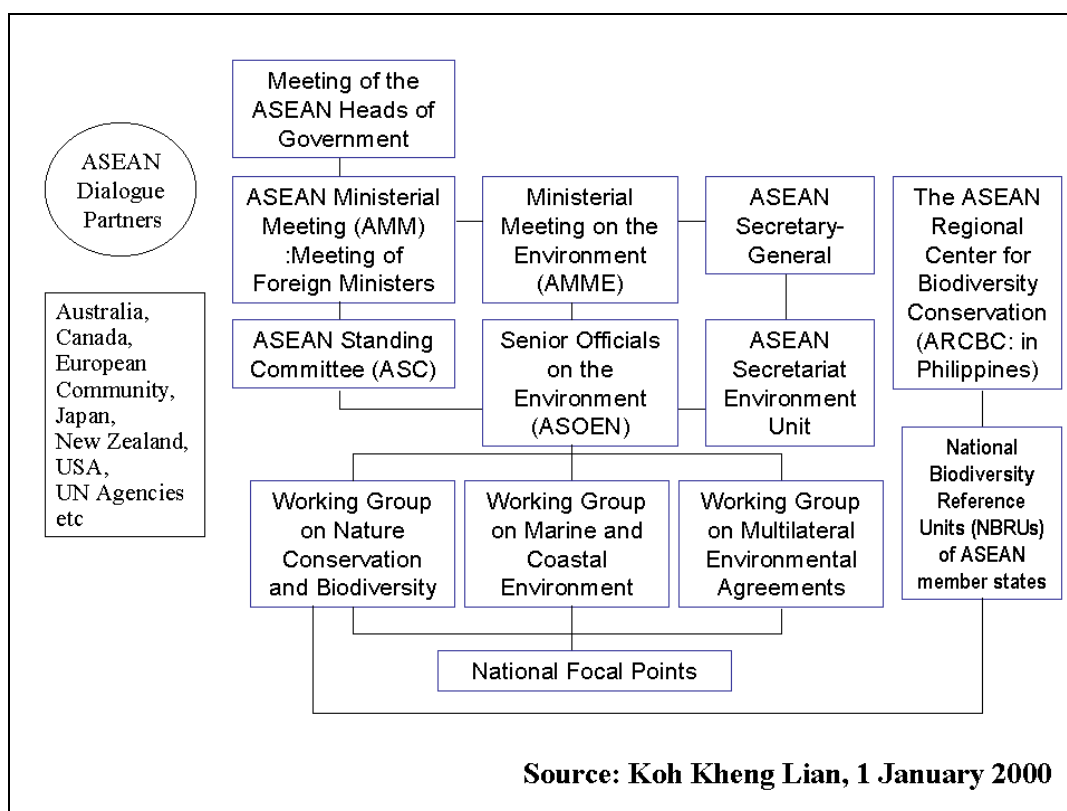
The general features of ASEAN environmental cooperative mechanism can be summarized as follows:

- a) Well established institutional structure: A number of environmental action plans and programs have been initiated by ASEAN, which has expertise in administering regional cooperation in various fields. ASEAN's well-designed organizational structure has been applied to environmental field, resulting in Ministerial meetings on the environment, senior officials meetings, working groups on single issues and an ASEAN secretariat environmental unit. There are strong affiliations between each component of the organizational structure. Accordingly, there has been little redundancy between environmental cooperation activities within ASEAN.

- b) Weak financial structure: ASEAN is not strong financially, and has mostly relied on external financial support for implementing its environmental activities, which have been provided mostly on a project-by-project basis. This has led to a failure to execute several project proposals which did not attract donors' attention.

In order to deal with these deficiencies, ASEAN must secure the funding necessary for the implementation of environmental plans, focus more sharply on priority areas of actions, and enhance the capacity of the ASEAN Secretariat. The evidence shows that ASEAN has already moved in that direction. At the ASOEN meeting chaired by Singapore, in 1998, a decision was made to "restructure

**Figure 3.3 Restructured Organizational Chart of ASEAN Environmental Cooperation**



and streamline the ASEAN working groups to be more responsive to emerging regional and international environmental issues.” As a result, only three working groups were maintained, including the working groups on Nature Conservation and Biodiversity, chaired by the Philippines, Coastal and Marine Environment, chaired by Thailand, and Multilateral Environmental Agreements, chaired by Malaysia” (Sunchindah, 1998).

There are more basic arguments that the modes of ASEAN cooperation -- in other words, the "spirit of ASEAN" or "the ASEAN way" -- may be inappropriate for dealing with environmental challenges (Hamzah, 2000/ Tay, 2000).

The "ASEAN way" emphasizes "the norm of non-interference in other states' affairs, preferred consensus and non-binding plans to treaties and legalistic rules, and relied on national institutions and actions, rather than creating a strong central bureaucracy."(Tay, 2000). The norm of the "ASEAN way" may have enabled all 10 states to come together, but it doesn't necessary mean it is right for improving the environment.

To this end, controlling transboundary atmospheric pollution/transboundary haze was a real test for ASEAN.

The trend is likely to change. Since the problem of haze has become increasingly serious in recent years, the Regional Haze Action Plan (RHAP) was adopted at the AMME in 1997. In order to assure

smooth operation and to promote the RHAP, a Haze Coordination and Support Unit (CSU) was established within the ASEAN Secretariat. A large amount of funding for the implementation of these programs has been provided by the ADB, UNEP, GEF, Canada, Austria, the U.S., the EU and other donors. Implementation of the plan is seen as satisfactory today in terms of monitoring. To review progress on implementation, regular and frequent meetings have been held through various channels. Tay (1999) points out that "these meetings have gone beyond exchange of formalities to a more open and frank discussion of the problems... It is notable in this regard that ASEAN officials on the environment have officially referred to Indonesia's forestry and land use policies; such issues are literally a matter of sovereign territorial rights. "

ASEAN has been in negotiations on an ASEAN agreement on transboundary haze. There is no assurance whether an agreement on transboundary haze will follow the footsteps of the Agreement on the Conservation of Nature and Natural Resources adopted in 1985. If put into effect, ASEAN will be on the threshold of a new mode of cooperation, different from the traditional "ASEAN-way."

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## 4

### Environmental Cooperation in South Asia

Wakana Takahashi

#### 4.1 Introduction

South Asia here refers to the seven countries, namely, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka.

The climates of this region range from monsoon to warm and humid, from hot and dry deserts to tropical upland climates. Large areas are tropical, and these areas too have a rich and diverse ecosystem<sup>36</sup>. The ecological balance of flora, fauna and forests, however, is threatened by rapid growth in human population—already about 1.3 billion.

Despite rapid economic growth during the 1990s, the region has one of the lowest per capita incomes in the world. Widespread poverty is linked to low skills and low status of women. Expanding populations, poverty and development lacking adequate environmental management have resulted in irreversible environmental degradation.

Environmental challenges in South Asia range from air pollution, water resources, land degradation, deforestation, marine ecology to loss of biodiversity. Table 4.1 shows environmental priorities for South Asian countries.

**Table 4.1 Environmental priorities for South Asian countries**

Country	Land degradation	Water Scarcity	Water Quality	Air Pollution		Urbanization	Marine environment	Deforestation
				Indoor <sup>37</sup>	Outdoor			
Bangladesh	High	Medium	-	High	Medium	Medium	High	Medium
Bhutan	-	-	Low	High	-	-	-	Medium
India	High	Medium	Medium	High	Medium	Medium	Low	Medium
Nepal	Medium	-	-	High	High	-	-	-
Maldives	-	Low	-	-	-	-	High	-
Pakistan	High	Low	Medium	High	-	Medium	Low	Medium
Sri Lanka	-	Medium	-	-	-	-	High	-

Source: Chatterjee, Mehra and Banerjee, 2000

These problems often pose a region-wide threat rather than merely a local or national threat. Northern watersheds on the Indian subcontinent, cutting across national boundaries, have been devastated by inappropriate cultivation, deforestation and water contamination. They also harbor the danger of major international conflicts.

The region, particularly India, relies on coal for its energy demands, which are expected to grow rapidly in the future<sup>38</sup>. Burning coal has a local impact, but also causes transboundary air pollution<sup>39</sup>

<sup>36</sup> For example, India is among the ten most plant-rich countries in the world (Parikh, et., 1999).

<sup>37</sup> Indoor air pollution is “a concern in the developing countries, where, for example, energy efficiency improvements sometimes make houses relatively airtight, reducing ventilation and raising indoor pollutant levels. In such circumstances, even minor sources of pollution - a furnace, a new carpet, or naturally occurring radon gas - can lead to significant exposures.” (TERI, 2000)

<sup>38</sup> According to Asia Least-Cost Greenhouse Gas Abatement Strategy (ALGAS) study for India, electricity generation totaled 59.64 GW in 2000 and is projected to grow to 93.01~115.19 GW by the year 2020 (ADB et., 1998).

<sup>39</sup> Recent evidence from atmospheric studies of the Indian Ocean shows high concentrations of small particles,

and global warming. Countries in the area are highly concerned over the danger posed by a potential rise in the global sea level.

The creation of the South Asia Cooperative Environment Programme (SACEP) was a milestone in regional collaboration on these issues. In parallel, the South Asian Association for Regional Cooperation (SAARC), established in 1985 for the purpose of accelerating the process of economic and social development in member states, has also promoted environmental cooperation among member states, in accordance with its integrated action program on development and the environment.

The late 1990s witnessed the emergence of more issue-oriented, focused cooperation on the environment: the South Asian Sea Action Plan was adopted in 1995, as was the Malé Declaration on Control and Prevention of Air Pollution and Its Likely Transboundary Effects for South Asia.

That is not to say that the institutions of South Asian environmental cooperation have been fully and satisfactorily developed. Links between SACEP and SAARC have been insufficient, and some have noted a gap between words and action.

This paper first outlines the environmental cooperation initiatives in South Asia, describing not only the plans and programs themselves but also the actors, processes and institutions involved. The following section provides a detailed analysis on SACEP with focus on SACEP's Strategy and Programme (SSP) I & II. Conclusion attempts to delineate the major features, weaknesses and future direction of these mechanisms for cooperation.

## 4.2 Overview

Although a number of bilateral agreements on environmental issues between South Asian countries had been reached, there was no multilateral environmental initiatives until the early 1980s. Multilateral environmental cooperation in South Asia began when the South Asia Cooperative Environment Programme (SACEP) was established in 1982. Since then, a number of action plans and programs have been developed and implemented under the SACEP. The South Asian Association for Regional Cooperation (SAARC) has also pursued regional cooperation on the environment.

This chapter provides an overview of multilateral initiatives on the environment undertaken in South Asia (see Table 4.2).

**Table 4.2 Chronological table of major cooperation initiatives related to environment**

	Major Events/ Action Plans
1982	Establishment of SACEP
1983	Designation of South Asian Seas as a part of UNEP's Regional Sea Programmes
1985	Establishment of SAARC
1987	Launch of environmental studies (natural disaster and climate change) by SAARC
1992	SACEP's Strategy and Programme I (SSP I: 1992~1996)
1995	Adoption of South Asian Seas Action Plan (came into effect in 1998)
1996	SACEP's Strategy and Programme II (SSP II: 1996~2000)
1997	Adoption of SAARC's Environment Action Plan
1998	Adoption of Malé Declaration on control and prevention of air pollution and its likely transboundary effects for South Asia
2001	SACEP's Strategy and Programme III (SSP III: 2001~2006)

Source: Author

### South Asia Cooperative Environment Programme (SACEP)

SACEP appears to be the most important regional environmental cooperation body. Established in 1982, it brought together the 8 countries of Afghanistan, Bangladesh, Bhutan, Maldives, India,

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known as aerosols, consisting primarily of soot, sulfates, nitrates, organic particles, fly ash, and mineral dust suspended over a very large area of the northern Indian Ocean, including the Arabian Sea and much of the Bay of Bengal (Chatterjee, Mehra and Banerjee, 2000).



Nepal, Pakistan and Sri Lanka<sup>40</sup>. Iran signed on in the late 1990s.

Since its start, the SACEP has identified 14 priority subject matters and facilitated a number of projects. For more improved and effective cooperation, some action program and plans were developed with financial and technical support from other international organizations such as UNEP and Network for Environmental Training and Tertiary Level in Asia and the Pacific (NETTLAP)<sup>41</sup>. These include a four-year program entitled SACEP's Strategy and Programme 1 (SSP-1) covering the period from 1992 to 1996, the Malé Declaration on Control and Prevention of Air Pollution and Its Likely Transboundary Effects for South Asia adopted in 1998, and a five-year South Asian Environmental Education and Training Action Plan, covering 2001-2005.

SACEP will be discussed in more detail later on in this paper.

#### SAARC (the South Asian Association for Regional Cooperation)

The idea for SAARC—established three years after SACEP—can be traced back to 1981 when the foreign secretariats of the seven countries met for the first time in Colombo. In 1983, the Integrated Programme of Action (IPA) was launched at the first meeting of the foreign ministers of the seven countries. The IPA is a key component of the SAARC process, which has been revised several times.

SAARC was formally established in 1985 when heads of states in the region gathered and adopted the SAARC Charter at the first summit, held in Dhaka in 1985.

SAARC aims to accelerate the economic and social development of member states. To this end, several areas of cooperation were identified: agriculture; communications; education; culture and sports; environment and meteorology; health; population activities and child welfare; prevention of drug trafficking and drug abuse; rural development; science and technology; tourism; transport; and women in development.

SAARC launched in 1987 a study on “causes and consequences of natural disasters and the protection of the environment,” and a study on the “greenhouse effect and its impact on the region.” During the eighth summit, held in New Delhi in 1995, leaders stressed the importance of prompt and effective implementation of the recommendations identified by the two studies.

Thus an “Action Plan” for immediate implementation was formulated at the SAARC Ministerial Meeting on Environment, held in Malé, in 1997. A “common position” on climate change was also adopted in Malé<sup>42</sup>.

In response, the Technical Committee on Environment identified measures for immediate action and decided on a number of ways to implement them. The measures include: “improving climate monitoring capability through networking arrangement and through the SAARC Meteorological Research Centre (SMRC); developing climate change and a sea-level rise scenario through country-specific studies and sharing of relevant data; making available to member states expertise on climate research and monitoring of greenhouse gas emissions; identification of training and research institutions and ongoing programmes; exchange of information and data; sharing experiences with strategies for developing mitigating and adaptive responses to climate change” (SAARC, 2000).

Other areas for “immediate action” as identified by the committee include: environmental legislation, regulations and standards in SAARC countries; rehabilitation of degraded lands; training courses on wetlands assessment and management; workshops on alternate / renewable energy; and

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<sup>40</sup> Afghanistan is not an acting member, due to political reasons.

<sup>41</sup> The establishment of NETTLAP was agreed upon at the Meeting of Experts to Develop a Programme of Action for Environmental Education and Training in Asia and the Pacific in Bangkok, 1985. The Network is designed to: “enhance the environmental expertise of tertiary level educators and through them the knowledge and skills of decision makers and policy formulators; increase the environmental skills and awareness of tertiary level graduates; enhance environmental technologies and capacities for their use; and strengthen the overall environmental expertise in the region at technical, management and policy levels.” NETTLAP consists of “institutions and individuals active in environmental education and training at tertiary (e.g. university, technical institute, teacher training college) level in the Asia-Pacific region. It is “supported by UNEP to facilitate the transfer of output from its various subprogrammes into the tertiary institutions of the region and thence into the public and private sectors and the community at large.” (UNEP, 1997)

<sup>42</sup> The common SAARC position highlights the need for determination of equitable emission entitlements as well as transfer of new and additional financial resources and environmentally sound technologies on concessional terms to developing countries.

workshops of SAARC national experts on climate change. The need to establish a networking approach through identified institutions has also been stressed.

Institutional arrangements of the SAARC include: summits, the Council of Ministers, the Standing Committee, technical committees for respective fields identified by the IPA, a number of ministerial meetings and the SAARC Secretariat. The chair of the Technical Committee on Environment and Meteorology rotates, and was held by Bangladesh for the period 1997-1998. The ministerial meetings on environment were held once in 1992, twice in 1997, once in 1998.

It was decided at the 9th SAARC Summit in 1997 that the Environment Ministerial Meeting “should be institutionalized henceforth as an annual event” (SAARC, 1997).

The SAARC Environment Ministers agreed to direct their focus on a single theme at each future meeting. They also agreed that biodiversity should be the theme for the year 1999. Thereafter, the Government of India was to host a meeting on the transboundary movement and dumping of hazardous wastes in the region, where ministers were to examine the implications for SAARC countries of the going into effect of the Basel Convention and explore the possibility of coordinating policies and procedures with regard to hazardous wastes.

Unfortunately, the annual Environmental Ministerial Meeting has been suspended since 1999 due to political tension caused by the nuclear tests in India and Pakistan.

#### South Asian Seas Action Plan

Although a variety of historical reasons apparently hindered the development of the Regional Sea Programme for the South Asian Seas, the creation of the SACEP has revitalized the idea. The launching of the program was called for by SACEP member states at UNEP’s Governing Council in 1982, and the result was the “designation of the region as a part of UNEP’s Programme” in 1983 (Abeyegunawardene, 1997).

The program involves the five marine states of South Asia: Bangladesh, India, Maldives, Pakistan, and Sri Lanka. These countries adopted a South Asian Seas Action Plan at a meeting of plenipotentiaries, held in New Delhi in 1995. The Action Plan came into force in 1998.

The SACEP has been designated as the secretariat for the implementation of the action plan.

Table 4.3 shows a list of projects under the plan as well as their implementing agencies. The implementation of the Action Plan is “in its nascent phase, pending the availability of funds” (Rajen, 1999).

**Table 4.3 Project and the implementing agency of the South Asian Sea Action Plan**

	Project Title	Implementing Agency
1	Coastal Environmental Management Plan for Pakistan	ESCAP and Gov. of Pakistan
2	Development of a System of Protected Areas in the South Asian Seas Region	IUCN
3	Assessment of Levels and Effects of Marine Pollution in the South Asian Seas Region	Intergovernmental Oceanographic Commission
4	Development of an Operational Regional Contingency Plan for Responding to Marine Pollution	International Marine Organization (IMO)
5	Survey of Land Based Sources of Marine Pollution and Formulation of Guidelines and Proposals for Environmentally Sound Waste management Technologies and Policies	SACEP
6	Promotion of Public Awareness for South Asian Countries in connection with the South Asian Seas Programme	SACEP

Source: Abeyegunawardene (1997)

#### Malé Declaration on Control and Prevention of Air Pollution and Its Likely Transboundary Effects for South Asia

Recognizing that air pollution poses a current and future threat to South Asia, a policy dialogue on the issue was organized as part of the UNEP Environment Assessment Programme for Asia and the Pacific (UNEP/EAP-EP) in collaboration with the Stockholm Environment Institute (SEI), funded by

the Swedish International Development Co-operation Agency (SIDA) in March 1998. Senior officials and experts from SACEP countries joined the meeting, at which a draft declaration was discussed and agreed upon.

The Malé Declaration was agreed upon during the 7th SACEP Governing Council Meeting, held in Maldives in April 1998. The declaration was signed by Bangladesh, Bhutan, India, Iran, Maldives, Nepal, Pakistan and Sri Lanka.

The implementation plan of the declaration consists of three phases, and Phase One—network establishment, baseline studies and development of action plans at national and regional levels—was carried out between May 1998 and March 2000.

With regard to network establishment, special attention was given (1) to raise regional awareness on the issue; (2) to develop links between regional experts and policy-makers; (3) to synthesize the relevant knowledge on the issue; and (4) to create products and policies that will help inform and influence the policy [makers] community of the potential impacts of acidification” (UNEP/EAP-AP, 2000).

Guidelines for the baseline studies and national action plans were developed with the SEI and SACEP and drawn up for practical use after examination by participating agencies. A workshop held in Katmandu in March 2000 reviewed the baseline studies. National action plans focusing on long-term strategies were thus developed.

The Subregional Action Plan for Phase 2 was also developed.

An institutional arrangement to support the implementation of Phase 1 consists of UNEP/EAP-AP, SEI and SACEP<sup>43</sup> (see Figure 4.1). UNEP/EAP-AP has administered the implementation of the declaration in collaboration with SACEP, and SEI has provided more substantial and technical support. SEI’s contribution was a part of its Regional Air Pollution in Developing Countries Program, which is funded by the SIDA.

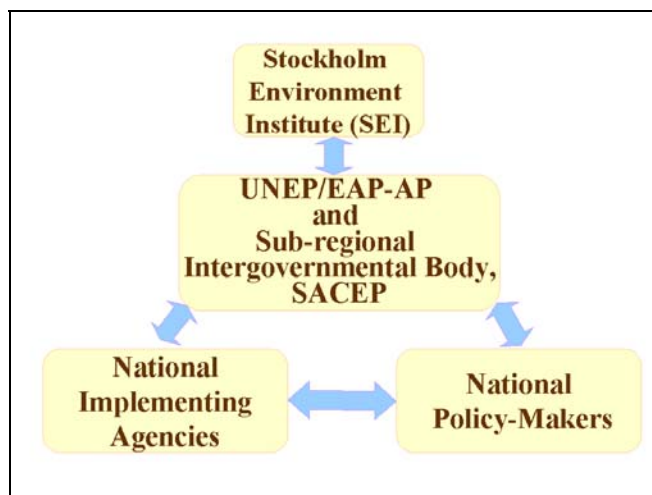
#### South Asian Environmental Education and Training Action Plan

One of SACEP’s priority areas is environmental education and training. The Center for Environmental Education (CEE), located in India, was assigned the responsibility of formulating the “Environmental Education and Training Action Plan” in collaboration with UNEP-ROAP. The action plan is aimed at presenting “an overall regional framework to educate and train people to deal with major environmental problems,” “sensitizing people on the need to eliminate the root causes of environmental degradation such as poverty, population pressure, overpopulation, wasteful production, human greed and underdevelopment.” (SACEP, UNEP, 2000)

### 4.3 The Case of SACEP (with focus on SACEP’s Strategy and Programme (SSP) I & II)

#### 4.3.1 Brief history and Objectives

**Figure 4.1 Organizational Chart for Malé Declaration**



Source: UNEP/EAP-AP (1999)

<sup>43</sup> A Memorandum of Understanding (MoU) was agreed upon by UNEP/EAP-AP and SEI to implement Phase I of the Malé Declaration.

### History

The initiative to establish an organization for environmental cooperation was made by UNEP Regional Office for Asia and the Pacific (UNEP-ROAP) in the late 1970s. The result was a high-level meeting of ministers of South Asian countries held in February. They adopted the Articles of Association of SACEP. SACEP became a legal entity in 1982 when the Articles of Association were ratified by the required number of countries.

To date, 9 countries -- 7 South Asian countries, Afghanistan and Iran—are members of SACEP. It is worth keeping in mind that SACEP is the first regional organization established in South Asia, preceding the SAARC, which was established in 1985.

Since 1982, fifteen priority subject areas were identified.

In 1991, SACEP with the assistance of UNEP/ROAP conducted a review of the SACEP, and the result was the formulation of SACEP's Strategy and Programme I (SSP I), covering 1992-1996. Thereafter, SACEP has formulated SACEP Strategy and Programme II (SSP II) covering 1996-2000, and SSP III covering 2001-2006.

### Objectives

The SACEP has the following three objectives and five functions (see Box 4.1):

#### **Box 4.1 Objectives and functions of SACEP**

##### Objectives

- a) To promote and support the protection, management and enhancement of the environment, both natural and human, of the countries of South Asia, individually, collectively, and co-operatively;
- b) To make judicious use of the resources of the environment towards removal of poverty, reduction of socio-economic disparity, improve the quality of life, and prosperity on a continuing basis;
- c) For these purposes, to make the fullest use of the organizational arrangements and facilities for cooperation under SACEP.

##### Functions

- a) to promote co-operative activities in priority areas of environment of mutual interest;
- b) to ensure that these activities result in benefit individually or collectively to the member states;
- c) to extend support as needed through exchange of knowledge and expertise available among the member countries
- d) to provide local resources towards implementation of projects and activities; and
- e) to encourage maximum constructive and complementary support from interested donor countries and other sources.

Source: Shihab (1997)

#### *4.3.2 An institutional (organizational) structure*

The principal institutional structure of the SACEP consists of three major organs: the Governing Council, the Consultative Committee, and the Secretariat (see Figure 4.2).

The Governing Council is responsible for deciding the policy and programs of the SACEP and consists of environmental and forestry ministers from the participating countries. The council meets regularly (every two or three years).

The Consultative Committee consists of representatives of the respective missions of member countries. It is held quarterly at the SACEP Secretariat in Colombo, Sri Lanka and is tasked with "facilitating the implementation of the programmes and policies as determined by the Governing Council through close informal co-operation" and promoting "the dissemination of information on the concepts and operations of SACEP in general" (Shihab, 1997).

The Secretariat in Colombo has been operational since 1982. It provides secretarial services to the meetings of the Governing Council and the Consultative Committee. The Director of the Secretariat is appointed from the member states on a rotating basis, for a period of three years.

SACEP Secretariat also has the responsibility to implement the South Asian Seas Action Plan: the Secretariat is in charge of administering the Action Plan and organizing its intergovernmental meetings.

#### 4.3.3 Activities

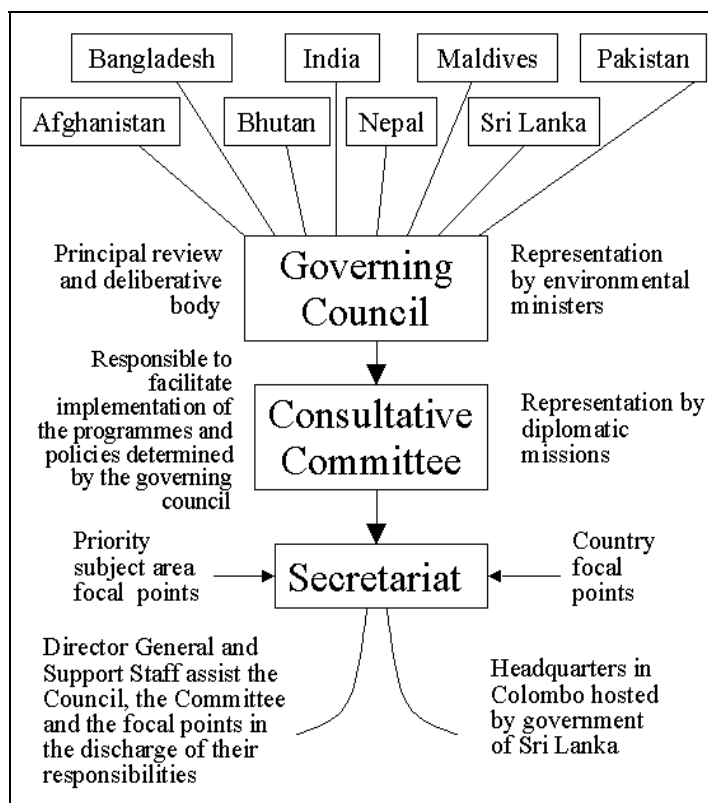
##### Modality of cooperation

The modality of cooperation for the SACEP varies in practice from policy dialogue, technical cooperation to project-based activities. Regular meetings for policy dialogue involve two channels: environment minister level, and senior official level. There have also been a number of workshops, symposium and seminars for exchange of information and data, formulation of specific action plans, training of policy-makers, scientists, biologists an irregular basis.

##### Selection of the priority areas

The nature and scope of SACEP is comprehensive. SACEP set out 14 subject areas together with the focal points (see Table 4.4). The SACEP Strategy and Program 1 (1992-96) identified five-priority attention (see Box 4.2).

**Figure 4.2 SACEP Organizational Chart**



Source: Bryceson and Wijayadasa (1998)

**Table 4.4 Subject areas and the focal points**

	Subject area	Focal points
1	Environmental impact assess. & cost/benefit analysis	Sri Lanka
2	Environmental quality standards	To be decided
3	Technology for development of renewable and reusable resources	UNIDO
4	Environmental legislation	India
5	Conservation of montane ecosystems and watersheds	Pakistan
6	Social forestry	Afghanistan with assistance of India
7	Conservation of coral, mangroves, deltas, coastal areas	Bangladesh
8	Island ecosystems	Bangladesh
9	Tourism and environment	Nepal
10	Desertification	UNEP
11	Regional Seas Programme	SACEP
12	Energy and environment	India and Pakistan
13	Education and training	India
14	Training in wildlife management	India

Source: UN/CSD (1998) Shihab (1997)

**Box 4.2 Priority attention under the SACEP Strategy and Program 1**

- 1) Capacity building and awareness raising;
- 2) Systematic information exchange and intra-regional technology transfer;
- 3) Environmental management for training and institutional development for training;
- 4) Regional cooperation in management plans for mountain ecosystems/watersheds and coastal resources;
- 5) Wildlife and wildlife habitat conservation in the region.

Source: UN/CSD (1998) and Shihab (1997)

*Implementation (monitoring and assessment) of projects*

SSP I listed 14 projects for implementation. In practice, the implementation turns much on availability of funds. Most of substantial project funding was done by Norwegian Agency for Development Cooperation (NORAD). Table 4.5 shows the list of major programmes under implementation.

**Table 4.5 Project Activities/Outputs of Completed and Ongoing Projects**

Theme	Project activities/outputs
Faunal biodiversity	Manual, regional report and action plan
Environmental training	Action plan, institutional framework and regional overview
Biodiversity	Environmental training, action plan and institutional framework
Maine protected areas & coral reef ecosystems	Training modules and national action plans
Framework legislation	Awareness information, training model laws and publications
Floral biodiversity	Assessment, country and regional reports, guidelines, manual and training
SACEP web-page	Disseminate information on SACEP& SACEP projects via internet, and access to subregional, regional and global environmental information

Source: Bryceson and Wijayadasa (1998)

The other important project implemented was the establishment in 1994 of SACEP Environmental and Natural Resources Information Center (SENRIC), whose function is data gathering, capacity building, training and information management.

In 1998, evaluation of SSP I & II was jointly conducted by two experts from NORAD and SACEP, based on a contract between Norway and SACEP. The reviewers assessed the overall performance, effectiveness, the effect and impact of the SSP I & II, and suggested concrete recommendations to improve the efficiency and effectiveness of the program (see Bryceson and Wijayadasa, 1998).

**4.3.4 Finance**

Among the major obstacles of managing SACEP is insufficient fund to support the various SACEP programs and plans.

There are the four main sources of anticipated income of SACEP, namely, (a) country contributions on the agreed scale of assessment; (b) hosting facilities provided by the government of Sri Lanka; (c) program and project funding by bilateral and multilateral donor/funding by bilateral and multilateral donor/funding agencies and (d) SACEP Trust Fund (Bryceson and Wijayadasa, 1998)).

SACEP has suffered shortfalls and deficits in country contributions. SACEP Trust Fund, established in 1994 with a target of US \$ 500,000 to be obtained as voluntary contributions from member countries and other donors, have received no such contribution from the participating countries.

Accordingly, the SACEP has mostly relied on external financial support for developing and

implementing its environmental activities. Much funding has come from international organizations such as UNEP, UNDP, GEF, UN/ESCAP, ADB and the World Bank. These funds have been provided mostly to support a single field, according to the donor's preference.

Substantial and more comprehensive project funding started only in 1992 with NORAD assistance for SSP I & II. Most of them were co-financed by UNEP, SACEP and ESCAP. In-kind contributions were also given by participating countries.

10 completed and ongoing project funded by NORAD, however, cover only four out of the fourteen priority subject matter areas of SACEP. Those external funding is, unfortunately, insufficient to carry out the all planned activities of SACEP.

#### *4.3.5 Relevancy with national policies*

Taking into consideration that many of the projects implemented under the plan involve cooperation on information exchange and training workshops, it is believed that the projects are helpful to improve technical, legal and institutional capacities for better environmental management at national levels. In particular, SACEP/UNEP projects on environmental law and policy in South Asia have helped countries in the region develop environmental legislation and policies<sup>44</sup>. Implementation of these national policies, however, has apparently been inconsistent. The major challenges in securing enforcement are "the lack of guidelines, unclear enforcement mechanisms and inadequate capacity of institutions, insufficient data and basic information" (INECE, 1998). Lack of technical facilities for measurement and monitoring, limited personnel and finances, lack of citizen' participation and political pressure from developers are also among the major obstacles.

#### *4.3.6 Overall performance review and future direction*

SACEP takes on the two characters of "a program" and "a legal entity."

SACEP, as an environmental cooperation program, is comprehensive in nature. Covering a number of priority subject areas with limited resources and capacity, its implementation was insufficient. This does not, however, negate the significance of the SACEP. Providing general principles, it has provided a solid basis and justification for member states and collaborating agencies to initiate collaborative projects more focused on single subjects identified by the SACEP. Formulation and implementation of a series of SACEP's Strategy and Programmes (SSP) marked a very important step towards further enhanced environmental cooperation in South Asia. Based on SACEP objectives, its secondary action plans were also developed, such as "South Asian Seas Action Plan" and "South Asian Environmental Education and Training Action Plan."

On the other hand, SACEP, as a legal entity, is a modest-sized regional environmental organization. SACEP has initiated and implemented multilateral environmental cooperation projects among member states, including the SSP I & II, and SACEP's secondary action plans such as "South Asian Seas Action Plan" and "South Asian Environmental Education and Training Action Plan." In addition, the SACEP has provided secretariat/administrative services for implementing other regional environmental initiatives, particularly for the Malé Declaration on air pollution: the initial idea of the Malé Declaration raised by UNEP/EAP-AP and SEI were channeled through regional countries via the SACEP.

SACEP, with limited financial and human resources, attempted to perform such tasks by keeping strong ties with other regional entities such as the ICIMOD and NETTLAP, UN organizations and bilateral/multilateral donors such as NORAD and SIDA. In particular, it has kept a close relationship with UNEP, signing in 1997 an agreement for cooperation on environmental activities in South Asia.

Effectiveness and impact of SACEP projects have, however, limited by attendance of unsuitably qualified participants, lack of continuity, and lack of feed-back and follow-up. Having very small

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<sup>44</sup> For example, a SACEP/UNEP/NORAD joint project on environmental law and policy in South Asia (phase one: 1996-1999) has greatly contributed to assist drafting nation environmental legislation in Maldives. This project has also assisted most regional countries to publish their "State of the Environment reports." (SACEP/UNEP/NORAD, 1999)

staffs, SACEP Secretariat has had constraints in coordinating the all activities.

In order to deal with these deficiencies, a number of suggestions were made through the review of SSP I & II prepared for SACEP and NORAD by Bryceson and Wijayadasa (1998). Those include:

- ◆ SACEP should concentrate solely on co-ordination and facilitation in relation to project implementation at national level, rather than being involved in project implementation. SACEP should be, however, responsible for the implementation of projects at a sub-regional level (along with networking, coordination, reporting and monitoring).
- ◆ In order to improve effectiveness and impact of projects, SACEP must design adequate processes to carry out prior consultation, needs assessment, prioritization, project identification and formulation.
- ◆ Institutional and organizational strengthening of SACEP should be given top priority. Especially, SACEP Secretariat should be strengthened.
- ◆ SACEP must secure the funding necessary for its activities: SACEP should make concerted efforts to collect all country contributions. Taking into account that there is an overdependency on the part of SACEP for project funds from Norway, SACEP should endeavor to diversify its funding sources.

In addition to those points, it can be said that SACEP activities have been also hindered by its weak political foundations. Having less political clout than SAARC, SACEP has had limited “ability to mobilize resources and to implement regional actions” (Chatterjee, Mehra, and Banerjee, 2000). This issue was taken up at SACEP Governing Council Meeting in 1998. The Governing Council decided to request all member governments to take appropriate measures and steps:

- to ensure that SAARC is informed of SACEP’s experience and its wish to collaborate and complement the work of SAARC in the area of environment;
- to ensure that SACEP continues as the premier body on environment in South Asia; and
- to request the SAARC Summit to direct the SAARC Secretariat to invite the Director of SACEP to make a presentation on its programme and plans.

There is, unfortunately, little prospects of such formal affiliation in near future, since hold of next SAARC Summit is postponed indefinitely, due to political tension caused by the nuclear tests in India and Pakistan.

#### 4.4 Conclusion

The mechanisms for environmental cooperation can be summarized as follows:

- f) Parallel institutions: The establishment of SACEP was a milestone for multilateral environmental cooperation in South Asia. A number of action plans and programs have been identified and implemented under SACEP. A parallel regional organization, SAARC, established three years after the creation of SACEP, has also pursued regional cooperation on the environment. With no formal link between the two major institutions, there are certain redundancies between their activities. Some points out that this also limit the ability of SACEP to mobilize resources and implement its own plans and programs.
- g) Weak financial structure: Facing several critical problem such as expanding populations, poverty and unsustainable environmental management, South Asia has problems mobilizing sufficient financial resources for environmental protection. Funding comes from international organizations and bilateral donors, but according to the donor’s preference. The amount of funding from South Asia and other sources is insufficient to carry out all the planned environmental activities.

Since SACEP’s inauguration in 1982, South Asia has witnessed gradual progress on regional environmental cooperation. This trend accelerated in the early 1990s after the Earth Summit was held in Rio and Agenda 21 was adopted.

In addition to the general and broad program that is SACEP, other multi-targeted approaches have also been tried: adoption of South Asian Sea Action Plan in 1995, SAARC’s Environment Action Plan in 1997 and the Malé Declaration on air pollution in 1998.

Implementation of the SACEP programme has been unsatisfactory, due to lack of coordination between relevant actors, lack of continuity, and lack of feed-back and follow-up. Undeveloped



institutional and financial foundation was also among the major obstacles in furthering the cooperation.

Therefore, as some suggest (Bryceson and Wijayadasa, 1998), SACEP should clarify its role more explicitly to improve the co-ordination and facilitation in prior consultation, needs assessment, prioritization, project identification and formulation. It also needs to strengthen the institutional and organizational foundation. In order to secure the funding, SACEP should make concerted efforts to collect all country contributions, and also diversify its funding sources.

In addition to the above-mentioned deficiencies, SACEP has suffered its weak political foundation. With no formal link between two major institutions for cooperation—the SACEP and the SAARC—the SACEP has had limited ability to mobilize resources and implement regional activities (Chatterjee, Mehra and Banerjee, 2000).

SACEP has apparently placed priority on broad areas of activity, including local and national environmental issues and training, while SAARC has given more attention rather to global and international issues, such as climate change and the transboundary movement of hazardous wastes. There has been, nevertheless, a certain redundancy between the activities of two institutions. A link is needed between the SACEP and the SAARC, but, to date, there has been no movement toward such affiliation.

Political tension caused by the nuclear tests in India and Pakistan led to a suspension of any collaborative activities of the SAARC. The SAARC's annual Environmental Ministerial Meeting was postponed after the 5th Ministerial Meeting in 1998, with no prospects for resumption. Sri Lanka, current chair of the SAARC, has endeavored to convince its two neighboring countries of the need to revive the SAARC, but the success of the endeavor remains unclear. All that thus far has been attempted has been a meeting of senior officials of the member countries. A Meeting of Technical Committees on the Environment is expected in January 2000 in Bhutan—the first such meeting since the political tension. It is, unlikely that an early Ministerial Meetings will be held, since India maintains support for furthering SAARC at the technical level only.

In spite of these unfortunate developments, environmental cooperation based on the SACEP has become more active. The evidence shows that implementation of the Malé Declaration is progressing in a positive and speedy manner, with the participation of both India and Pakistan. Environmental Education and Training Action Plan (2000-2005) is expected to facilitate broad participation in environmental activities at local, national and regional levels.

Furthermore, the Cooperative Monitoring Center (CMC) at Sandia National Laboratories in the U.S., through funding provided by the Department of Energy (DOE) Office of Nonproliferation and National Security, organized a South Asia Water Resources Workshop to promote water quality data sharing in South Asia, in which scientists and researchers from Bangladesh, India, Nepal, Pakistan, Sri Lanka and the US participated. According to Rajen (1999), such “cooperative monitoring projects among neighboring countries in South Asia could build regional confidence, and, through gradual improvements in relations, reduce the threat of war and the proliferation of weapons of mass destruction”. It is worth keeping in mind that advancement of regional environmental cooperation, if strategically designed, is beneficial to both environmental preservation and fostering mutual trust and creation of peace in the region. (Kato and Takahashi, 2000).

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# **Improving Environmental Governance in Asia: Institutions for Regional/Subregional Environmental Cooperation \***

**Wakana Takahashi & Kazu Kato**

### 5.1 Introduction

Environmental governance is the process through which domestic and international society deals with environmental problems. Environmental governance refers to “the interactions among formal and informal institutions and the actors within society that influence how environmental problems are identified and framed” (Schreurs, 1998).

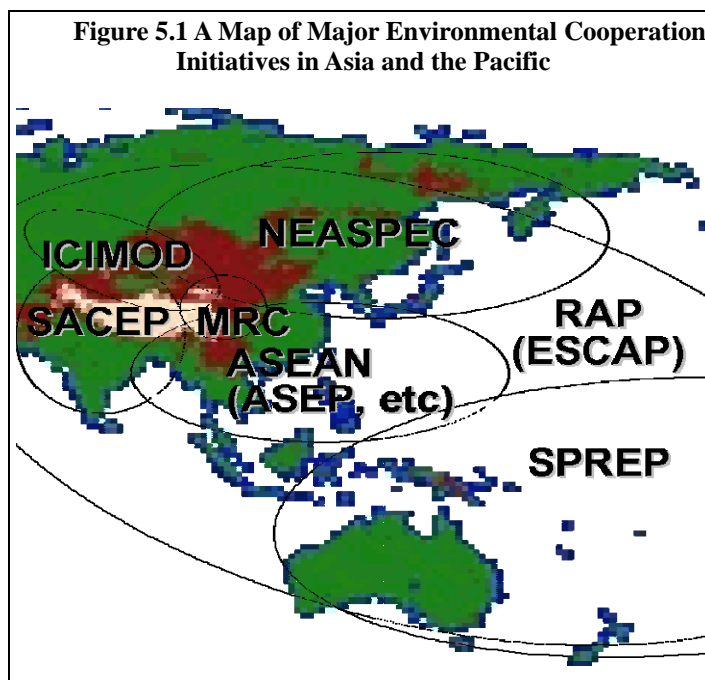
Here, “Institutions” means “persistent and connected sets of rules and practices that prescribe behavioral roles, constrain activity, and shape expectations” (Keohane, Haas and Levy, 1994). This paper use the word “institutions” to include “both organizations and sets of rules,” codified in not only conventions and protocols but also in non-binding plans and programs that have been formally accepted by states.

Since 1992, when the Rio Summit was held and Agenda 21 was adopted, environmental governance structures in Asia and the Pacific have changed dramatically. Among the major developments in environmental governance structure are the establishment of new environmental laws, programs and institutions in many countries, in particular developing countries, and increased participation by citizens, scientists, NGOs and enterprises in the environmental policy formation and implementation processes.

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\* This paper, after extensive revision, will be presented at the International Workshop on the Long-term Prospective Project of ECO ASIA, held on February 27 and 28, 2001.

In addition to these developments at the domestic level, the 1990's also witnessed the growth of institutions for environmental cooperation at the regional and subregional level. In Asia, which includes more than thirty geographically, economically and politically diverse countries, collaboration at the (smaller-scaled) subregional level has been emphasized by many international and regional organizations. The result has been activation of existing subregional environmental programs and plans, and the emergence of a multitude of new initiatives (See Figure 5.1).



However, activation of regional environmental cooperation between regional organizations does not ensure institutional effectiveness. In

fact, in several cases, organizations for environmental cooperation have not yet been fully and satisfactorily developed. There are still gaps between the planning and the implementation stages. Insufficient capacity in terms of technical, personnel and financial resources are among the major obstacles for many developing countries to implement environmental governance programs and plans. Also, the effectiveness of the linkages between actors within a state and actors operating internationally have been strongly hampered by domestic politics (Schreurs and Economy, 1997). In many cases, the outlook for accomplishing their tasks is unclear.

These problems raise the following questions: What are the main features that define environmental governance at the regional/subregional level in Asia? What are the similarities and differences between the cooperation mechanisms of subregions? Do/will they appropriately and effectively address the environmental problems threatening the region? What steps need to be taken to improve those institutions?

The Environmental Governance Project of the IGES, as a part of its major activities, has engaged in a comparative study of institutions and mechanisms of environmental cooperation in Asia, focusing on three subregions—Northeast Asia, Southeast Asia (ASEAN) and South Asia.

This paper presents a synthesized summary of the research<sup>45</sup>. First, this paper outlines the existing multilateral initiatives in the three subregions. Next, it attempts to conduct a comparative analysis of the mechanisms and institutions for subregional environmental cooperation by discussing the actors in the regional environmental cooperation arena. Finally, this paper concludes by offering suggestions on how to promote environmental cooperation in the region.

## 5.2 Overview: existing institutions

### 5.2.1 Northeast Asia<sup>46</sup>

The Northeast Asian subregion here refers to China, Japan, South Korea (ROK), North Korea, Mongolia, the Russian Far East and Chinese Taipei. There was not much cohesion between countries

<sup>45</sup> This paper is written based on findings and conclusions of regional/subregional environmental cooperation studies of IGES. See Takahashi (2000b, 2001a, 2001b) for detailed information.

<sup>46</sup> See Takahashi (2000b) for detailed information.

within this subregion until the latter part of the 1980's, and countries rarely cooperated on environmental issues, except for certain initiatives undertaken by countries on a bilateral basis. During the latter part of the 1980's, however, a tendency arose towards joint efforts at dealing with environmental problems associated with development. Agenda 21, adopted at Rio Summit in 1992, triggered multilateral cooperation on the environment, resulting in the establishment of several subregional programs, plans and regular conferences.

Among these initiatives, the North-East Asian Subregional Programme of Environmental Cooperation (NEASPEC) played a central role as a comprehensive intergovernmental program. The program was created at the first Meeting of Senior Officials on Environmental Cooperation in Northeast Asia in 1993, hosted by the United Nations Economic and Social Commission for Asia and the Pacific (UN/ESCAP). The motivating force behind NEASPEC was the government of South Korea

Since 1993, senior officials have held meetings every year or every two years, to decide on program activities, including project planning and implementation. The three priority areas identified by NEASPEC are energy and air pollution, ecosystem management and capacity building. Several fundamental projects on energy and air pollution—training workshops, technology demonstration projects, and monitoring-data collection projects—have been identified and implemented with the financial assistance of ADB. Although NEASPEC did not until quite recently have its own financial mechanisms, relying exclusively upon ad hoc project-based funding, the participating governments agreed in March 2000 to establish a core fund for NEASPEC.

The Northeast Asian Conference on Environmental Cooperation (NEAC), which also covers various environmental issues, is a forum for policy dialogue for government officials of environmental ministries and agencies from China, Japan, South Korea, Mongolia and Russia. Researchers, local government officials and representatives of NGOs have been also invited to conferences. NEAC conferences have been held annually, since 1992, and have provided participants with opportunities to exchange information, share experiences and discuss actions to be taken in the future. The conference itself does not create any projects or program-oriented activities.

On the economic cooperation front, the Tumen River Area Development Programme (TRADP), which is promoted by UNDP and aims to promote regional economic cooperation between China, South Korea, North Korea, Mongolia and Russia, developed a Memorandum of Understanding on Environmental Principles governing the TRADP in 1995. The Tumen region has been threatened by severe environmental degradation, namely, inland and coastal water pollution, biodiversity loss, deforestation and air pollution. In response to the memorandum, it was decided to create a Strategic Action Programme (SAP) for the purpose of developing an effective long-term regional strategy for dealing with international water pollution and loss of biodiversity. The Global Environment Facility (GEF) decided to sponsor the SAP with 5 million US\$ over a two-year period, and the program was launched in May 2000.

Collaboration focusing on a single subject also started following the Rio Summit. Problems related to the marine environment are under the purview of the Northwest Pacific Action Plan (NOWPAP). This sea plan was initially advocated by UNEP, rather than by countries within Northeast Asia. The participating countries are China, Japan, the South Korea, Russia and North Korea<sup>47</sup>. Those countries adopted action plans at the first intergovernmental meeting, held in Seoul, in 1994 (UNEP, 1997).

Another example of focused collaboration is the creation of the Acid Deposition Monitoring Network in East Asia (EANET). This network was created on the initiative of the government of Japan—all the operating costs are paid by the Japanese Government. Japan also provides financial and technical assistance on monitoring activities to developing member countries through its official development assistance (ODA) channel. The network links ten national governments and their monitoring sites. Using shared guidelines and technical manuals, the network has been collecting, compiling and evaluating monitoring data on acid deposition. The network began its preparatory-phase activities in 1998, and its regulatory activities in 2001. The network center is located in Japan, and Environment Agency (now the Ministry of Environment) of Japan administers

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<sup>47</sup> North Korea is not an acting member, to date.

and coordinates the network's activities as interim secretariat. The second intergovernmental meeting of the network, held in 2000, designated the UNEP as the Secretariat for the EANET after 2002 (Interim Secretariat [of EANET] and Interim Network Center [of EANET], 2000).

To protect migratory waterbirds, the North East Asian Crane Network Center was established in 1997, based on the "Asia-Pacific Migratory Waterbird Protection Strategy," which was adopted at the Seventh Meeting of the Conference of the Contracting Parties to the Convention on Wetlands (Ramsar). The network links eighteen important sites for the survival of cranes from six Northeast Asian countries, so that those who work at different sites can exchange information and share their experiences. The network also link researchers, conservationists, governmental officers and others concerned about crane protection, and provides a basis for joint research and conservation activities. The network is managed by Wetlands International-Asia Pacific. The late 1990's also witnessed the establishment of two more waterbird network: the East Asian Australasian Shorebird Site Network, in which twenty-four sites from ten countries participate, and the East Asian Anatidae Site Network.

In addition to the founding of these networks, the late 1990's witnessed the emergence of collaborative efforts at the ministerial level. Following a proposal by the South Korea, the Tripartite Environment Ministers Meeting (TEMM) between China, Japan and Korea was held in Seoul in January 1999. The three countries recognized the need to cooperate and to improve the level and quality of environmental cooperation in the subregion. The TEMM is to be held on a yearly basis. The second TEMM was held in Beijing in February 2000, and the ministers agreed to develop and work on specific projects, focusing particularly on raising the consciousness of the environmental community, preventing fresh water pollution and land-based marine pollution and cooperating in the field of environmental industry. The three countries have already begin designing the project proposals, and steps have been taken toward implementation.

Other initiatives covering a broader geographical area, have also been made. Among them is an effort made by an Asia-Pacific Economic Cooperation (APEC) forum. This forum was inaugurated in 1989, and includes eighteen countries and economies. The First Environmental Ministerial Meeting, held in 1994, developed an "APEC Environmental Vision Statement." Following this Statement and other declarations, APEC developed a three-pronged environmental work program, namely, 1) the integration of environmental and economic considerations into APEC working groups; 2) sustainable cities, clean technologies, and the marine environment; and 3) a long-term focus on food, energy, the environment, economic growth, and population.

On the scientific front, the Asia-Pacific Network for Global Change Research (APN) was established in 1995 for the purpose of strengthening links between the scientific community and policymakers in the Asia-Pacific region. APN is an inter-governmental network which seeks to promote, encourage and support research activities, focusing on long-term global changes in climate, ocean and terrestrial systems, and on related physical, chemical, biological and socioeconomic processes.<sup>48</sup>

Finally, the Environment Congress for Asia and Pacific (ECO ASIA) must be mentioned. ECO ASIA was initiated by the Environment Agency of Japan, with the objective of fostering policy dialogue and cooperation on environmental and developmental issues among the environmental ministers of participating countries. While ECO ASIA was originally intended as an informal forum for information exchange between ministers, it has endorsed the "ECO ASIA Long-term Perspective Project," aimed at identifying options for environmental policies that promote long-term sustainable development of the Asia-Pacific region. This project will identify major environmental issues confronting the region; examining their links with socioeconomic issues; and forecasting the future social, economic, and environmental issues that may result from different regional development scenarios.

### 5.2.2 Southeast Asia (ASEAN)<sup>49</sup>

Southeast Asia, as referred here, embraces the ten countries of the Association of Southeast Asian

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<sup>48</sup> <http://www2.rim.or.jp/apn/index.htm>

<sup>49</sup> See Takahashi (2001a) for detailed information.



Nations (ASEAN). Southeast Asia has a longer history of subregional environmental cooperation than the other subregions of Asia. Since its establishment in 1967, ASEAN has emphasized "functional cooperation" between member states on science and technology, culture and information, social development, and the environment (ASEAN Secretariat, 1995a).

The beginning of collaborative efforts on the environment can be traced back to 1977, when the ASEAN Sub-Regional Environment Programme (ASEP) was developed in collaboration with UNEP. ASEP I designated six priority areas and listed more than one hundred projects and activities. Thereafter, two similar programs were developed and implemented. In 1993, a new ASEAN Strategic Plan of Action on the Environment was agreed upon, consisting of ten strategic thrusts and twenty-seven supporting actions (ASEAN Secretariat, 1994). In addition, the ASEAN Cooperation Plan on Transboundary Pollution was agreed to in 1995 (ASEAN Secretariat, 1995b). In 2000, an Environmental Education and Training Action Plan was also developed, in collaboration with UNEP-ROAP (Pradham, 2000).

The organizational structure to support those plans consists of the ASEAN Senior Officials on the Environment (ASOEN) and its subsidiary working groups, the meeting of environmental ministers, and the ASEAN Secretariat. Ministerial meetings occur every three years, to ensure the implementation of the environmental decisions made by the heads of government, and to adopt action plans. ASOEN meets every year to review the implementation of the plans, and to provide operational policy guidance. The ASEAN Secretariat administers all those activities.

In addition to the plans mentioned above, more focused and intensive collaboration also started in the late 1990's. The haze experienced in Southeast Asia in 1997 resulted in the most serious challenge in the subregion, particularly in Indonesia, Malaysia, Singapore and Brunei Darussalam. Accordingly, a Haze Technical Task Force was set up in 1995, and the Regional Haze Action Plan was adopted by the ASEAN Senior Officials on the Environment (ASOEN) meeting in 1997 for the purpose of fighting land and forest fires. Major components of the Plan are to take preventive measures, to establish regional monitoring mechanisms, and to increase firefighting capacity. Furthermore, Environment Ministers from each country agreed to initiate the process of negotiating on the ASEAN Agreement on Transboundary Haze, in 2000. ASEAN, in close collaboration with UNEP, has conducted a feasibility study on a comprehensive assessment of legal, institutional and administrative arrangements, and has been drafting the agreement.

In parallel with these plans and programs, the Hanoi Plan of Action, the first in a series of comprehensive long-term ideas adopted at the ASEAN Summit in 1998, identified fifteen activities for environmental protection and sustainable development to be undertaken, with emphasis on transboundary haze control (ASEAN Secretariat, 1999).

Aside from those non-binding plans and programs, ASEAN developed an Agreement on the Conservation of Nature and Natural Resources, which is the only environmental treaty of ASEAN to date. The agreement was concluded and signed by foreign ministers from all six ASEAN countries in 1985. Of the six, Indonesia, the Philippines and Thailand ratified it in 1986, while Brunei Darussalam, Malaysia and Singapore have not. So, the agreement has not entered into force.

### 5.2.3 South Asia<sup>50</sup>

South Asia refers to seven countries—Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. Although a number of bilateral agreements on environmental issues between South Asian countries had been reached, no multilateral initiatives existed until the early 1980's when the South Asia Cooperative Environment Programme (SACEP) was adopted by environmental ministers from eight countries in 1982<sup>51</sup>. Covering broad priority subject areas, implementation of this program was poor. This does not, however, negate the significance of SACEP, since it provided a solid basis and justification for member states and collaborating agencies to initiate collaborative projects focused on single subjects identified by the SACEP.

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<sup>50</sup> See Takahashi (2001b) for detailed information.

<sup>51</sup> The eight original members are Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. Iran also joined SACEP in the late 1990s.

SACEP has the characteristics of a modest-sized regional environmental organization, consisting of three major organs: the Governing Council, the Consultative Committee, and the Secretariat (Shihab, 1997). SACEP, as an organ, provided secretariat and administrative services for implementing its own programs together with other environmental initiatives, such as the Malé Declaration on air pollution endorsed by UNEP/EAP-AP.

The South Asian Association for Regional Cooperation (SAARC), which seeks to accelerate the economic and social development of its seven member states, has also pursued regional cooperation on the environment. SAARC has been particularly concerned with transboundary and global environmental issues such as natural disasters, climate change and transboundary movement of hazardous wastes, and developed an action plan.

In addition to these two major comprehensive initiatives, several plans focusing on single issues have been developed in South Asia. The launching of the Regional Sea Program was called for by SACEP member states at UNEP's Governing Council in 1982, resulting in the "designation of the region as a part of UNEP's Programme" in 1983 (Abeyegunawardene, 1997). The program involves the five marine states of South Asia—Bangladesh, India, the Maldives, Pakistan, and Sri Lanka. These countries adopted a South Asian Seas Action Plan at a meeting of plenipotentiaries, held in New Delhi in 1995. The Action Plan came into force in 1998. The SACEP secretariat has been designated as the secretariat for the implementation of the plan.

With regard to air pollution, the Malé Declaration on Control and Prevention of Air Pollution and Its Likely Transboundary Effects for South Asia was agreed upon during the 7th SACEP Governing Council Meeting, held in Maldives in April 1998. The declaration was signed by Bangladesh, Bhutan, India, Iran, Maldives, Nepal, Pakistan and Sri Lanka. The implementation plan for the declaration consists of three phases, and Phase One—network establishment, baseline studies and development of action plans at national and regional levels—was carried out between May 1998 and March 2000. An institutional arrangement to support the implementation of Phase One consists of UNEP/EAP-AP, the Stockholm Environment Institute (SEI) and SACEP<sup>52</sup>. UNEP/EAP-AP has administered the implementation of the declaration, in collaboration with SACEP, and SEI has provided substantial technical support. SEI's contribution was a part of its Regional Air Pollution in Developing Countries Program, which is funded by the Swedish International Development Authority (SIDA).

An Environmental Education and Training Action Plan was also developed in 2000 by SACEP, in collaboration with UNEP-ROAP (Pradham, 2000). The action plan presents "an overall regional framework to educate and train people to deal with major environmental problems . . . and to sensitize people on the need to eliminate the root causes of environmental degradation such as poverty, population pressures, overpopulation, wasteful production, human greed and underdevelopment." (SACEP & UNEP, 2000).

### 5.3 An assessment: Actors in regional environmental cooperation arena

#### 5.3.1 Regional Organizations

As in the case of Europe, regional organizations have played significant roles in addressing, identifying, coordinating and implementing joint environmental activities. This is demonstrated by a number of EC/EU efforts to unify environmental standards in connection with economic activity such as trade and manufacturing. In the case of long-range transboundary air pollution control, the Convention itself was facilitated and coordinated by the United Nations Economic Commission for Europe (UN/ECE). It is worth pointing out that EC/EU financial and technology transfer mechanisms have official and unofficial links with the LRTAP Convention. This apparently made it easier for the member states to comply with the LRTAP Convention and its protocols (Nordberg, 2000).

Because it does not have a strong central bureaucracy as does the EC/EU, ASEAN has provided minimal, largely administrative support to member states through the ASEAN Secretariat (Tay, 2000).

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<sup>52</sup> A Memorandum of Understanding (MoU) was agreed upon by UNEP/EAP-AP and SEI to implement Phase I of the Malé Declaration.

It has drafted many regional environmental action plans, three ASEAN environmental programs (1978-1992), two strategic action plans (1994-), and transboundary pollution action plans (1995-) (ASEAN Secretariat, 1994, 1995).

The institution supporting those plans and programs is well-structured, consisting of summits, ministerial meetings on both foreign affairs and environment, senior officials meetings, working groups and ASEAN Secretariat. Consequently, ASEAN has managed to develop a comprehensive and strategic framework for environmental cooperation with few redundancies.

In South Asia, both SACEP and SAARC have played similar roles as ASEAN. SACEP was established for environmental protection, whereas SAARC aims for broad collaboration on economic and social development. The institutional arrangements of the latter include: summits, the Council of Ministers, the Standing Committee, technical committees for respective fields, and the SAARC Secretariat, while the structure of the former consists of the environment and forestry ministers meeting, senior officials meeting—the Consultative Committee—and the Secretariat, but without summits. With no formal link between the two major institutions for cooperation, the SACEP and the SAARC, the SACEP has had limited success in mobilizing resources and implementing regional activities (Chatterjee, Mehra and Banerjee, 2000).

SACEP has apparently placed priority on broad areas of activity, including local and national environmental issues and training. SAARC, on the other hand, has given more attention to global and international issues, such as climate change and the transboundary movement of hazardous wastes, and has attempted to establish a common position for SAARC countries in global negotiations. There has been, nevertheless, redundancy between the activities of two institutions.

Northeast Asia is characterized by the fact that no comprehensive regional organization equivalent to EC/EU, ASEAN, SAARC or SACEP exists, resulting in the emergence of several independent initiatives on environmental cooperation. The functions and activities of each subregional program, plan, and forum may overlap. In fact, redundancies seem inevitable in Northeast Asia.

The absence of a regional organization also affects the institutional and financial arrangements of each program and its plans. For example, the location of the secretariat ranges from UN/ESCAP, to UNEP, to China, and to Japan, or on a rotating basis. Accordingly, the status of participating states differs from one initiative to another, depending on diplomatic relations between countries within the region, and the international membership of the host organizations<sup>53</sup>.

### *5.3.2 International Organizations*

UN organizations have conducted various activities underlining their catalytic and coordinating role in promoting regional and subregional cooperation in environmental fields. The most notable contribution of the UNEP in promoting subregional cooperation lies in its role in coordinating and initiating the Regional Seas Programme, which includes the Northwest Pacific Action Plan, East Asian Seas (EAS) Action Plan and South Asian Sea Action Plan.

Attaching high priority to subregional approaches, UNEP has also provided substantial support to draft various action plans in most subregions, together with technical and financial assistance for a number of projects developed under subregional environmental programs (Natori, 2000).

UNDP, which helps developing countries adopt integrated approaches to natural resource management to improve the lives of people living in poverty, has also provided financial and technical assistance to subregional environmental initiatives in the developing world. GEF has provided technical assistance grants to proposed biodiversity and climate change projects in Asia, including an emergency response project to prevent haze in Southeast Asia by fighting forest fires in Indonesia, and a project to prepare a Strategic Action Programme for the Tumen River Area Development Program.

International banks such as the Asian Development Bank and the World Bank have provided large amounts of financial assistance to environmental activities in the region. In particular, ADB's regional technical assistance grants have played a significant role in facilitating collaboration between countries. This is particularly true in the case of transboundary haze mitigation projects in Southeast

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<sup>53</sup> For example, North Korea does not attend most subregional programs, except those hosted by UN Organizations. North Korea cannot receive assistance from the ADB, to which it does not belong. Taiwan has no access to many initiatives because its position in international politics is uncertain although it is a member of APEC and ADB.

Asia. It seems the grant led to a good start towards ASEAN's implementing the Regional Haze Action Plan (Pippinyo and Prasiddha, 1999).

UN/ESCAP, which holds ministerial meetings on environment and development every five years, develops regional action programs for sustainable development with five-year time frames, as a follow-up to UNCED. To ensure the implementation of the programs, ESCAP conducts consultations on a subregional basis. In keeping with this purpose, subregional efforts, including several plans endorsed by ASEAN, NEASPEC, and SACEP, were examined at the 4<sup>th</sup> ESCAP ministerial meeting, held in 2000 in Japan (Ichimura, 2000). ESCAP has also devoted itself to maintaining and facilitating subregional meetings, particularly in the case of Northeast Asia. Upon request from countries of the subregion, UN/ESCAP has acted as the interim secretariat of NEASPEC since 1997, and has coordinated its activities. Furthermore, ESCAP held a senior officials meeting in Central Asia, where no regional organizations for environmental cooperation exist, and initiated the process of formulating subregional environmental programs in the late 1990's (Karim, 1999).

There is, however, a limit to the role of international organizations. Due to their lack of financial resources, South Asia and Southeast Asia have mostly relied on external financial support from international organizations, together with bilateral donors, to implement their environmental activities. Funding has mainly been provided on a project-by-project basis. This has resulted in a large number of project proposals which did not attract donors' attention, and were simply not carried out.

Except bilateral financial and technical assistance to China and other developing countries, Northeast Asia receives less funding from international organizations, since the region contains two developed countries, Japan and South Korea. Instead, international organizations have given more attention and resources, to supplement the poor political relations in this region (Shrestha, 2000). This is true for the Northwest Pacific Action Plan and NEASPEC: the former is administered by UNEP, whereas the latter has been managed by UN/ESCAP. The Acid Deposition Monitoring Network will be a new addition to this list, since its secretariat will be located at UNEP/EAP-AP after 2002. Although countries in the subregion want UN/ESCAP to continue to take responsibility, the UN/ESCAP wants to give up the position.

### *5.3.3 National Governments*

National governments are the most important actors among those involved in the process of environmental cooperation. Regional cooperation should be based on spontaneous initiatives between countries. Transboundary pollution, or even global environmental problems, are rooted in human activities taking place at the local and national levels, and are therefore best dealt with at the level closest to the source (Kato, 2001). Without the commitment of national governments, regional cooperation cannot be successful.

Most national governments state that they place great importance on environmental protection and sustainable development, in general. There are, however, gaps between words and action. When negotiating concrete commitments, different viewpoints are often expressed, which has hindered progress on regional cooperation.

The legacy of ASEAN has been to avoid such critical situations, applying the norm of the so-called ASEAN way—non-interference and aversion to a strong central bureaucracy. The primary emphasis of any action plans developed by ASEAN is to develop national plans without binding commitment. Implementation of plans is left to the capabilities of each country.

The long-lasting and recurrent episodes of transboundary haze pollution provided a testing ground for the ASEAN way. Against the norm of the ASEAN way, several member countries criticized Indonesia by name for causing suffering in neighboring countries, and not taking immediate stringent countermeasures. To this end, ASEAN ministerial meetings have repeatedly stressed that each government should consider the inclusion of presumptive provisions in their national laws to discourage land owners from allowing open burning to take place on their land.

Yet, the stringency of existing command-and control measures varies, as does compliance with the national laws and policies. In the case of Indonesia, it is unlikely that strict, zero-burning legislation will be introduced in the near future. Even if such legislation were to be introduced, compliance would be hindered by political uncertainties in Indonesia.

In the case of Northeast Asia, countries have not reached the point of negotiating concrete commitments. Because of the great diversity in terms of their level of economic development and political systems, countries in Northeast Asia have expressed different views and approaches to environmental cooperation, especially China, Japan and South Korea.

China, suffering from devastating environmental deterioration including heavy industrial pollution, desertification, and inland water and coastal pollution, believes subregional cooperation should be focused on these issues. China also believes developed countries in the subregion should offer substantial financial support for the establishment and operation of environmental programs, as well as technical assistance for projects in their priority areas. China is quite sensitive to the use of the term “transboundary,” as it does not wish to be seen by other countries as causing pollution that threatens environmental conditions in territories outside its borders.

Japan believes that it has long worked to satisfy China’s demands through Official Development Aid on a bilateral basis. Japan also appears wary of multilateral initiatives, out of concern that such an initiative could become another channel for development assistance. Japan prefers to focus on monitoring the state of the environment and transboundary pollution<sup>54</sup>. Multilateral initiatives undertaken or endorsed by Japan target the wide region of East Asia, or the entire Asia-Pacific region, rather than focusing on Northeast Asia. Japan has also suggested that countries attending an initiative should share the burden to the extent possible under their present circumstances.

South Korea is keener to promote multilateral environmental cooperation focusing on Northeast Asia. It apparently believes that multilateral initiatives should include both technical projects as preferred by China and monitoring-type environmental management projects as preferred by Japan (Valencia, 1998). South Korea has tried to reconcile the approaches of both China and Japan by proposing that priority projects of NEASPEC be energy and air pollution. It seems that South Korea prefers the presence of international organizations in such multilateral initiatives. It has suggested that coordinating mechanisms for environmental cooperation channel financial and technical assistance from international organizations including UNDP, UN/ESCAP and ADB.

International relations within Northeast Asia have been dominated by strong bilateral cooperation with the United States, rather than multilateral cooperation between countries of the subregion. This is particularly true for Japan. Recent evidence shows that China has begun to show its interest in multilateral relations. It is time to enhance multilateral environmental cooperation in Northeast Asia. With the absence of regional organizations, and different and sometimes competing perspectives of national governments, and having had little expertise in multilateral diplomacy, countries in Northeast Asia is facing new ground.

International relations within South Asia have also been dominated by bilateral relations with the predominant power, India. Therefore, transboundary environmental issues, as seen in the case of Northern watersheds on the Indian subcontinent, being devastated by inappropriate cultivation, deforestation and water contamination, have been dealt with mostly on bilateral basis.

It can be safely said that countries, except for India, would choose multilateral collaboration. However, their multilateral initiatives have not been very strong. It was only during the late 1980’s that countries have shown concern for environmental issues at the SAARC, mostly due to the need to create a common position in global environmental negotiations. This progress was suspended by political tension caused by the nuclear tests in India and Pakistan. An early resumption of ministerial meetings on the environment is unlikely, since India maintains support for furthering SAARC at the technical level only.

In spite of these unfortunate developments, environmental cooperation based on the SACEP has become more active. Since it does not involve any meetings at the summit level, SACEP has been enjoying the freedom to make its own decisions. The evidence shows that implementation of the Malé Declaration is progressing in a positive and speedy manner, with participation by both India and Pakistan.

Furthermore, an attempt has been made to promote the sharing of water quality data in South Asia, involving scientists and researchers from Bangladesh, India, Nepal, Pakistan, and Sri Lanka. This

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<sup>54</sup> Japan places priority for multilateral programs on areas such as marine pollution, acid rain, air and water pollution. Japan has recently expressed deep concern for climate change.

project was proposed a research institute funded by the United States government, which hopes that “cooperative monitoring projects among neighboring countries in South Asia could build regional confidence, and, through gradual improvements in relations, reduce the threat of war and the proliferation of weapons of mass destruction.” (Rajen, 1999).

#### 5.3.4 *NGOs, citizens and academics*

International NGOs and NGO networks are among the newly emerging actors in environmental governance in Asia. Although most of them targeting single countries on single issues, several NGOs or networks have taken regional approaches to environmental protection.

Some NGOs are linked to regional institutions endorsed by international and regional organizations and national governments. One encouraging example is an IUCN regional aquatic ecosystems program in Asia. IUCN has maintained strong ties with the Mekong River Commission, and has conducted environmental assessments of developments in the lower river basin to create new protected wetlands areas, support national agencies, increase institutional capacity, assist governments with the implementation of the Ramsar convention, disseminate information and promote communication between various actors (IUCN, 2000).

Another example is migratory waterbird protection. The late 1990’s witnessed the emergence of several waterbird networks, which are administratively managed by Wetlands International-Asia Pacific. The networks link a number of important sites for the survival of waterbird from several East and Northeast Asian countries. The networks also link researchers, conservationists, governmental officers and any other parties concerned about waterbird protection, in an open manner, and provide a basis for joint research and conservation activities.

Nevertheless, NGOs participation in multilateral environmental cooperation has thus far been limited in every subregion in Asia. A number of critics have suggested that regional initiatives to address environmental issues are often top-down, with little involvement by civil society, local government and NGOs, especially at the decision-making level (Nicro, 1999). Appropriate mechanisms for bringing the public and NGOs into play do not currently exist.

Academics—universities, research institutes and also individual technical and scientific specialists—are another newly emerging actor in the field of regional environmental cooperation in Asia. Academics play significant roles in identifying environmental threats, drafting action plans and agreements and monitoring the implementation of the agreements, in cooperation with officials of international organizations and national governments. In fact, decision-making processes of several action plans and agreements of ASEAN and SACEP/SAARC have involved a number of lawyers and scientific specialists from several academic institutes, such as the Asia-Pacific Center for Environmental Law (Singapore), Institute of Southeast Asian Studies (Singapore), the Asian Institute for Technology (located in Thailand), Thailand Environment Institute, and Tata Energy Research Institute (India).

Although collaboration has been mostly on a single-project basis, some research institutes have started to deal with more comprehensive tasks, such as creating regional plans and institutions, and following up on their implementation. This is particularly true for the Stockholm Environmental Institute. Taking advantage of its well-developed expertise on the regional approach to long-range transboundary air pollution control in Europe, the Institute assisted UNEP/EAP-AP and SACEP in drawing up the Malé Declaration on Control and Prevention of Air Pollution and Its Likely Transboundary Effects for South Asia. The institute also has assisted UNEP/EAP-AP, SACEP and its member states with developing common monitoring guidelines, provided technical and financial assistance, and has been reviewed the implementation processes.

International joint research among academics has also been expanding since the 1990’s. The creation of mechanisms to support such research efforts, such as APN and GEF, has accelerated the trend.

This is not to say that such efforts are sufficiently advanced to create transnational “epistemic communities,” or communities of experts sharing common values and approaches to policy

problems<sup>55</sup>. Haas (1990) attributes the success of the regional efforts to control marine pollution in the Mediterranean Sea to “the involvement of ecologists and marine scientists who set the international agenda and directed their own states’ support to international efforts and toward the introduction of strong pollution control measures at home.” It seems the time has not yet come for the emergence of such a community in Asia.

On the contrary, the evidence shows that most links between international and national governmental organizations and academics, or between academics and other academics are on an *ad-hoc* basis. These insufficient links sometimes cause friction between scientists, between scientists and policymakers, and also between policymakers from different countries. In several cases, some have criticized the fact that scientists from only a single country consulted with decision-makers on regional initiatives, and took over the decision-making process.

#### 5.4 Conclusion: Recommendations for furthering cooperation

This paper has examined the institutions for environmental cooperation of three subregions in Asia, Northeast Asia, Southeast Asia and South Asia. The analysis indicates that the mechanisms of environmental cooperation vary from one subregion to another. This concluding section provides a summary of major features of environmental cooperation mechanisms, together with some recommendations, for each subregion.

##### *Northeast Asia*

The characteristic features of existing programmes and mechanisms for environmental cooperation in the subregion may be summarized as follows:

**Parallel institutions:** Several institutions for environmental cooperation were established through different channels, including environmental ministries, official diplomatic channels, officers of environmental ministries and agencies, NGOs, and academics, with little coordination between the various channels. Consequently, some institutions contain material that is redundant.

**Multi-layer structure:** Geographical coverage of environmental cooperation institutions ranges from global, wider-than-regional to subregional. Some multilateral institutions target Northeast Asia, while some target the whole region of East Asia or, even more broadly, Asia and the Pacific. The evidence shows that South Korea tends to favor a focus on Northeast Asia, whereas Japan focuses on the broader region (East Asia), or the entire Asia-Pacific region.

**Different membership:** The status of participating states differs from one institutions to another, depending on diplomatic relations between countries and on the international membership of the host organization.

**Weak institutional/financial structure:** Since most of the regional environmental institutions have little organizational structure and a weak financial foundation, cooperation has made only slow progress. In the absence of regional organizations which can administer regional environmental plans and programs, each of them must start negotiations from scratch. Some have stagnated in terms of institutional and financial development.

The evidence shows that weaknesses and inadequacies of environmental cooperation schemes in Northeast and East Asia, as analyzed in this paper, have hindered the progress of regional cooperation on single issues such as acid rain and marine pollution control<sup>56</sup>. The question to be answered is whether and how the region can get out of this stagnation.

In the case of acid rain control, the first regional step taken in Europe was to gather scientific facts

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<sup>55</sup> According to Haas (1990), an “epistemic community” is “a professional group that believes in the same cause-and-effect relationships, tests to assess them, and shares common values. As well as sharing an acceptance of a common body of facts, its members share a common interpretive framework, or ‘consensual knowledge,’ from which they convert facts or observations to policy-relevant conclusions.”

<sup>56</sup> See Takahashi (2000a) and Takahashi & Asuka (2000) for the case of acid rain, and see Valencia (1998) and Haas (1998) for the case of marine pollution control.

on acid deposition, emissions of pollutants, and reaction, transport and diffusion mechanisms. The second step was to develop efficient strategies for acid rain control. In this process, several protocols were adopted. The third step was to implement pollution abatement and prevention processes, mostly at domestic and local level. Considering that the Acid Deposition Monitoring Network has just started its regulatory activities, this region is currently at the first step: that of the mid-1970's in Europe. One of the biggest differences between Europe and East Asia is that the third step has already started to take shape in East Asia. That is, countries in the region are paying more attention to, and strengthening national laws and regulations on, controlling air pollution and acid rain. A large amount of environmental investment has been given to China through both official development assistance and foreign private investment. The creation of a "China Council," which consists of China as well as its donor countries, and coordinates efficient assistance to China, also is a step in the right direction.

Considering these facts, it might safely be said that a significant degree of collaboration has already taken place on the issue of acid rain in Northeast Asia. Much of this collaboration is, unfortunately, undertaken in a fragmented manner. Therefore, the region needs to form links between individual initiatives and financial mechanisms, between bilateral and multilateral aid programs, between donor agencies, and between regional cooperation institutions and financial aid mechanisms.

Northeast Asia needs to create a mechanism for systematic coordination between all the initiatives, in particular initiatives addressed at similar or related issue areas. To make it easier, the first step to be taken would be to set up a system that maintains transparency and full disclosure. Recently, some regional and subregional initiatives have set up their own web pages on the Internet. (These include the EANET, TEMM, TRDAP and the Crane Network. Collaborative activities of NEASPEC are also introduced in UN/ESCAP homepage.) This trend should grow and be further enhanced.

In the long-term, a comprehensive and strategic environmental action plan should be developed for medium and long-term objectives. Such action plans have already succeeded in other regions and subregions such as the EU, the Baltic Sea region and ASEAN.

One long-term objective for Northeast Asia would be to create a framework in which all parties in the subregion can participate. Because of the political sensitivities and security situation in the subregion, this objective will not be easily achieved. Therefore, international organizations and NGOs must act as an intermediary for the countries of the subregion.

In addition, countries of this region need to improve their diplomatic relations and skills, to handle the complex and difficult problems of different political systems and perspectives. This is particularly true for Japan and South Korea. Although the two countries have much in common with each other in that they are willing to promote and lead the various environmental initiatives, they are working in different directions, resulting in parallel institutions and the stagnation. Both countries need to develop strategies for regional cooperation which incorporate their own as well as the other's interests and the common interests of the sub-region.

#### *Southeast Asia (ASEAN)*

The characteristic features of existing programmes and mechanisms for environmental cooperation in the subregion may be summarized as follows:

**Well established institutional structure:** A number of environmental action plans and programs have been initiated by ASEAN, which has expertise in administering regional cooperation in various fields. ASEAN's well-designed organizational structure has been applied to environmental field, resulting in ministerial meetings on issues related to environment and development, senior officials meetings, working groups on single issues and an ASEAN secretariat environmental unit. There are strong affiliations between each component of the organizational structure. Accordingly, there has been little redundancy between environmental cooperation activities within ASEAN.

**Weak financial structure:** ASEAN is not strong financially, and has mostly relied on external financial support for implementing its environmental activities, which have been provided mostly on a project-by-project basis. This has led to a failure in executing several project proposals which did not attract donors' attention.



In order to deal with these deficiencies, ASEAN must secure the funding necessary for the implementation of environmental plans, focus more sharply on priority areas of actions, and enhance the capacity of the ASEAN Secretariat. The evidence shows that ASEAN has already moved in that direction. At the ASOEN meeting chaired by Singapore, in 1998, a decision was made to be more issue-oriented than project-oriented and to “restructure and streamline the ASEAN working groups to be more responsive to emerging regional and international environmental issues.” As a result, only three working groups were maintained, including the working groups on Nature Conservation and Biodiversity, chaired by the Philippines, Coastal and Marine Environment, chaired by Thailand, and Multilateral Environmental Agreements, chaired by Malaysia” (Sunchindah, 1998).

In addition to the points stated above, some critics have suggested that the modes of ASEAN cooperation—in other words, the “spirit of ASEAN” or “ASEAN way”—might be inappropriate for dealing with environmental challenges (Hamzah, 2000/ Tay, 2000). The “ASEAN way” emphasizes “the norm of non-interference in other states’ affairs.” To this end, controlling transboundary air pollution including haze episodes would provide a real measure of effectiveness of the ASEAN way.

This trend, however, is likely to change. ASEAN environmental officials have officially denounced Indonesia’s forestry and land use policies, even though such issue is a matter of sovereign territorial rights. ASEAN is in the process of developing and negotiating the ASEAN Agreement on Transboundary Haze. The development of a legally-binding treaty is, however, not the only solution. It is more important to create mechanisms for bringing countries to comply with international commitments. To this end, regional policymakers will need to coordinate their activities with technical and financial assistance mechanisms.

#### *South Asia*

The characteristic features of existing programmes and mechanisms for environmental cooperation in the subregion may be summarized as follows:

**Parallel institutions:** The establishment of SACEP was a milestone for multilateral environmental cooperation in South Asia. A number of action plans and programs have been identified and implemented under SACEP. A parallel regional organization, established three years after the creation of SACEP, has also pursued regional cooperation on environmental issues. With no formal link between the two major institutions, there are certain redundancies between their activities. Some points out that this also limit the ability of SACEP to mobilize resources and implement its own plans and programs.

**Weak financial structure:** Facing several critical problems such as expanding populations, poverty and unsustainable use of natural resources, South Asia has difficulties in mobilizing sufficient financial resources for environmental protection. Funding comes from international organizations and bilateral donors, but according to the donor’s preference. The amount of funding within South Asia and other sources is insufficient to carry out all the planned environmental activities.

In order to deal with the deficiencies, as some suggest (Bryceson and Wijayadasa, 1998), SACEP should clarify its role more explicitly to improve the co-ordination and facilitation in prior consultation, needs assessment, prioritization, project identification and formulation. SACEP also needs to strengthen its institutional and organizational foundation. In order to secure the funding, SACEP should make concerted efforts to collect all country contributions, and also diversify its funding sources.

In addition to the above-mentioned deficiencies, SACEP has suffered its weak political foundation, having no formal ties with SAARC. A link is needed between the SACEP and the SAARC, but, to date, there has been no movement toward such affiliation.

However, there are no signs of such a working relationship to date. Political tension caused by the nuclear tests in India and Pakistan has led to a suspension of any collaborative activities by SAARC. In spite of these unfortunate developments, environmental cooperation based on the SACEP has become more active. SACEP therefore needs to advance the strategic goals of regional environmental

cooperation, which will benefit both sustainable development and the fostering of mutual trust and peace in the region. To this end, a workshop on South Asia Water Resources to promote water quality data sharing in South Asia, organized by a research institute funded by the United States government, is a step in the right direction.

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## Appendix 1-1

### アジア小地域環境協力プログラム比較研究の為の分析枠組(邦訳)

加藤久和

#### 1.1 はじめに

今日我々が直面する環境問題の多くは、ますます複雑化し拡大しており、国境を越え地球規模で影響をもたらすものもある。だが、問題の原因あるいは発生源そのものが地球規模であるというケースはほとんど見あたらない。越境汚染あるいは地球規模の環境問題でさえ、局地的及び各国レベルでの人間活動に起因しており、発生源に最も近いレベルで実際の取り組みが行われることになる。これは、欧州連合などの地域統合体における国家の行動に関する原則としてよく用いられる「補完性の原理(subsidiarity principle)」という普遍的概念につながる。そのため、IGES のアジア環境ガバナンスプロジェクトにおける戦略研究では、各国レベルおよび地方レベルにおける環境ガバナンス制度の研究を重要視してきた。

しかしながら、多くの場合、国内レベルでの取組みと同時に、国際レベルにおいても何らかの協力活動が必要とされることは忘れてはならない。特に、環境問題への取組みに際し、制度面で不備が有り、資金的にも技術的にもキャパシティが低い途上国にとって、地域／国際協力は重要である。

一方、複数の国々による地域レベルでの協力なくしては解決できないタイプの環境問題もある。このため、地理上、経済上あるいは地政学上の「地域」内諸国に共通な環境問題に取り組むためには、地域的アプローチをとることが重要である。

国連機関の中で、とりわけ国連環境計画(UNEP)は、かなり前からこの地域的アプローチの重要性を認識し、国連地域経済委員会が置かれている世界 5 地域のそれぞれに地域事務所を設置し、それぞれの国連地域委員会事務局内に環境調整部門を設置するよう支援を行った。この 5 箇所の地域事務所に加え、ごく最近には、国連本部にも UNEP 北米地域事務所が設置された。

一方で、UNEP 自身が推進してきた地域海洋プログラムは、これまでの UNEP の業績の中でもとりわけ大きな成功を収めた例として、国際関係、法律、開発援助の実務者や学術関係者から高い評価を受けている。

アジア太平洋地域においては、1985 年に国連アジア太平洋経済社会委員会(UN/ESCAP)が第 1 回環境開発大臣会合を主催して以来、持続可能な開発のための地域協力推進の必要性がますます重視されるようになってきた。以来、大臣会合は 5 年に一度開催されている。1990 年の第 2 回大臣会合においては、1992 年の国連環境開発会議(UNCED、リオ地球サミット)の準備として、持続可能な開発のための地域戦略が初めて採択された。

この地域戦略をもとに、1995 年の第 3 回 ESCAP 大臣会合においては詳細な地域行動プログラム(RAP, 1996-2000)が立案された。このプログラムは全てのレベルで実施されるべきものであるが、とりわけ加盟各国の国内レベルに加え、小地域レベルで実施する必要性が強調された。(2000 年 8 月に北九州で開催された第 4 回環境開発閣僚会議において採択された新規 RAP, 2001-2005 では、このプログラムと各優先分野におけるプロジェクトの小地域での実施が、さらに強調されている。)

#### 1.2 既存のアジア小地域環境協力プログラム

1970 年代半ばに採択された ASEAN 環境プログラム(ASEP)および南太平洋地域環境計画

(SPREP)は、アジア太平洋地域における環境協力小地域プログラムの先駆けであるが、いずれも加盟各国の政府が積極的に参加しており、事務局も設置されるなど比較的強力で安定した制度基盤を持ち、加盟国間の全体的な政策調整メカニズムとして重要な役割を果たしてきた。1993年7月、ASEAN 高級事務レベル会合(ASOEN)は、1994-98年における新規環境戦略計画を草案、策定した。この計画案はその後、各国政府首脳が参加するASEAN サミットにおいて承認された。一方、最近の煙害を考慮し、1997年には地域煙害対策行動計画も採択された。ASEAN 地域における環境協力は包括的であり、他地域の環境行動プログラムにとって、モデルケースとして大いに参考になる。

南アジアにおいては、南アジア協力環境プログラム(SACEP)の参加国が、SACEP 戦略プログラム(1992-96)と呼ばれる行動計画を策定、実施した。主な活動分野はキャパシティ・ビルディングと意識向上、組織的な情報交換と地域内での技術移転、環境管理と制度整備に関するトレーニングである。大気汚染の分野では、1998年のSACEP 理事会の第7回会合で、「南アジアの大気汚染および越境汚染の規制と防止に関するマレ宣言」が採択されている。

メコン河下流域では、水資源の利用と開発に関する協力・調整を行う政府間組織として、メコン河委員会(MRC)が設立されている。MRCは、長期にわたりその活動を停止していたが、1991年に新たな協定が調印され、同委員会は活動を再開した。この地域内の環境問題と取り組むために、技術支援部内に環境課が設置されている。

北東アジアでは、1990年代に、多国間、二国間のプログラムやフォーラムが次々に設立された。その中でも、北東アジア小地域環境協力プログラム(NEASPEC)は、同地域における包括的な政府間プログラムとして中心的な役割を果たしている。このプログラムでは、エネルギーと大気汚染、生態系管理、キャパシティ・ビルディングという3つの優先分野を設け、いくつかの基本的なプロジェクトを実施してきた。

また、1983年には、国際総合山岳開発センター(ICIMOD)がネパールで設立されている。ICIMODは、ヒンズークシーヒマラヤ地域の環境の安定化、持続可能な山岳生態系保全、貧困撲滅のためのプログラムを実施している。

### 1.3 環境制度作りにおける地域的アプローチ

歴史的に、環境問題が国際法・政策の分野において重要視されたのは、国際河川その他の淡水資源、漁場、渡り鳥他の動物など、複数国に共通の自然資源の利用と管理に関連する場合に限られていた。だが、世界の多くの地域で急速に工業化・都市化が進み、自動車利用が増大するなど、現代社会が到来すると、環境汚染が国際問題となり、政策を調整し協力を推進するための国際メカニズム構築の必要性が一気に高まった。こうして、二国間あるいは多国間の環境条約が次々と締結された。

これらの条約レジームの多くは、地域レベルのものである。1972年のストックホルム人間環境会議以来、数多くの地球規模あるいは多国間の環境協定(MEA)が採択されてきたが、これらの多くは既存の地域メカニズムを基盤として構築され、地域レベルでの協力活動を実施するための枠組みを提供してきた。そのような事例として、各種の海洋汚染防止および漁業条約、国連欧州経済委員会(UN/ECE)による長距離越境大気汚染条約、ボン渡り鳥条約、砂漠化防止条約などが挙げられる。

真に世界的な環境条約も増加しているが、これらの条約の責務を実施し、確実に遵守することは容易ではない。そこで国際環境法の視点から、地域的アプローチは新たな環境制度作りだけでなく、確実な実施および遵守を促進させる機能を持つという説も提示されている。また、地域化が国際[環境]標準の設定を一新するための必須要素だという意見もある。「[世界レベルで]構築された非対称的な個々の[環境]レジームは、経済的あるいはその他のトレード・オフの関係によってその非対称性を補うことができる地域グループ内で取組まれる方が、よりその目的を達成しやすい。」(Sand, 1992)

だが、アジア太平洋地域では、国際水域および漁場の管理、非核地帯の設置という分野を除き、共通の環境問題と取り組むための法的拘束力のある制度はほとんど存在しない。1985年のASEAN自然並びに自然資源保護枠組み協定(ASEAN協定)は、環境分野におけるそのような包括的制度の数少ない例の1つだが、制定以来15年経過した今日においても、未だに批准・発効されていない。

## 1.4 アプローチと方法

以上のような歴史的背景や制度の現状を踏まえ、IGES環境ガバナンスプロジェクトでは、研究計画で特定したアジアの3小地域(東南アジア、北東アジア、南アジア)における、環境協力のプログラムおよび協力メカニズムの研究を行うこととする。この研究には、基本的には国別ガバナンス制度の比較研究で採用された分析枠組(Miranda Schreuers, IGES, 1998)を用いることとする。実際に研究を行う上では、必要に応じて変更を加えているが、政策課題の設定・政策決定・実施における様々なアクターとプロセスが果たす役割について分析を行うという点では、ほぼ同様のアプローチと方法を用いる。

### 環境問題

- 大気汚染:酸性雨と気候変動
- 河川海洋汚染
- 森林破壊

### 政策過程

### 政策課題の設定

### 国際レベルと国内レベルの関連性

### 政策の実施

### アクターとその利害

## 1.5 論文の概要

具体的には、3小地域の各環境プログラムに関し、以下の設問項目を取り上げ、分析を加えることとする。

### (1)沿革

- 採択された時期、期間
- 合意の形態(条約、覚書、その他の実施機関間で結ばれた合意の形態、大臣宣言、国際会議の決議等)
- 公約のレベル(政府間、大臣レベル、省庁の高級事務レベル等)
- 制度機構全体の構成と各参加者
- プログラム内容と制度上の取り決めに関する簡単な経緯

### (2)目標/目的

- 総合目標および個別目的
- 一定期間内で達成すべき具体的目標(設定されている場合)

### (3) 協力／活動の優先分野と戦略

- 制度機構上で政策課題を設定するアクター（国または機関）
- 政策課題・優先項目を設定するうえで支配的役割を果たすアクター
- 政策課題・優先項目の特定・選択方法（プロセスおよび手続き）
- 特定された政策課題・優先項目と、総合目標・個別目的・達成目標との関連
- 特定された政策課題・優先項目と、域内各国の優先環境課題との関連
- 特定された政策課題・優先項目と、地球規模の環境問題との関連
- 優先協力分野の決定に際し用いられる情報・データ源

### (4) 国内政策とのセクター横断的統合

- 経済（貿易・産業）政策
- 財政・金融政策
- エネルギー需給政策
- 農林業政策
- 土地利用計画規制政策
- 水資源開発管理政策
- 保健福祉（社会保障）政策
- 平和安全保障（軍事）政策

### (5) 協力の形態

- 情報交換／ネットワーク
- 政策対話（政策担当者／高級事務レベル官の定期会合等）
- 技術協力（専門家のセミナー、トレーニングのためのワークショップ等）
- 共同環境モニタリング／評価
- プロジェクト・ベースの活動実施

### (6) 制度機構

- 政策決定機関
- 下部機関（設置されている場合）（委員会、作業部会等）
- 諮問機関（設置されている場合）（専門家グループ、科学技術パネル等）
- 他の小地域機構／ネットワークとの協力関係（地方政府・NGOs・消費者組合／協同組合・民間企業・労働組合等による地域／国際協力ネットワーク・連合を含む）
- 事務局（常設化されたものか、あるいは輪番か）、職員、プログラム活動センター、プロジェクト事務所およびその職員

### (7) 実施、モニタリング、評価

- 制度機構内において、実施・モニタリング・評価・フォローアップのプロセスの監視について責任を負う機関
- 関係する政府以外の関係者（NGO や民間企業等）による、プログラムの実施・モニタリング・評価のプロセスへの関与、及び程度

### (8) 財政

- 自己資金、外部資金、両方の組合せ
- 自己資金の場合、費用分担割合
- 資金援助の供与者：UN その他の国際機関、二国間援助機関、その他の個人出資者

(9)これまでの実績

環境協力プログラム／メカニズムの有効性を、何らかの合理的かつ有効な一定の方法に照らし合わせて評価することは難しい。このため、以下のような具体的な実績(総合目標、個別目的、達成目標に照らして)に基づいて評価を加える。

- 特定分野における行動計画の策定や、その進捗状況の評価
- 各優先分野に関して実施されたプロジェクトの件数と規模、および総合目標・個別目的への影響と有効性の評価

(10)協力プログラムの全体的有効性の評価

(11)結論

- 小地域環境協力の現状および今後の発展の見通しに関する全体評価
- 地域および小地域レベルでの環境協力の有効性を改善し、強化するための提案や政策提言

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## Appendix 1-2

### 北東アジアの環境協力\* (邦訳)

高橋若菜

#### 2.1 はじめに

北東アジアとは、ここでは、中国、韓国、日本、北朝鮮、モンゴル、ロシア極東部、台湾を含める地域を指すこととする。この小地域の気候は北極圏から亜熱帯地域まで多岐にわたり、植生も多様である。人口密度は高く、天然資源の消費も多く、不適切な環境管理下での急激な経済成長・工業化によって、北東アジアは世界で最も汚染された小地域の一つとなった。今日北東アジアは、大気汚染(酸性雨問題を含む)、海洋・淡水汚染、土壌汚染、生物多様性喪失、砂漠化といった多くの環境問題に直面している。

この地域は、経済・政治体制が多様であることから、1980年代後半までは、政治的・経済的・社会的な求心力が薄かった。それゆえ、一定の二国間援助を除いては、環境協力は殆ど行われていなかった。しかし冷戦が終結し中国が開放・改革路線に向かうと、この小地域内の経済交流は徐々に活発化し、二国間での環境援助は質量共に増大した。またリオサミットを契機に、NEAC(環日本海環境協力会議)、NEASPEC(北東アジア順地域環境協力プログラム)や、TEM(日中韓三カ国大臣会合)、NOWPAP(北西太平洋地域海行動計画)など、様々なチャンネルを通じた多国間の環境協力もはじまった。

しかしながら、これまでのところ、北東アジアにおける環境協力は、制度的な面において、十分に進展してきたとは言い難い。まず、これら幾つかの多国間取組間の連携や役割分担は不十分であるし、また長期的な目標を欠いているものも有る。さらに、多国間取組の多くには、確固とした制度・資金的メカニズムが備わっていない。

このように考えていくと、現段階で北東アジアの環境協力枠組の進展をレビューし、今後の展開について検討することは、意義が有ると思われる。

本稿は、北東アジア環境協力の過去と将来に関する一考察である。本稿では、北東アジアや東アジア、あるいはより広域なアジア太平洋地域全体における環境協力プログラム・フォーラム・会議などの取組をただ単に記述するだけでなく、そういった環境協力に関する主体・プロセス・制度的枠組について注意を払う。すなわち、環境協力がどういった主体によって言及し促進されてきたか、各主体同士はどのように相互作用しているか、環境問題に対する北東アジアの小地域協力メカニズムはどのようなものであるか、北東アジアの経済・社会事情がこの小地域の環境協力メカニズムにどのような影響を与えてきたのかについて検証する。

これらの検証を通じて、本稿は、北東アジア環境協力メカニズムの弱みや問題点を明らかにし、将来の展望についても考察を行う。さらに最終章では、若干の将来への提案も試みる。

#### 2.2 北東アジア環境協力の概観

アジア太平洋地域は、地理的にも経済・政治体制も多様である。そのため、国連機関は、広域のアジア太平洋地域全体よりは、むしろ小地域レベルでの環境協力を重点を置いてきた。そのような例として、南アジア環境協力プログラム(SACEP)、ASEAN 下で発達した数々の環境協力計画

\* 本稿は、2000年7月26-28日にモンゴルウランバートル市にて開催された第9回環日本海環境協力会議(NEAC)に提出されたペーパーの邦訳を、加筆修正したものである。

やプログラム、メコン河委員会(MRC)や南太平洋地域環境計画(SPREP)等が挙げられる。

しかしながら、北東アジアは、冷戦期には東西陣営に分割されており、また国毎に経済・政治体制や発展段階も異なることから、元来小地域としての求心力が弱かった。そのため、小地域レベルでの環境協力も進展してこなかった。しかし、冷戦終焉を契機に、域内各国は多国間環境協力の必要性を認識するようになり、90年代に入って幾つかの多国間プログラムやフォーラムが誕生した(表 2.1)。

本章では北東アジアで展開されてきた多国間、および二国間の環境協力の現状を概観する。

表 2.1 北東アジアの環境協力年表

	主な出来事
1988	日韓環境シンポジウム開催(後の NEAC)
1991	第 1 回エコアジア開始
1992	第 1 回環日本海環境協力会議 (NEAC)開催 北東アジア準地域環境協力プログラム (NEASPEC) 高級事務レベル会合開始
1993	北西太平洋地域海行動計画 (NOWPAP) 採択 “APEC Environmental Vision Statement (環境声明)”採択
1994	アジア太平洋地球変動研究ネットワーク(APN)設立
1995	豆満(図們)江経済開発地域 (TRADP) 環境原則に関する 覚書 採択
1998	日中韓三カ国大臣会合 (TEMM)開始 酸性雨モニタリングネットワーク (EANET) 試行稼動開始
2001	EANET 本格稼動開始

出典：著者

### 2.2.1 北東アジア小地域内の環境協力

#### 環日本海環境協力会議 (NEAC)

北東アジアにおける多国間環境協力の兆しは、1988 年に開催された日韓環境シンポジウムにさかのぼる。この会議は、当初は日韓の環境省庁によって主催されたものであったが、UNEP が協力し、中国、モンゴル、ソ連(後にロシア)がオブザーバーとして参加するようになり、北東アジア 5 カ国が情報を交換し域内協力を模索するフォーラムへと発展することになった。

その直接的なきっかけを与えたのは、1992 年に開催されたリオサミットである。リオサミットは地域環境協力の必要性を喚起し、これを受けて日本の環境庁が同年、環日本海環境協力会議 (NEAC)を開催した。

以来、NEAC は年 1 回開催され、北東アジア 5 カ国(日本、中国、韓国、モンゴル、ロシア)の環境関係省庁、および地方自治体の政策担当者、環境専門家、国連アジア太平洋経済社会委員会 (UN/ESCAP) や国連環境計画 (UNEP) 等の国際機関などが、環境政策や協力などについて率直に意見・情報を交換し、政策対話を行う機会を提供している。1992 年に初めて新潟で NEAC が開催されるまでは、北東アジアには環境問題について話しあう多国間対話の場はなかったことを考えると、NEAC は北東アジアの多国間対話の先駆けとして評価することができよう。

#### 北東アジア小地域環境協力プログラム (NEASPEC)

NEAC が環境関係省庁の担当官を中心に、地方自治体、専門家が集う自由率直な対話フォーラムとしての機能を果たしていたとするならば、北東アジア小地域環境協力プログラム (NEASPEC) は、外交ルートを通じた、北東アジア初の包括的な公式な環境協力プログラムと捉えることができる (Overseas Environmental Cooperation Center, 1994)。

NEASPEC は 1993 年、韓国の提唱を受け、国連アジア太平洋経済社会委員会 (UN/ESCAP)<sup>1</sup>

<sup>1</sup> 現在UN/ESCAPはNEASPECの暫定事務局である。

が主催した、域内6カ国<sup>2</sup>の外務省高級事務官が参加する高級事務レベル官会合の場で策定されたプログラムである。以来、高級事務レベル官会合が、ほぼ1年に1度開催され、NEASPECの重要な事柄について決定している。

NEASPECでは、①エネルギー・大気汚染関係、②エコシステム管理、③キャパシティ・ビルディングを優先分野として特定している。1996年にモンゴルで開催された第3回高級事務レベル官会合では「NEASPECの枠組」が採択された。それ以降、①分野では、アジア開発銀行(ADB)の資金供与も受けて具体的な協力プロジェクトの実施も始まった。

しかしこれらの資金は任意的(ad hoc)なものであり、恒常的な資金メカニズムや組織体制を整えることが当面の重要課題になっていた。そこで、2000年3月に開催された高級事務レベル官会合では、中核基金(Core fund)を設立することが合意され、韓国が10万ドルの拠出を決めた。なお、組織面に関しては、UN/ESCAPはこれまでNEASPECの暫定事務局を務めてきた。暫定事務局の任期が終わる2002年以降、UN/ESCAPは域内国が事務局の任を引き受けることを期待しているが、域内各国はUN/ESCAPが事務局の任を継続することを望んでいる。

NEASPECは、北東アジア内で唯一プロジェクト実施を伴う包括的な政府間プログラムとして、今後、北東アジアの多国間環境協力において、中心的な役割を果たすことが期待される。

#### 北西太平洋地域海行動計画(NOWPAP)

北東アジアでは、特定の環境問題に依拠した多国間協力プログラムも進行している。日本海閉鎖水域では<sup>3</sup>、1994年に北西太平洋地域海行動計画(NOWPAP)が設立されている。NOWPAPはNEASPECやNEACのように域内各国の自発的発意のもとに始まったのではなく、UNEPが推進してきた地域海行動プログラムの一つとして設立されたプログラムである。UNEPは、地中海地域行動計画の発展を皮切りに、南太平洋やカリブ海・黒海等、世界の14海域で地域海プログラムを推進している。

NOWPAPには日本・韓国・中国・ロシア・北朝鮮の政府機関が参加している<sup>4</sup>。

#### 日中韓3カ国環境大臣会合(TEMM)

北東アジアでは他の小地域と異なり、1990年代後半まで、環境大臣レベルの恒常的な会合は開かれていなかった。そこで、韓国の提唱を受け1999年より年1回、日中韓3カ国環境大臣会合(TEMM)が開催されるようになった。

1999年に韓国で開催された第1回TEMMでは、三カ国は、北東アジアの環境問題は今後ますます深刻なものになっていくことを受け止め、これらに対応していくためには三カ国がよりいっそう緊密に協力を行うことが不可欠であるとする共通認識を確認した。その上で、TEMMでは、a)環境共同体意識の向上、b)生物多様性や地球温暖化などの地球規模の環境問題への協力強化、c)大気汚染の防止と海洋環境の保全、d)環境技術、環境産業および環境研究における協力の促進を優先的に取り組む分野として指定した。

2000年に中国で開催された第2回TEMMにおいては、今後淡水や海洋汚染・環境産業分野を中心にプロジェクトを実施していくことが決定された。

次回は2001年に日本で開催される予定である。

#### 北東アジア北東太平洋環境フォーラム(NEANPEF, NAPEP)

NGO・専門家レベルでは北東アジア北東太平洋環境フォーラム(NEANPEF、改名後はNAPEP)が1992年に形成された。このフォーラムは、北東アジア6カ国及びアメリカのNGOや専門家、政府政策担当者、研究所、大学、企業等が参加して、主に生態系保全分野での情報交換

<sup>2</sup> 6カ国とは、日本、韓国、中国、北朝鮮、モンゴル、ロシアをさす。但し、NEASPECの高級事務レベル会合(SOM)が日本、韓国で開催されたときは、北朝鮮は参加していない。

<sup>3</sup> 日本ではこの海域を「日本海」というが、韓国では「東海」という。会議の場では、この海域の名称をめぐる議論があり、結局経緯度を特定し「北西太平洋」の名称を用いることになった。

<sup>4</sup> 北朝鮮は、NOWPAPの活動自体には参加していない。

等を行っている。

#### 豆満江(図們江)経済開発地域(TRADP)

中国・韓国・北朝鮮・モンゴル・ロシアの 5 カ国間では、UNDP の支援を得て、豆満江(図們江)地域の開発・貿易に関する多国間協力が進展している。これに伴い、TRADP では環境と開発の問題も議論されるようになっており、1995 年には「環境問題に関する覚書」が締結された。TRADP の主要な環境課題は、淡水・海洋汚染と生物多様性の喪失等であり、現在 GEF の資金を受けて、これらの問題に対する戦略行動計画(SAP)の策定が進められている。

#### 北東アジア地域ツル類重要生息地ネットワークセンター

生物多様性保全分野では、1996 年には国際湿地保全連合のアジア太平洋支部が策定した「アジア・太平洋地域渡り性水鳥保全戦略」、及び同年開催されたラムサール条約第6回締約国会議における勧告(ブリズベン・イニシアチブ)に基づいて、「北東アジア地域ツル類重要生息地ネットワーク」(6 カ国 18 生息地)が設立された。このネットワークは、それぞれの渡り鳥の渡りルートにある各国が、それぞれの国にある重要生息地を選定し、生息地間の情報交換、地域住民の啓発活動等を通じ、効果的な湿地の保全を図っていくとするものである。このネットワークの実施に当たっては、NGOs、専門家、地方自治体、各国関係省庁に至るまで幅広い主体が参加している。

### 2.2.2 東アジア・アジア太平洋地域にまたがる環境協力

#### 東アジア酸性雨モニタリングネットワーク(EANET)

1990 年代、酸性雨問題が東アジア地域の政策問題としてクローズアップされてきたことをうけて、1993 年、東アジアモニタリングネットワーク(EANET)に関する専門家会合が始まった<sup>5</sup>。専門家会合は 1997 年まで 4 回開催され、酸性雨の現状やその影響、さらには地域協力の方向性に関する議論を行った。専門家会合の提言を受けて、1998 年 3 月には初のEANET政府間会合が開催され、暫定的な「東アジア酸性雨モニタリングネットワークの設計」が取りまとめられ、同年 4 月からEANET試行稼働が始まった。さらに、2000 年 10 月に開催された第 2 回政府間会合では、2001 年 1 月より本格稼働期に入ることが決定された。

EANET の目的は、「東アジア地域の酸性雨の状況に関して共通の理解を形成すること、また、酸性雨の人の健康及び環境への悪影響の未然防止又は軽減を目的とした地方(local)、国(national)及び地域(regional)のレベルにおける政策決定過程に有益な情報を提供すること」にある。

EANET には 10 カ国の政府機関が参加しており、各国はそれぞれモニタリングサイトを数箇所指定している。各モニタリングサイトは、共通のガイドラインと技術マニュアルを用いてモニタリングを行う。そのデータは各国の国内センターを通じて、ネットワークセンター(酸性雨研究センター:新潟所在)に集められ、分析される。

EANET は日本政府の提唱によって設立されたものであり、日本が運営費用を全額負担している。また日本は途上国メンバーのモニタリング活動を円滑に行うために、ODA を通じた資金的・技術的支援も行われている。EANET の暫定事務局はこれまで日本政府が引き受けていたが、2002 年より、UNEP アジア太平洋地域オフィス(バンコク郊外)に引き継がれることになっている。参加 9 カ国のうち、北東アジアからは、日本に加えて中国・韓国・モンゴル・ロシアも参加している。

#### アジア太平洋経済協力会議(APEC)

APEC は、1989 年に、アジア太平洋の 18 の「経済体」によって設立された緩やかな経済協力体であるが、このうち北東アジアからは、日本、中国、韓国、ロシアおよび台湾も加盟している。

<sup>5</sup> 専門家会合には、日中韓、マレーシア、モンゴル、ロシア、フィリピン、タイの 9 カ国および国際機関やアメリカからも参加があった。

APECでは環境と経済の統合が謳われており、1994年には、第1回環境閣僚会議が開催され、「APEC環境ビジョン宣言」が採択された。これをうけて、APECでは3つの環境ワークプログラムが策定されている<sup>6</sup>(Dua et., 1997)。

#### アジア太平洋地球変動研究ネットワーク(APN)

APNの発案は、1992年に開催された日米首脳会談の場で合意された「日米グローバルパートナーシップ行動計画」に、地球変動研究(Global Change Research)が盛り込まれたことにさかのぼる。このアメリカ提案は、地球変動研究の為に地域ネットワーク/機関を、地球を3分割して設立することであった。このうちアジア太平洋地域については、日本が中心となって担当することが合意された(谷津、2000年)。

こうしてAPNは1995年に設立され、1996年に第1回政府間会合が開催された。それ以降APNは、地球環境に関する政策担当者と科学者の連携を強め、国際共同研究を推進する政府間機関として、専門家同士の交流を促進する事業を行うとともに、数々の国際共同研究プログラムに資金的支援を行ってきている。APN事務局は日本の環境庁がひきうけてきたが、1999年には神戸にAPNセンターが開設されている。

北東アジアからは、日本をはじめ中国・韓国・モンゴル・ロシアがAPNに参加している。

#### アジア太平洋環境会議(エコアジア)

エコアジアは、リオサミットを契機に、日本の主導で1991年に発足された。エコアジアは、非公式な大臣会合として自由で率直な政策対話のフォーラムを提供することを当初の目的としていたが、その後、アジア太平洋の持続的発展に資するような長期的な環境政策を検討することを目的に、長期展望プロジェクトを開始している(薄木、2000)。

#### 2.2.3 二国間協力

北東アジアは、多国間に比べ二国間レベルで環境協力が大きく進展している点で、特徴的である。とりわけ域内唯一の超先進国であり世界でも有数の援助供与国である日本政府は、環境協力を経済協力の重点事項と位置づけ、環境面における開発援助として、二国間環境協力を推進してきた<sup>7</sup>。

このうち、最も盛んに行われているのは日中間協力であろう。79年の大平総理大臣(当時)訪中以来、日本政府は積極的に対中経済協力を推進してきているが、環境案件は当初上下水道整備のみに限られていた。しかしながら、1990年代に入ってから、環境協力案件は質量ともに増加し、円借款を中心に無償協力・技術協力等の援助が、各関係省庁・援助機関によって実施されてきた<sup>8</sup>。但し、環境案件は経済開発に直接的に貢献しないため要請が出難い。また居住環境案件に比べて、産業公害案件は相対的に少ないという問題点がある。そのため通商産業省では、1992年より、産業公害分野及び省エネルギー分野に特化した「グリーン・エイド・プラン」事業も展開しており、中国は、インドネシアやフィリピン等と並んで重点国の一つとして位置づけられている。

一方で、二国間環境協力の担い手となるのは中央省庁ばかりではなく、北九州市や広島市を中心に地方公共団体間によるソフト面を中心とした協力も増大する傾向にある。また、公益法人による事業、助成・基金等による支援、学術的協力、民間企業の環境投資など、民間レベルでの環境協力も徐々に進展している<sup>9</sup>。

これらの活動の支える枠組も、整備されつつある。まず1994年3月には日中環境保護協力協

<sup>6</sup> 3つのプログラムは以下のとおりである: 1) integration of environmental and economic considerations in APEC's working groups; 2) attention to sustainable cities, clean technologies, and the marine environment; and 3) long-term focus on food, energy, environment, economic growth, and population.

<sup>7</sup> 平成4年に閣議決定された政府開発援助大綱は、「環境の保全」を基本理念として掲げ、援助原則の一つとして「開発と環境の両立」を取上げている。

<sup>8</sup> 東アジア地域への環境面における経済協力に関しては、藤倉(1999)等参照。

<sup>9</sup> これら日中環境協力事例に関する情報は、海外環境協力センター(1999)等参照。

定が締結された。この協定に基づいて日中合同委員会(各関係省庁が出席)が毎年開催され、協力の現状をレビューして新プロジェクトを検討するなど、全体を調整する役割を担っている。また 96 年 5 月、無償資金協力により設置された日中友好環境保全センター(北京)は、環境協力の窓口として、中心的な役割を果たしている。一方 ODA だけでなく、自治体・民間レベルの協力を含めた二国間環境協力の全般のあり方を議論するものとして、政府機関、地方自治体・民間団体が参加する「日中環境協力総合フォーラム」も 1996 年より年 1 回のペースで開催され、関係者が一同に集い情報交換を行なう場として、一定の機能を果たしている<sup>10</sup>。更に、首脳レベルの対話においても、環境協力に対するイニシアティブが表明されるようになってきた。例えば、97 年 9 月日中首脳会談では「21 世紀に向けた日中環境協力」が合意され、「環境開発モデル都市構想」<sup>11</sup>「環境情報ネットワーク」<sup>12</sup>を日中環境協力の 2 本柱とすることが決定された。また 1998 年、江沢民主席が訪日した際には、「21 世紀に向けた環境協力に関する共同発表」が出され、東アジア酸性雨モニタリングネットワーク(EANET)への積極的な参加や、地球温暖化防止に向けた協力の実施も、主要なテーマとして掲げられた。

このように、日中間においては各主体による様々な環境協力が進行中である。但し、これらの連携は未だ必ずしも充分であるとは言えない。そこで 1998 年に環境庁が「日中環境協力構想」を打ち出すなど、各種の連携を図るための様々な努力が、現在も進行中である。また国際的にも、環境と開発の分野における中国と国際社会の協力促進を目的として、国際合同委員会(チャイナカウンシル)が 92 年に設立されている。そこで、日本もカウンシルへ委員を派遣したり作業部会へ貢献するなど、民間ベースを含めた積極的な参加を行っている。

一方日韓環境協力は、日中のそれと比較すると質量ともに小規模なものにとどまっている。この背景として、1983 年の 7 年間に於ける円借款以降、「韓国経済が既に援助からの卒業段階に達している」ため、対韓円借款供与・無償資金協力が行われなくなったことが挙げられる<sup>13</sup>。それ以降、環境保全を中心とするプロジェクト方式技術協力は行われるのみになっている。また自治体レベルにおいては環境研修や研究協力、環境技術交流事業等<sup>14</sup>が行われているものの、それほど活発ではない。

日韓協力を支える枠組みとしては、1993 年 6 月に日韓環境保護協力協定が締結されている。又この協定に基づいて、日韓環境保護合同委員会が、毎年両国で開催され、協力プロジェクトの調整・実施を図っている<sup>15</sup>。首脳レベルでは、1998 年 10 月に金大中韓国大統領が日本を訪問した際、「日韓共同宣言—21 世紀に向けた新たな日韓パートナーシップ」が採択され、その中で地球環境問題に関し両国政府が緊密に協力していくことが謳われた。また宣言の付属書として行動計画も採択され、環境政策の対話統行・北東アジア地域における環境協力強化・環境ホルモンの共同研究開始・環境産業分野における相互交流の可能性の検討が特記されている。

このように日韓環境協力は「援助」から「対等な協力関係」構築へと姿を変えながら、徐々に発展している。しかしこのような試みはまだ始まったばかりで、今後進展する余地が大いに有るといえる。

一方、日蒙環境協力は、日本主導のもとに進展しつつある。モンゴルは 1991 年旧ソ連を中心とする COMECOM の援助停止にともなって経済危機に陥った為、同年ロンドンサミットでモンゴルへの緊急援助の必要性が喚起された。これをきっかけに日本は対蒙経済協力を大幅に増額し、モンゴルにとって最大のドナー国となった。このことから日蒙関係は冷戦期に比べ好転しており、環

<sup>10</sup> 環境庁資料参照。

<sup>11</sup> 日中間で環境対策の為のモデル都市を設定し、中国側における環境規制の強化等の努力と、日本側の支援を集中的に投入し、大気汚染、酸性雨など環境対策の成功例を作り、将来の普及への呼び水としようとするもの。現在、大連・重慶・貴陽の三都市で実施中。

<sup>12</sup> 全国 100 ヶ所に環境情報処理の為のコンピューターを設置し日中友好環境保全センター(北京)を中心とした全国的な環境情報ネットワークを完成しようというもの。

<sup>13</sup> 日本外務省『我が国の政府開発援助—1998 年』、52 頁。

<sup>14</sup> 環境庁資料参照。

<sup>15</sup> これまでに 21 件のプロジェクトが実施されており、うち環境庁案件は 6 件である。

境面における二国間協力も概ね好調に進展する傾向に有る(海外環境協力センター、1997年)。具体的には、研修生の受け入れや専門家・調査団の派遣、森林管理や地下水開発、発電所改修などの分野における有償・無償資金協力プロジェクトが実施されている。両国はこのような環境協力を今後も推進させることで合意しており、1998年5月バガバンディ大統領が訪日した際、両国の環境協力の推進が確認された。

他方、日露協力に関しては、1991年4月に日ソ環境保護協力協定が締結されており、これに基づいて日露環境保護合同委員会が開催されている。この会議の場で「日本海の海洋環境の為の共同調査」が実施されるなど、研究を中心とした環境協力が進展している。

なお、日本と北朝鮮間には正常な国交が樹立されていないこともあり、環境協力は殆ど進展していない様子である。

北東アジアにおいては日本以外の国家間においても二国間環境協力は進展している。このうちもっとも協力関係が進んでいるのは韓中協力であろう。前述のように「韓国経済が既に援助からの卒業段階に達した」ことは、すなわち、韓国が被援助国から援助供与国へとシフトしていることを示唆するが、実際韓国は87年に対外経済協力基金(EDCF)、91年に韓国国際協力団(KOICA)を設立し、1996年にはOECDに加盟するなど、着実に援助供与国としての体制を整備しており、これに伴って、環境面における対中ODAも増大している。

しかしながら、韓中環境協力は、必ずしもODAを軸とはしていないようである。1993年10月に韓中環境協力協定が締結されているが、ここにおいて「平等と相互利益」の精神が歌われており、データ・情報交換や人的相互交流・研究協力を中心とした協力が推進されている。この協定に基づいて、韓中環境協力合同委員会が毎年相互に開催されているが、1999年9月の時点では12の二国間環境協力プロジェクトが承認され、進行中である。そのうち主要なものの一つとして黄海生態系プロジェクト(Yellow Sea Large Marine Ecosystem Project: YSLAE)がある。このプロジェクトは越境原因分析(Transboundary Diagnostic Analysis: TDA)・戦略行動プログラムの実施から環境改善までを含む包括的なものであるが、このプロジェクトにはUNDPも関与しており、プロジェクトにかかる経費はGEFから拠出されることになっている<sup>16</sup>。

このように、韓中環境協力は平等性と相互利益を基礎として、徐々に進展する傾向に有るが、近年では首脳レベルにおいても環境協力が言及されるようになってきている。1999年に中国で行われた韓中首脳会談では、韓中関係を、これまでの「善隣友好協力関係」から二十一世紀を目指した包括的な「パートナーシップ関係」に引き上げることが合意され、政治、安保、経済、文化、環境、人的交流などの各分野で協力を拡大することが「共同声明」によって明記されている。

その他、中蒙、韓露間においても、それぞれ環境協力協定が締結されている。

## 2.3 北東アジア小地域環境協力プログラムの事例(省略)

### 2.4 北東アジアの環境協力メカニズム

#### 2.4.1 主要な特徴

北東アジア地域環境協力のメカニズムの主な特徴は、以下の点にまとめることができよう:

**複数制度の併存:** 多国間環境協力は、環境大臣会合、高級事務官、環境省庁、NGO、専門家レベルなど異なる複数のルートを通じて展開されているが、(生物多様性の例を除き)これらの取組間、及び各主体間の連携は殆どない。その為同様の問題を扱う地域的取組間の連携・役割分担が図られていない場合がある。

**入れ子構造:** 環境協力取組は、世界レベルのもの、広域地域(アジア太平洋全域、東アジア)から

<sup>16</sup> 韓国通商外交部ホームページ参照: <http://www.mofat.go.kr/main/etop.html>



小地域(北東アジア)を対象としたものが混在している。このうち、韓国は北東アジアに根差したものを、日本はより東アジアあるいはアジア太平洋を対象とした枠組を志向する傾向が有る。

**異なる参加国:**北東アジアには、ASEANのように、全ての環境協力計画・プログラムの事務局・調整役を担えるような地域機構がない。そのため地域的取組の主催国／機関(事務局・暫定事務局など)はそれぞれ異なっている。結果として、主催国との外交関係や、主催国際機関のメンバー如何によって、各取組への参加国は異なっている<sup>17</sup>。

**脆弱な制度・資金的メカニズム:**北東アジアの各協力取組は、一から制度機構や資金メカニズムについての交渉を行い、構築していかななくてはならない。そのため、殆どの場合、制度機構は十分に発達しておらず、また資金も不十分である。なかには、交渉が行き詰まって、停滞しているようなケースも有る。UN/ESCAP, UNEP, UNDPからの実質的な支援や、ADB、世界銀行(WB)等からの資金援助は地域協力プログラムの実施に重要な貢献をしているが、そのキャパシティには一定の限界がある。一方地域環境協力枠組への直接的な資金供与ではないが<sup>18</sup>、日本のODA等を通じた資金援助は域内各国の環境対策推進に大きな役割を果たしている。

**環境問題の優先順位の相違:**地域的取組の多くは、その制度・資金的メカニズムを決定する時期にきているが、各国の見解が異なる為、これらを決定することは非常に難しくなっている。環境問題別に見ると、大気汚染(酸性雨)、淡水・海洋汚染、生物多様性喪失、砂漠化等が地域で緊急で取組むべき主要課題となっている。このうち中国内陸部やロシア極東部の森林伐採等による砂漠化対策への地域協力の進展は殆どない(UNEP, 2000)<sup>19</sup>。越境汚染問題は、現在というよりは将来の問題である為に、国内の環境問題に比べると緊急性や優先順位が低い傾向が有る。また、この分野では、各国の統一した科学的知見も殆ど存在しなかった。それゆえ、域内各国が越境汚染問題に取組むインセンティブは低かったが、最近この傾向には変化が見られる。

北東アジアの環境協力の歴史は、漸く10年を迎えようとしている。北東アジアでは、環境問題を議論するフォーラムを常設化し、地域協力で取り扱うべき問題を特定しつつある段階にある。いくつかの取組では、その次の段階—環境モニタリングを通じた科学的データの収集—に進んでいるが、その進展の度合いは、30年以上もの歴史を持つ欧州や、20年以上の歴史を持つASEANとは比較にならない。それゆえ、現段階で、北東アジアの環境協力メカニズムの是非や効率性について判断しようとするのは、時期尚早といえるかもしれない。

にもかかわらず、この小地域における環境協力の進行は、遅々としているという印象がある。協力取組の幾つかは、制度的・資金的メカニズムを構築することに四苦八苦している。この地域の経済的政治的状況が、環境協力の進展を制約しているように見受けられる。

そこで、次節では、環境協力を推進する上で重要だと思われる、地域機構、国際機関、各国政府、NGO、市民の4主体に焦点を当てて、北東アジア環境協力メカニズムを分析し、その弱点を明らかにしていきたい。

<sup>17</sup> たとえば、北朝鮮は、国連加盟国であるためNEASPECのメンバー国になっている(但し、NEASPEC-高級事務レベル官会合へは中国・モンゴルでの開催時にオブザーバー参加したのみにとどまっている。またNEASPECの地域プロジェクトはADBからの資金拠出を受けているが、北朝鮮はADB非参加国であるため、これらの資金を受け取ることができないという制約が有る。)一方、台湾は国際法上の地位が非常に不安定であり、殆どの多国間プログラムに参加できなくなっている。但し、台湾はAPECには加盟しており、またADBのメンバーでもある。

<sup>18</sup> 但し、NEASPECのプロジェクトはADBからの資金供与を受けているが、このADB資金の殆どは日本基金からのものである。

<sup>19</sup> 但し、砂漠化対策・森林保全に関しては、各国内では熱心に取組まれるようになってきており、二国間協力も、政府だけでなく企業やNGOsが参加する植林事業等は多く行われている。とりわけ中国は1998年夏の大洪水が森林破壊にあったことを認識しており、国務院は取組を強めている。

## 2.4.2 環境協力の主体

### 地域機関

他の地域(欧州、東南アジア、南アジア)では、地域機関は、環境協力を推進する上で極めて重要な役割を果たしてきた。

例えばEC/EUでは、様々な経済活動と関連して、貿易や生産活動に関し共通環境基準を導入するなど、数々の共通環境政策が策定されてきた。

一方、長距離越境大気汚染条約(CLRAP)に関しては、条約自体は国連欧州経済委員会(UN/ECE)が、事務局として条約推進や調整役を担っている。ただし、CLRAPは一定の遵守規定を備えてはいるものの、非遵守国に遵守を強制するようなメカニズムは持っていない。にもかかわらず、CLRAPはこれまで非常に高い遵守率を誇っている。その背景としてEC/EUによる資金・技術メカニズムが、公的にも非公式にも、CLRAPメンバー国の条約遵守を促進してきたことが指摘できる。またEU自身が持つ数々の大気関連の指令は、法的拘束力をもつものであり、EC/EU加盟国の指令の遵守が、CLRAPの各議定書の遵守にも繋がったとも考えられている(石井、2000年)。

一方、ASEANはUNEP等の国際機関の支援を得て、3つのASEAN環境プログラム(ASEP:1978年-1992年)、2つの環境戦略行動計画(1994年-)越境汚染行動計画(1995年-)、Regional Haze行動計画(1997年-)など、数々の環境協力計画やプログラムを策定してきた。

これらの計画やプログラムを策定し実施する為の制度的枠組も、ASEANでは徐々に整えられてきた。その中心的な役割を果たしているのが、1989年に専門家会合から高級事務官会合へと格上げされたASOEN(ASEAN環境高級事務レベル官会合)であり、その下には現在3つの作業グループ(自然保護と生物多様性、海洋環境、多国間環境協定)が設置されている。一方、近年深刻化した森林火災問題に対しては、1995年ASOEN Haze Technical Task Force(HTTF)が設置されている。ASEAN事務局は、EC/EUのような巨大な官僚組織を持たないが、事務局機能を提供し、加盟各国や他のドナー国/国際機関間の調整を行い、ASEAN環境政策全般の実施を円滑にするよう努力してきた(Tay, 2000)。一方、ASOENの上にはASEAN環境閣僚会議も恒常的に開催され、またASEAN外務閣僚会議、更にASEAN首脳会議とも連携されている。このような制度的枠組が整えられた結果、ASEANでは、プログラム間の重複が殆どなく、包括的・戦略的な環境協力を推進することが可能になった。

しかしながら、北東アジアには、EUあるいはASEANに匹敵するような地域機構が存在しない。そのため、複数有る各取組の調整役を担う主体が不在となっている。その結果、幾つかの地域的取組の機能や活動がオーバーラップしてしまうケースも出ている。例えば、NEASPECとNEACの役割は、最近では異なった方向を目指してはいるものの、当初は似通ったものとなっていたことが指摘できる<sup>20</sup>。

以上の問題点を解決する為に、北東アジアでは、これら環境取組の連携を互いに強め、相乗効果が出るような全体的な枠組を考えるべきであることが、一部の専門家や政府担当者の中で指摘されている。

一方で、ASEANやECのような地域機関が不在であるということは、北東アジアの各協力取組が、制度的・資金的取決めについて、一から交渉を始めなければならないという難点をもつことも示唆している。

例えば、北東アジアには、欧州委員会やASEAN事務局のように、各協力取組の事務局、調整役を引き受ける主体が存在しない。そのため、この小地域では、事務局をどこに設置するかが協力取組如何によって事務局も異なっている。例えば、NEASPECの暫定事務局はUN/ESCAPが引き

<sup>20</sup> NEASPECは近年、大気汚染対策に関する小規模な技術支援プロジェクトを実施している。一方でNEACはプロジェクトは持たないが、各々の環境問題からインターネットの活用・地方自治体の役割など広範なテーマをとりあげ、政府機関だけでなく地方自治体や専門家NGOsを会議に招待するなど、多様な主体が自由率直に意見交換を行う場を提供することを目的としている。

受けているし、EANETの暫定事務局は提唱者である日本環境庁が引き受けてきた(但し、2000年10月に、本格稼働時はUNEPに事務局機能が移転することが決定済み)。一方、NEACは開催国持回り、などとなっている。このうちNEASPECの暫定事務局であるUN/ESCAPは、他の小地域の例に準じて、NEASPECの事務局も将来的にはいずれかの参加国の国内に設置されることを希望しているが、その見通しはまだたっていない。

一方で、資金的取決めについても、北東アジアには、EC/EUのような環境プログラム実施の為の資金メカニズムもなければ、ASEANのように外部資金の調達・調整を行う機関もない。そのため、各取組は、個々バラバラに資金メカニズムを模索しなければならず、資金拠出に苦慮しているケースは少なくない。

例えば、NEASPECは、会議開催等の資金は開催国か(途上国で開催する場合は)UNDP等からの資金支援でまかなっており、プロジェクト実施には、ADBからの資金を受けてきた。しかしこれらの資金はあくまで ad-hoc ベースであり、恒常的ではなかった。こうしたことから、2000年に開催された第6回NEASPEC高級事務レベル官会合では、韓国が提唱してCore Fundが設立されることになった。しかし各国の拠出負担率は定まっておらず、現在のところ加盟国の自発的な拠出に任されている。一方、NOWPAPは、加盟4国が同率で(各々25%)運営費を負担することになっているが、日本以外の国は、この拠出分担率に合意したわけではない。日本以外の国は、日本が国連分担金割合に応じてより多くの資金を拠出することを望んでおり、全額支払ってはいない。

資金面において、例外的にうまく回っているのは、EANETである。EANETの試行稼働中は、日本政府が会議費運営費を全て拠出してきたし、また各国が実際にモニタリングを実施するに当たっては、日本のODAを通じた資金・技術供与が行われてきた<sup>21</sup>。しかし本格稼働に当たっては、日本政府はすべての国が、その国に見合った資金拠出を行うことを期待している。一方で、参加国の殆どは、EANET本格稼働後も、日本が引き続き自発的に資金を供与することを望んでいる。

### 国連機関

北東アジアでは地域機関が不在である帰結として、この小地域では、環境協力を推進する上で国連機関が果たすべき役割が大きくなっている。

UN/ESCAPは、アジア太平洋地域全域において小地域環境協力の推進に力を注いでいるが、このうち北東アジアに関しては、NEASPECの暫定事務局の任も引き受けるとともに、加盟各国を代表してADBにNEASPECプロジェクト実施の資金拠出を依頼・調整する役割なども引き受けてきた。他方UN/ESCAPは、多くの地域取組会合に出席し、参加国/国際機関間のコミュニケーション促進に努めるなど、重要な役割を果たしてきた。

UNEPも、UN/ESCAPとともに、小地域環境協力を推進させる上で重要な主体であるといえよう。UNEPがこれまでに、数々の技術支援プロジェクトを実施してきた。しかし、この分野におけるUNEPの最大の貢献は、地域海行動計画の策定と実施であろう。UNEPは、他地域の地域海行動計画と並んで、NOWPAP及びEAS(東アジア地域海行動計画:北東アジアからは、中国・韓国が加盟)の事務局を引き受け、両計画の推進役、加盟各国の調整役として極めて重要な役割を果たしている。更に2000年に入ってから、EANETの事務局がUNEPに設置されることも、決定された。

他方、UNDPは、貧困の撲滅、途上国の開発など、持続的発展に関する途上地域支援をその主要目的として掲げているが、小地域環境協力の分野においても、途上国/地域への資金的・技術的支援を行っている。北東アジアでは、UNDPはTRADPを主導しているが、TRADPでは、GEFの資金を受けて、淡水・海洋汚染と生物多様性喪失に関する戦略行動計画の策定が進行中である。

<sup>21</sup> 日本は1997年に橋本政権が提唱した「21世紀に向けた環境開発支援構想(略称ISD)」のなかで、EANET整備構想を「ODAを中心とした国際環境協力」の行動計画の柱の一つに据え、各国の実情を踏まえて、研修や専門家派遣、モニタリング関連機材共同の支援をODAを通じて継続的に行ってきた。

このようにして、国連機関は様々な立場から、北東アジアにおける地域協力を促進・調整する役割を果たしてきた。しかしながら、国連機関の役割には、一定の限界が有ることは、指摘しておく必要が有ろう。

というのも、UN/ESCAP や UNEP-ROAP は、限られた資金的・人的資源でもってアジア太平洋全域をカバーしなければならず、北東アジアの環境協力のみを注ぐわけにはいかない事情が有る。

例えば、NEASPEC を立ち上げた UN/ESCAP は、北東アジア以外でも、SACEP、ASEAN 環境協力プログラム、SPREP などの設立に関与してきた。しかし各小地域環境協力プログラムが軌道に乗れば、UN/ESCAP はその運営を域内各国の自発的發展に任せるのが常であり、例えば SACEP の場合も、UN/ESCAP による暫定事務局の後に、SACEP 独自の事務局がスリランカ内に設置されることとなった。UN/ESCAP は NEASPEC についても、SACEP と同様、将来的には独自の事務局が設立されることを望んでいる。

### 各国政府

北東アジア諸国は、環境協力に対し、必ずしも同一の見解やアプローチをとっているわけではない。このことは、この小地域の環境協力進展にとって、一つの大きな制約要因になっているのではないかと考えられる。

まず、中国は産業汚染、淡水・海洋汚染、また西部の砂漠化問題等、緊急な問題を抱えており、地域協力においてもこのような問題が取り扱われるべきであると考えている。一方で、中国は「越境」汚染という表現によって、中国が他国の環境問題を引き起こしているようなイメージが与えられることを良しとしない。

この地域の環境協力を進展させるに当たって、中国がもっとも強調することは、中国をはじめ域内国の多くは、技術も資金も人的資源も持ちあわせない発展途上国であるという点である。それゆえ中国は、多くの環境協力関連会議の場において、環境協力プログラムを策定・実施する上では、域内先進国から域内途上国への技術的・資金的支援が不可欠であることを強調してきた。

域内唯一の先進国である日本は、中国の要請に、主に二国間協力を通じて応え、多くの ODA を通じた環境支援プロジェクトを実施してきた。しかしながら、多国間取組は既存の二国間取組や多国間取組と重複する内容であってはならないとする点で、日本と中国の意見は異なる。日本が推進している多国間協力は、情報交換、モニタリング等の共同調査、あるいは越境汚染に特化した具体的プロジェクトのみに焦点を絞る傾向が有る。なお、地域で取り扱われる問題としては、海洋汚染・酸性雨等が二大問題であったようだが、近年日本は、気候変動問題も、地域にとって重要な政策課題の一つと捉えているように見受けられる。

また日本は、地域環境協力が新たな援助供与チャンネルとならないことを望んでいる。また、地域環境協力は、原則的に域内各国の自発的發展に基づいて生じるものであることから、日本は多国間環境協力枠組に対しては、域内全ての国がその能力に応じて(資金的)負担を追うべきであると考えている。

他方、韓国は、いずれの国よりも北東アジアの多国間環境協力推進に熱心であるように思われる。韓国は、中国が望むような技術支援的な協力と、日本が希望するような環境状態の共同調査等の環境管理プロジェクトの双方が、地域環境協りに盛り込まれるべきだと考えている(Valencia, 1998)。それゆえ韓国は、NEASPEC の優先順位の一つとして大気汚染を挙げ、Training 等のプロジェクトと環境モニタリング・データ収集のプロジェクトの双方を提案してきた。また韓国は、このような環境協力は、国際的な枠組のもとで推進されるべきだと考えており、数々の既存の多国間取組を推進・調整する役として、UNDP、UNNEP、UN/ESCAP、ADB 等の国際機関の関与が重要であると考えている。

他方、ロシアおよびモンゴルは、域内先進国や国際機関からの、環境保全の為の資金的・技術的支援を必要としている。ロシアにとって優先順位が高いのは生態系管理や、具体的な協力計画の策定と実施である(Valencia, 1998)。一方で、モンゴルは、自然災害(干ばつ)、生物多様性保護、大気汚染等を優先順位の高い問題として捉えている。

北東アジアの環境協力に関する見解やアプローチが異なるのは、何も国家間においてのみではない。すなわち、各国とも、国内レベルにおいても、すべての関連主体が環境協力の在り方に関し、必ずしも同一の見解やアプローチをとっているわけではないことは、ここで指摘されるべきであろう。一国の政府内においても、環境協力政策の策定や実施には、環境省庁だけでなく、通商、エネルギー、外務、水産、運輸、厚生等、多くの省庁が関与している。省庁間で、必ずしも同一の見解が取られているわけではなく、時には権限や利害をめぐって意見の衝突も見られる。このような国内レベルでの見解の相違や衝突が、多国間環境協力取組の状況を更に複雑化させているといえよう。

#### NGOs・市民・学術関係者

北東アジア環境協力に関しては、市民や NGOs の参加も徐々にはじまっている。NGOs 間のネットワークとしては、NAPEP やアジア・太平洋環境会議 (APNEC) などが、定期的に会合を開催し、様々な環境問題について幅広く議論を行っている。また大気分野では、日中韓のほか、ロシア、モンゴル、及び台湾の NGOs のネットワークである AANE (東アジア大気行動ネットワーク) が設立され、酸性雨と気候変動双方の問題について取り組んでいる。

しかしながら、こういった NGOs が、地域環境協力政策の策定過程に影響を及ぼしたり、あるいは実施過程に参加する例は多くない。そういった意味で、北東アジア地域ツル類重要生息地ネットワークは、専門家、地方自治体、各国関係省庁に至るまで幅広い主体者が参加し、情報交換、地域住民の啓発活動等を通じた効果的な湿地の保全を推進している点で、例外的な存在と言えよう。

一方、学術関係者—大学、研究所、科学技術分野の専門家等—は、環境問題を特定し、行動計画その他の草案を行ったり、あるいは各種環境協力取組の実施状況を監視する上で、重要な役割を果たしている。ただし、環境協力取組の政策決定者と科学者等の学術関係者の結びつきは、任意で一時的なものでしかない。このような不十分な連携関係によって、科学者間や科学者と政策担当者間、或いは異なる国の政策担当者間においても軋轢が生じることが有る点は、指摘されるべきであろう。幾つかのケースでは、一国の科学者のみが地域協力枠組の政策決定者と協議することができ、意思決定プロセスを支配しているという批判もある。

#### 2.4.3 今後の展望

前節では、地域環境協力を推進する上で重要だと思われる4つの主体に焦点を当てて、北東アジア環境協力メカニズムの分析を試みた。その結果、地域機関の不在、国連機関の役割の限界、各国のスタンスの相違、限られた市民・NGOsの参加といった、北東アジア環境協力メカニズムの限界や弱点が明らかにされた。

にもかかわらず、北東アジアでは環境協力を推進させる必要性は有る。そこで本章は、まず、その必要性について明らかにする。そのうえで、他の地域／小地域の事例を検証し、北東アジアが効率的に環境協力を進めるにはどうすれば良いか、インプリケーションについて考察する。

#### 小地域環境協力の必要性

まず、北東アジアにおける環境協力の必要性としては、以下の点が挙げられよう (Kato & Takahashi, 2000)。

- a) 北東アジアでは、越境大気汚染(酸性雨)や海洋汚染、有害廃棄物の越境移動等の広域(越境)環境問題が、将来深刻になると予想されている。しかしながら、これらの問題に関する科学的知見は共有されていない。一方で、砂漠化や生物多様性喪失も、小地域全体にとって深刻な問題となってきている。これらに対処・防止するには、「全世界」あるいは「アジア太平洋全域」では広すぎるが「一国単位」では対処できないことから、「地域・小地域単位」での対応が合

理的と考えられる。

- b) 北東アジアでは 1990 年代に入るまでは小地域としての求心力が小さく、経済体制の違いから、地域経済統合への動きは見られなかった。しかし近年、この小地域の経済交流は進展しており、TRADP のような開発プログラムもスタートした。こういった経済交流の進展は、域内共通の環境基準の必要性など、共通の環境ガイドライン等の策定を促すと考えられる。
- c) 北東アジアは冷戦期に東西陣営に分割されており、それ以前の世界大戦の記憶も、依然としてこの地域の国際関係に大きな影を落としている。また冷戦後になっても、北東アジア域内で、地域安全保障・平和の為のメカニズムが構築されたわけではない。2000 年に入って北東アジアの国際関係は大きな変容を迎えつつあるが、北東アジア内では、今日に至っても、国交が樹立していない国も有れば、領土問題が解決していないケースも複数有る。こういった状況を考えると「環境」という政策分野での協力を推進することによって、それまで疎遠であった国家間関係を密にし相互信頼関係を醸成し、地域安全保障の礎の一つにしようとする試みは意義が有る。(Schreurs & Pirages eds., 1998; Matsushita et al., 2000; Yonemoto, 1998).

但し、こういった環境協力が自動的に地域の安定と平和に寄与する訳でないことは、留意すべきであろう。前述したように、北朝鮮は、NEASPEC のメンバー国となっているものの、NEASPEC-高級事務レベル官会合へは中国・モンゴルでの開催時にオブザーバー参加しただけである。台湾は地域諸国との正常な外交関係を持っていないため、ほとんどの多国間プログラムに参加できなくなっている。それゆえ、地域の平和と安定に寄与するような環境協力を推進するためには、この小地域の国際関係をよく考慮して、戦略的に行う必要があると言えよう。

#### 他地域／小地域からの教訓

北東アジアが小地域環境協力を進める上で、数々の制度的阻害要因が有ることは、前節で明らかにされた。にもかかわらず、この小地域では、依然として環境協力を推進していく必要性が有ることも指摘された。では今後、北東アジアはどのようにして環境協力を進めていけば良いのだろうか。この問題を考える上で、他地域の事例について学ぶことは、それなりに意味が有る。

ここでは、長距離越境大気汚染をめぐる欧州の地域協力と、バルト海小地域の環境協力の事例を取り上げて検証する。

まず、欧州における長距離越境大気汚染であるが、この事例は、世界でも最も成功を収めた環境協力の事例の一つとして捉えられている。リオサミットで採択された Agenda 21 は、「欧米における酸性雨への取組の経験は継続されるべきであり、世界のほかの地域にも分け与えられるべきである」ことを謳った。

欧州では、1972 年北欧諸国の要請を受けて OECD が国家間モニタリングプログラムが開始された。その後 1977 年にはヨーロッパ経済委員会 (UN/ECE) がモニタリングを引き継ぎ、79 年には長距離越境大気汚染条約 (CLRTAP) が採択された。この条約自身は何らかの汚染対策を加盟国に強要するものでなかったが、1985 年には、硫黄 30%削減、88 年には窒素酸化物凍結が議定書によって定められた。更に、90 年代に入ると排出・酸性沈着・排出削減の為の必要技術を計算するコンピューターモデルがそのまま条約に取り込まれ、オスロ議定書では、「限界負荷量」に基づいた硫黄排出削減が義務づけられるようになった。

このような欧州の地域的取組に習って、EANET では EMEP 専門家などを招聘し、EANET を構築する上での様々な知見や助言を得てきた。現在の東アジアの状況は、欧州で OECD のモニタリングプログラムが開始されたばかりの 1970 年代半ばの状況に段階に有るのではないかと考えられる。今後東アジアでは、欧州で既に開発されたように、大気汚染物質排出の目録作成や長距離越境モデル構築による越境輸送量の推計といった科学的事実の解明が焦眉になると思われる (Takahashi, 2000)

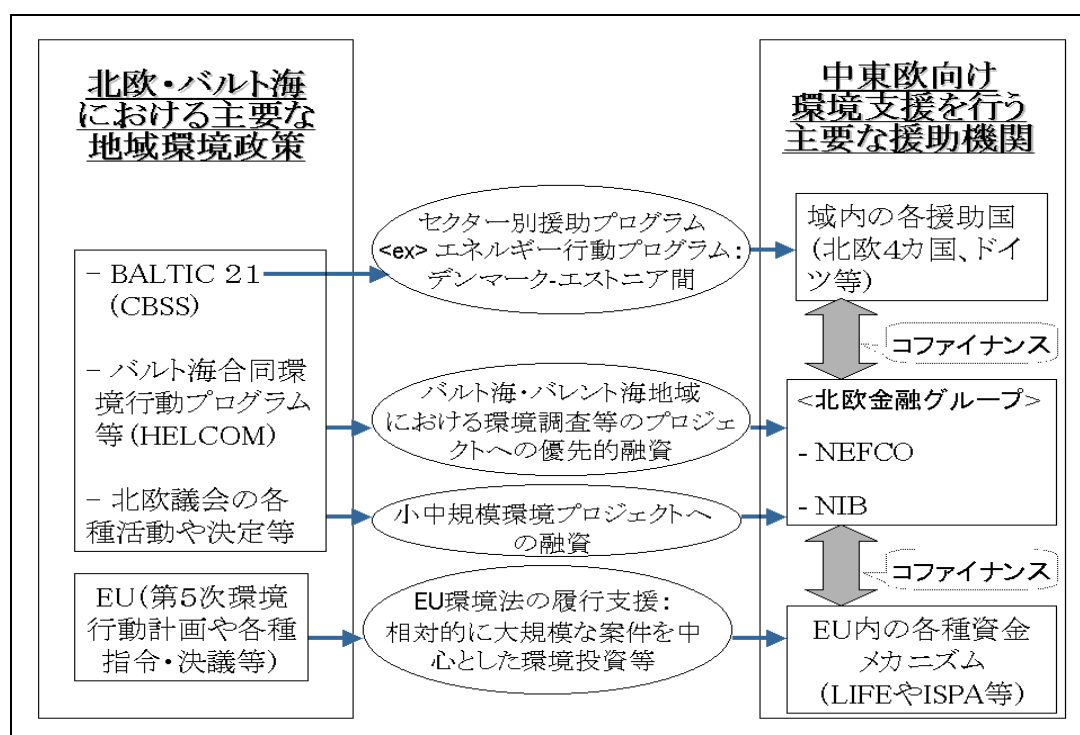
しかしながら、制度面に関しては、東アジアが、欧州と類似したプロセスを辿るかどうかが、現時点で判断することは難しい。なぜならば、北東アジアはヨーロッパと違って、域内諸国の経済レベ

ルや政治体制が大きく異なるため、足並みをそろえて均一的な地域政策を導入することは容易ではないからである。またヨーロッパでは、EC/EU という地域機関が、公式に非公式にも条約の進展を密接に支えてきたが、北東アジアには EC/EU に該当するような強力な地域機関がない。更に LRTAP の特殊事情として、冷戦期に東西陣営の架け橋として環境協力が推進されたことが、条約進展に大きな影響を与えたという特殊事情もある。このようなヨーロッパ独自の事情が、国際的な取組の進展を強く促し続けてきた。

このような相違点を考えると、北東アジアが、その協力スキームの不備を乗り越えてまで、欧州と同じプロセスや制度化を辿って、酸性雨を巡る地域協力条約を締結し、議定書交渉を進めるとは考えにくい。

しかしながら、制度面に関し、欧州から得られる教訓が全くないわけではない。欧州では LRTAP や EU Directives のような共通環境政策と援助政策がリンケージされ、全体的な地域協力スキームを形作っているが、このような特徴はバルト海小地域において、より顕著にみられる。

さらに、バルト海小地域は、先進国と移行経済国が同居している点で、北東アジアと類似点を持つ。この小地域では、EU における「指令」に当たるような強い法的拘束力を持つ取決めはない。しかし、複数の多国間枠組が重層的に存在し、各種環境協力プログラムや行動計画などを策定している。これらの決定は北欧諸国による二国間援助や北欧ファイナンスグループによる環境援助に反映され、効果的な環境協力が進められている。このようなリンケージの考え方は、北東アジアでより戦略的で効果的な地域環境協力を推進する上で、示唆に富んでいる(図 2.1 参照)。



出典:筆者作成

図.2.1 バルト海地域の環境政策と各援助機関とのリンケージ

この小地域における環境協力の事例から考えられる北東アジアへのインプリケーションは、以下のとおりである。

- 地域協力と援助施策のリンケージ<sup>22</sup>：地域協力は、域内国の自発的協力に立脚するもの

<sup>22</sup> バルト海地域では、Baltic 21 という小地域行動プログラムの中で、それぞれ主導国が定められており、例えば大気汚染防止のエネルギー行動プログラムはデンマークが担当し、自国のODAを用いてセクター別援助プログラムを



であり、原則的には域内参加国のburden Sharingが望ましい。しかし、域内途上国が協力プログラムを自己資金のみで行うことは困難であり、先進国や国際機関の資金・技術支援が不可欠になる。

- 二国間援助と多国間援助のリンケージと役割分担: 二国間ODAは、元来、その二国間における外交関係の判断の下でなされるものであり、一つの地域を対象とするものではない。他方、多国間援助はより地域的な公共性の高いものに優先順位を置くことができる<sup>23</sup>。但し国際金融機関のみの資金には限りがあるため、二国間援助や民間投資等と協調して進めることも重要である。その際ソーシャルリターンや収益性等に応じて、ODA、他の資金メカニズム・民間投資等を使い分ける事も重要である。
- Innovativeなアプローチ(複合効果アプローチ・セクター統合型アプローチ)の適用: 例えば、地球温暖化防止に向けた二酸化炭素(CO<sub>2</sub>)削減対策は、同時に二酸化硫黄(SO<sub>2</sub>)、窒素酸化物(NO<sub>x</sub>)、一酸化炭素(CO)の排出削減を伴うことが多いため、酸性化・オゾン層破壊・都市大気汚染問題の改善にも副次的な効果をもたらす。それゆえ、実質的な汚染削減につながるようなプログラムを考える際は、このような複合効果アプローチを検討することは、効率的な環境協力を進める上でも重要である。すなわち、域内の発展途上国の殆どは、先進国の関心が高い地球温暖化問題、或いは越境大気汚染(酸性雨)問題よりは、局地的な大気汚染や光化学スモッグ、CO<sub>2</sub>よりはSO<sub>2</sub>・NO<sub>x</sub>問題に関心が深い。しかし、複合効果・複数汚染アプローチを用いれば、双方の関心に沿う形でより協力政策を行いやすくなる可能性がある。

なお、この小地域では、目的に応じて様々な多国間枠組:CBSS や北欧議会・HELCOM 等があるが、このように「域内全ての当事国が同時に参加する」のではなく「域内の部分的な協力が域内全体にとっても有益であるという観点、及び部分的な協力を拡大していく」考え方を、「モジュール多国間主義」(Ivanov, 1999)と呼ぶ。この考え方は、域内全ての当事国が同時に参加できる多国間取組をもたない北東アジアにも通用する考え方ではないかと思われる。

## 2.5 結びに変えて:将来への提言

北東アジアと他地域の環境協力学スキームの相違点を指摘するのは比較的たやすい。しかし、経済・社会・政治的な要素の違いを念頭に置きつつ、欧州の事例から北東アジアへ通用する建設的な教訓を導き出すのは難しい。北東アジアは政治的にも経済的にも非常にユニークな地域であり、他の地域環境協力の事例からノウハウを拝借するだけでは、この小地域の将来像は描けない。ここでは幾つかの将来への提言を試みたい。

北東アジアでは、併存している複数の環境協力取組間に、なんらかの連携関係を築く必要がある。とりわけ、類似したテーマを扱う地域的取組間は、公式／非公式な方法で何らかの有機的な連携を持ち、役割分担を明確にしていく必要が有る。こういったことを可能にするためには、各協力取組は、情報を公開し開かれた仕組みを持つ必要が有る。その出発点として、最近、幾つかの地域的協力枠組はインターネットを通じて情報公開を始めてい。この傾向は促進されるべきであるし、また情報の開示度も高めていくべきであろう。

この地域では、環境協力学スキームが抱える問題点や不備によって、酸性雨や海洋汚染など個々の環境問題への協力取組の進展も阻害されるという残念な状況に陥っている。にもかかわらず、前述したように、北東アジアでは、域内先進国が途上国に対し環境汚染対策の実施を支援するための巨額の ODA を抛出しており、また官民を通じて多くの環境投資が行われてきた。ただ、こ

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展開している。

<sup>23</sup> なお、これまで北東アジアでは、多国間援助が相対的に少なかった。しかし、近年日本の環境援助プロジェクトの中には、米国や韓国と共同で関わるものも出てきている<sup>23</sup>。今後はこのような試みが拡大される事が期待される。



これらの協力は個々別々に行われ、必ずしも効率的ではないとの批判もあった。

そこで、北東アジアでは、バルト海諸国のように、地域協力施策と援助施策をリンケージさせるよう考案することが重要になると思われる。元来、地域協力は、域内諸国の自発的協力を立脚するものであり、原則的には域内参加国の費用負担が望ましい。ただし、各種行動計画やプログラムの実施に際しては、域内途上国は自己資金のみで実施することは容易ではなく、先進国や国際機関の資金・技術支援が不可欠となる。

長期的には、包括的かつ戦略的環境行動計画を立案すべきであろう。そのような行動計画は、すでに EU、バルト海地域、ASEAN などの地域並びに小地域で成功を収めている。行動計画が、EU 第 5 次行動計画のように、各セクターにおける主要な施策とその手段・達成時期や取り組むべき主体者、資金メカニズムまでを特定できれば尚良い。このような行動計画を描く上では、日中韓三カ国大臣会合、ESCAP 大臣会合やリオ+10 などのハイレベルな会議は、大事な契機となる。

もう一つの長期目標として、北東アジアの全関係者が参加できるような枠組を構築する必要がある。この小地域の政治的安全保障状況により、この目標は容易には達成できないだろう。そのため、にもかかわらず、韓国と北朝鮮は歴史的な首脳対談を果たし、北朝鮮が ARF に加盟するなど、幾つかの明るい兆しは有る。ここでポイントとなるのは、国際機関および NGO の媒体としての役割である。UN/ESCAP や UNDP、UNEP の果たすべき役割の重要性は勿論のこと、ADB が各国の媒体として大きな役割を果たすことが期待される。特に、台湾は国際法上の地位が不安定で、国連機関には加盟していないが、ADB や APEC には Chinese Taipei として参加している。もし域内で非加盟国であるロシアや北朝鮮が将来 ADB に加盟することがあれば、ADB は各国をつなぐ媒体となり得る。一方で、NGO は生態系保全分野で、地域協役に大きな役割を果たしている。北東アジアの重要生息地ネットワークには北朝鮮を含む北東アジアの 6 カ国が参加している。また大気に関する NGO ネットワークである AANEPA には台湾からも参加がある。現時点で、北東アジアのすべての国・経済体をつなぐことができるのは NGOs に他ならないことは留意されるべきである。

さらに、この地域の各国政策担当者は、このような困難な状況に対処するための専門能力を改善する必要がある。これは特に日本と韓国にあてはまる。この 2 国は環境協力を率先して推進する意欲があるという意味で、互いに共通する部分が多いにもかかわらず、目指す方向性は異なっている。その結果、独立した複数の制度が一貫性なく誕生し、一部の制度は停滞するなど残念な事態を引き起こしている。両国は独自の利害のみならず、互いの利害、さらに地域の共通利害を織り込んだ地域環境協力戦略を策定する必要がある。

## 略語

AANEA	東アジア大気行動ネットワーク
ADB	アジア開発銀行
ALGAS	アジア最小コスト温暖化ガス削減戦略
AMM	ASEAN (外務)閣僚会議
AMME	ASEAN 環境閣僚会議
APEC	アジア太平洋経済協力会議
APN	アジア太平洋地球変動研究ネットワーク
ASEAN	東南アジア諸国連合
ASOEN	ASEAN 環境高級事務レベル会合
CBSS	環バルト海諸国評議会
CEC	欧州委員会
CLRTAP	長距離越境大気汚染条約
CO	一酸化炭素
CO <sub>2</sub>	二酸化炭素
COMECOM	経済相互援助会議
EANET	東アジア酸性雨モニタリングネットワーク
EAS	東アジア地域海計画
ECO-ASIA	アジア太平洋環境会議(エコアジア)
EMEP	欧州監視評価計画
EC	欧州共同体
EU	欧州連合
GEF	地球環境基金
HELCOM	バルト海洋環境保護委員会
JICA	日本国際協力事業団
LTPP	エコ・アジア長期展望プロジェクト
KOICA	韓国国際協力団
MRC	メコン河委員会
NAPEP	北アジア太平洋環境パートナーシップ
NEAC	環日本海環境協力会議
NEANPEF	北東アジア北太平洋環境フォーラム(後に NAPEP と改名)
NEASPEC	北東アジア準地域環境協力プログラム
NGOs	非政府組織
NO <sub>x</sub>	窒素酸化物
NOWPAP	北西太平洋地域海行動計画
ODA	政府開発援助
OECD	経済協力開発機構
SACEP	南アジア環境協力プログラム
SAP	戦略行動プログラム(図們江／豆満江地域開発計画)
SO <sub>2</sub>	二酸化硫黄
SOM	(NEASPEC の)高級事務レベル会合
SPREP	南太平洋地域環境計画
TEMM	(日中韓)三カ国大臣会合
TRADP	図們江／豆満江地域開発計画
UNCSD	国連国連持続可能な開発委員会
UNCED	環境と開発のための国連会議(1992年に開催されたリオサミットをさす)
UN/ECE	国連欧州経済委員会
UN/ESCAP	国連アジア太平洋経済社会委員会
UNDP	国連開発計画
UNEP/ROAP	国連環境計画 アジア太平洋地域オフィス

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## Appendix 1-3

### アジアの環境ガバナンス： 地域／小地域環境協力の制度改善へ向けて (邦訳)

高橋若菜  
加藤久和

#### 3.1 はじめに

環境ガバナンスとは、各国の国内社会あるいは国際社会が環境問題にどのように対処するかに関わることである。環境ガバナンスは、「社会の公式・非公式な制度と個々のアクター（行為主体）の間の相互作用に関連しているが、これらの相互作用は、環境問題がどのように認識され、どのように取組まれるのかに影響を及ぼす」(Schreurs, 1998)。

ここで「制度」とは、「[関連するアクターの]持続的な行動上の役割を定め、活動を方向づけ、[アクターが抱く]期待を収斂していくようなルールや実践の体系」(Keohane, Haas and Levy, 1994)を意味する。本稿では、この「制度」という用語を「組織及びルールの体系の双方」を含むものとし、条約や議定書のみならず、拘束力のない行動計画やプログラムでも国家政府によって承認されたものも含めることとする。

リオの「地球サミット」が開催され、「アジェンダ 21」が採択された 1992 年以来、アジア太平洋地域における環境ガバナンスの構造は急速な変貌を遂げた。環境ガバナンスにおける主な進展としては、各国レベル—特に途上国—における新たな環境法やプログラムの制定、制度化の進展、また、市民・科学者・NGO・企業等の環境政策立案・実施プロセスへの参加の増加が挙げられる。

国内レベルでのこのような進展に加え、1990 年代には、地域及び小地域レベルでの環境協力の進展も見られた。アジアには 30 カ国以上も有り、地理的、経済的、政治的に多様であるために、多数の国際機関や地域機関が比較的小規模な地域レベルでの共同活動に重点を置いてきた。その結果、既存の小地域レベル環境協力プログラムは活発化し、新たな環境協力プログラムも誕生した。

しかしながら、小地域レベル環境協力が活性化したとはいえ、そういった協力活動の有効性や効率性が必ずしも保証されているわけではない。環境協力のための制度が不十分なケースも多々見受けられる。計画段階と実施段階の間には、まだギャップがある。多くの途上国にとって、技術、人材、財源面での能力が不十分で、地域レベルの環境ガバナンス・プログラムやプロジェクトを実施するうえで大きな障害となっている。また、各国の国内事情により、各国レベルの政策担当者や国際レベルの担当者との間の連携が大幅に阻害されている (Schreurs and Economy, 1997)。多くの場合、目標を達成できる見通しは不透明である。

そこで、以下のような問題が提起できよう。つまり、アジアの地域／小地域レベルでの環境ガバナンスを特徴づける主要な要素は何か。小地域の各種協力メカニズムの間の類似点と相違点は何か。それらはこの地域を脅かす環境問題に適切かつ効果的に取り組んでいるか—あるいは将来取り組むことになるか—。それらの制度を改善するために、どのような措置を講じる必要があるか。

こういった問題を検証するため、IGES の環境ガバナンス・プロジェクトはその活動の一環として、アジアにおける環境協力のプログラムあるいはメカニズムの比較研究を行った。なお、研究を行う上では、特に北東アジア、東南アジア (ASEAN)、南アジアという 3 つの小地域に焦点を絞った。

本稿はその研究の大筋をまとめたものである<sup>24</sup>。本稿では、まず最初に、3 つの小地域における既存の多国間協力イニシアティブの概要を紹介する。次に、地域環境協力分野のアクター（行為主体）の役割を検証することによって、小地域環境協力のためのメカニズムと制度の比較分析を試

<sup>24</sup>本稿はIGESの「環境ガバナンス・プロジェクト」の下で行われたアジアの地域／小地域環境協力研究の成果に基づいて執筆されたものである。詳細はTakahashi (2000b, 2001a, 2001b)を参照のこと。

みる。最後に結論として、それぞれの小地域ごとに、環境協力促進の方法を提案する。

## 3.2 概要:既存の制度

### 3.2.1 北東アジア

ここで北東アジア地域とは、中国、日本、韓国、北朝鮮、モンゴル、ロシア極東部および台湾を指す。この地域には、1980年代後期まで政治的な求心力がなく、二国間の特定のイニシアティブを除くと、環境問題に関する各国間での協力はほとんど行われていなかった。だが、1980年代後期になると、複数の国が協力して開発に伴う環境問題に取り組もうとする傾向が見られるようになった。1992年のリオ地球サミットで採択されたアジェンダ21はこの傾向に拍車をかけ、この地域でも、環境面での多国間協力に関する数々の小地域プログラムや行動計画が策定され、定期会合も開催されるようになった。

これらのイニシアティブの中で、北東アジア地域環境協力プログラム(NEASPEC)は、包括的政府間プログラムとして中心的な役割を果たしている。このプログラムは、1993年に国連アジア太平洋経済社会委員会(UN/ESCAP)の主催で開催された第1回北東アジア環境協力高級事務レベル会合で創設された。NEASPECを提唱し背後から推進したのは韓国政府であった。

1993年以来、プロジェクトの企画と実施などについて討議・決定する機関として、高級事務レベル会合が1~2年に一度、開催されてきた。NEASPECの3つの優先分野は、a)エネルギーと大気汚染、b)生態系管理、c)キャパシティ・ビルディングである。このうち、エネルギーと大気汚染に関しては、トレーニングのためのワークショップ、技術デモンストレーション・プロジェクト、環境モニタリング・データ収集プロジェクトが特定され、ADBから資金援助を受けて実施された。NEASPECはそれ自体では財源調達メカニズムを持たず、プロジェクト・ベースでのアドホックな資金調達に依拠してきたが、参加国政府の間では、恒常的な資金メカニズムの創設を必要とする声が高まっていた。そこで、2000年3月、韓国政府の提案により、NEASPECの中核基金(core fund:参加国が任意・自発的に資金を拠出)を設立することが合意された。

NEASPECと同様に包括的に環境問題全般を取り扱うイニシアティブとして、環日本海環境協力会議(NEAC)がある。NEACは、中国、日本、韓国、モンゴルおよびロシアの環境省庁の政策担当者が外交ルートを経さずに年一回集まり、自由率直に政策対話を行おうとする場である。会議には研究者、地方自治体の政策担当者やNGOも招かれている。NEACは各国の政策担当者が、環境保全や政策に関する情報を交換し、体験を共有し、今後講じるべき対策について協議する重要な機会ではあるが、この会議自体でプロジェクトやプログラム活動の立案を行おうというものではない。

一方、北東アジアの経済協力に関しては、UNDPの主導で始まった豆満江(図們江:トゥーメン河)流域開発計画(TRADP)がある。TRADPは、北東アジア5カ国—中国、韓国、北朝鮮、モンゴル、ロシアの地域経済協力の振興をねらいとしたものだが、TRADPにおいても1995年に「環境保全原則に関する覚書」が交わされた。豆満江流域は、内陸水と沿岸水域の汚染、生物多様性の喪失、森林破壊、大気汚染などの深刻な環境悪化に脅かされてきた。そこでTRADP環境覚書をきっかけに、国際水域の水質汚濁および生物多様性の喪失の問題と取り組むため、効果的な長期の地域戦略を策定しようという動きが出てきた。これを受けて、世界環境ファシリティ(GEF)は、戦略的行動計画(SAP)策定のために2年間で500万ドルの助成を行うことを決定した。この資金援助は2000年5月に開始されている。

なお、リオサミットにおけるアジェンダ21は、特定の環境問題に依拠した多国間協力プログラムの誕生をも促した。日本海閉鎖水域では1994年に北西太平洋地域海計画(NOWPAP)が設立されている。NOWPAPはNEASPECやNEACのように域内各国の自発的発意のもとに始まったというよりは、UNEPが推進してきた地域海行動計画の一つとして設立されたプログラムである。UNEPは「地中海地域行動計画」の成功を皮切りに、南太平洋やカリブ海、黒海等、世界の14海域で地

域海計画を推進している。NOWPAPの参加国は中国、日本、韓国、ロシアおよび北朝鮮である<sup>25</sup>。(UNEP, 1997)。

その他の特定の環境問題に関する協力の事例としては、東アジア酸性雨モニタリング・ネットワーク(EANET)の設立が挙げられる。このネットワークは日本政府の提唱によって創設されたもので、運営にかかる費用は全額日本政府によって負担されている。また、日本は政府開発援助(ODA)を通じ、途上国のモニタリング活動を支援するための資金・技術援助も提供している。このネットワークでは、参加各国が国内モニタリング・センターやモニタリング・サイトを指定する。これら各国のモニタリング・サイトでは、共通のガイドラインと技術マニュアルを用いて、酸性沈着に関するデータが収集される。これらのデータは、各国の国内センターを通じてネットワーク・センターに集められ、分析される。同ネットワークは1998年に試行稼働を、2001年には本格活動を開始した。ネットワーク・センターは日本の新潟の酸性雨研究センターが引き受けており、一方EANETの暫定事務局は日本の環境庁(現環境省)内に設置されて、ネットワーク活動の管理・調整を行ってきた。2000年に開催されたEANET第2回政府間会合では、UNEPを2002年以降のEANET事務局に指定することが決定された(Interim Secretariat [of EANET] and Interim Network Center [of EANET], 2000)。EANETには東アジア10カ国が参加しているが、このうち北東アジアからは、日本以外に、中国・韓国・モンゴル・ロシアが参加している。

一方、第7回湿地条約(ラムサール条約)締約国会議で採択された「アジア太平洋渡り性水鳥保護戦略」に基づき、渡り性水鳥を保護するために、1997年北東アジア・ツル・ネットワーク・センターも創設されている。このネットワークは北東アジア6ヶ国のツルの生存にとって重要な18ヶ所をつなぎ、各地の関係者による情報交換と体験の共有を促進しようとするものである。また、研究者、環境活動家、政府職員など、ツルの保護に関心を持つ人々の間の連携を促進し、共同の研究・保護活動を行うための基盤を提供している。ネットワークの管理は、国際NGOであるウェットランド・インターナショナル/アジア太平洋によって行われている。1990年代後期には、10ヶ国、24観測地点で構成される東アジア～オーストラリア・シギ・チドリ類ネットワークと東アジア・カモ類ネットワークという、さらに2つの水鳥ネットワークも創設された。

これらイニシアティブに加え、1990年代後期には大臣レベルでの定期会合も始まった。この会合は韓国の発案で、1999年1月に第1回日中韓三ヶ国環境大臣会合(TEMM)がソウルで開催された。参加国大臣は、北東アジアの主要三ヶ国としてより積極的に環境問題に対応していく必要性を認め、環境協力を強化することで合意した。TEMMは毎年開催されることになっており、第2回会合は2000年2月に北京で開催された。ここでは、地域環境共同体としての意識の向上、淡水汚染と陸上汚染源に起因する海洋汚染の防止、環境産業の振興に関して、具体的な協力プロジェクトを策定・実施することが合意された。参加国はすでに具体的なプロジェクトの立案作業に入っており、実施に向けた取り組みも進行中である。

なお、1990年代には、北東アジア・東アジアに焦点を絞らず、さらに広いアジア太平洋地域にまたがる環境協力も始まった。アジア太平洋経済協力(APEC)フォーラムによる活動は、その一つと言えよう。APECはアジア太平洋の18の「経済体」によって設立された緩やかな経済協力体であるが、このうち北東アジアからは、日本、中国、韓国、ロシアおよび台湾も加盟している。APECでは環境と経済の統合が謳われており、1994年に開催された第1回閣僚会議では、「APEC環境イニシアティブ声明」が採択された。この声明その他の宣言に続き、APECは以下の3本の柱から成る環境対策を策定した。

- (1)APECの各作業部会において環境・経済面での配慮を統合させること
- (2)持続可能な都市、クリーンな技術、海洋環境
- (3)長期的には食料、エネルギー、環境、経済成長、人口問題に焦点を当てること

一方、科学的な側面では、アジア太平洋地域内の科学者と政策担当者の結びつきの強化を目的として、1995年にアジア太平洋地球変動研究ネットワーク(APN)が創設された。APNは地球規模の長期的な気候変動、海洋・陸上系、それらに関する物理・化学・生物・社会・経済的プロ

<sup>25</sup> 現時点では、北朝鮮は活動には参加していない。



セスを中心とした研究活動の促進、奨励、支援を目的とする政府間のネットワークである。具体的には、専門家同士の交流を促進する事業を行うとともに、数々の国際共同研究プログラムに資金的支援を行ってきている<sup>26</sup>。1999年には神戸にAPNセンターが開設された。現在、北東アジアからは、日本をはじめ中国、韓国、モンゴルおよびロシアがAPNに参加している。

最後に、アジア太平洋環境会議(エコアジア)に触れておいたほうが良いであろう。エコアジアは日本の環境庁(現環境省)の提唱によって創設された。当初エコアジアは、非公式な大臣会合としてハイレベルな情報交換のフォーラムを提供することを意図していたが、後に、アジア太平洋地域の長期的な持続可能な開発を推進する環境政策のためのオプションを見つけることをねらいとする「エコアジア長期展望プロジェクト」も進めてきた(薄木、2000)。このプロジェクトは、同地域が直面する主な環境問題を特定し、社会経済問題との結びつきを検討し、各種の地域開発シナリオの結果として生じる将来の社会・経済・環境問題を予測することを目的としている。

### 3.2.2. 東南アジア(ASEAN)

本稿で東南アジアとは、東南アジア諸国連合(ASEAN)に所属する10ヶ国を指すこととする。東南アジアは、環境協力に関し、アジアの他の地域よりも長い協力の歴史を持っている。1967年の発足以来、ASEANは科学技術、文化情報、社会開発、環境に関する加盟国間の「機能的協力」を重視してきた(ASEAN Secretariat, 1995a)。

ASEAN内環境協力の発端は、UNEPの協力を得てASEAN地域環境計画(ASEP)が立案された1977年にさかのぼる。ASEP Iは1978～82年の5年間を対象としたもので、6つの優先分野を指定し、100件を超えるプロジェクト/活動を策定した。ASEP Iに次いで、1983-87年、1988-92年には、それぞれ同様のプログラム(ASEP II& III)も立案された。1993年には、10項目の戦略と27の活動項目からなる新規ASEAN戦略環境行動計画が採択された(ASEAN Secretariat, 1994)。1995年には、ASEAN越境汚染協力計画が合意された(ASEAN Secretariat, 1995b)。さらに、2000年にはUNEP/ROAPの協力を得て、環境教育・訓練行動計画も策定された。

これらの計画の決定や実施を支える主要な機関は、ASEAN環境高級事務レベル会合(ASOEN)およびその作業部会、環境大臣会議、ASEAN事務局等である。環境大臣会合は2年に1度開催され、サミットレベルでの環境関係の決定事項を具体化させ、活動計画を採択する。ASOENの会議は毎年開催され、大臣会合において採択された各種環境計画の実施状況を検討し、作業部会への指揮も行う。これらの活動は全てASEAN事務局によって管理・調整されている。

以上の計画に加え、1990年代後期には、さらに特定の環境問題に焦点を絞った協力活動も始まった。1997年に東南アジアで起きた煙害(Haze)は、特にインドネシア、マレーシア、シンガポール、ブルネイ・ダルサラームに、極めて深刻な被害をもたらした。その結果、1995年に煙害対策技術特別委員会(HTTF)が設置され、1997年のASEAN環境高級事務レベル会合では、地域煙害対策行動計画(RHAP)が採択された。この計画の主要部分は、防火対策の実施、地域モニタリング・メカニズムの設置、消化能力の向上である。さらに2000年には、ASEAN越境煙害防止協定の交渉プロセスを開始することに各国の環境大臣が合意した。ASEANはUNEPの協力を得て、法律、制度、行政面の整備状況を包括的に評価するフィージビリティ調査を実施し、現在国際協定の草案を起草中である。

これらのイニシアティブと平行して、1998年には、ASEANサミットでハノイ行動計画が採択された。ASEANでは、リオサミット後の課題として、過去30年間の地域協力をレビューし、更なる地域協力を進める決意を示すものとしてASEAN Vision(将来展望)を公表したが、このVisionをもとに2020年までのASEANの道筋を示したのが「ハノイ行動計画」である。この計画は、マクロ経済、資金協力から科学技術の促進、人的資源の開発、平和と安全保障の問題に至るまでを包摂する包括的な計画であるが、このうち「環境と持続可能な開発」分野では15の具体的な行動計画が定められている(ASEAN Secretariat, 1999)。

<sup>26</sup> <http://www2.rim.or.jp/apn/index.htm>参照。

なお、以上の各種プログラムや行動計画は、いずれも法的拘束力を持たないものであるが、ASEAN 環境協力分野で、一つだけ拘束力を持つ協定が採択されている。これが、ASEAN「自然および自然資源の保護に関する協定」である。この協定は1985年に当時のASEAN全6ヶ国の外務大臣によって調印された。しかし6ヶ国のうちインドネシア、フィリピン、タイは1986年に批准したものの、ブルネイ・ダルサラーム、マレーシア、シンガポールはまだ批准していない。このため、この協定はまだ発効していない。

### 3.2.3. 南アジア

南アジアとは、ここではバングラデシュ、ブータン、インド、モルジブ、ネパール、パキスタン、スリランカの7ヶ国を指す。南アジア諸国間では、環境問題に関連していくつかの二国間協定が結ばれていたが、1980年代初期までは多国間イニシアティブは存在しなかった。多国間協力が実際に始まったのは1982年、8ヶ国<sup>27</sup>の環境大臣が南アジア環境協力計画(SACEP)を採択して以降のことである。SACEPでは幅広い優先分野が指定されたが、具体的なプログラム実施は進まなかった。だが、このことによってSACEPの意義が失われるわけではない。SACEPは加盟国政府および国際機関に対し、SACEPで特定された各種テーマに関する協力プロジェクトを推進するうえで、確固とした基盤や正当性を与えたといえよう。

SACEPは理事会、協議委員会、事務局という3つの中心的組織で構成され、小規模な地域環境機関の特徴を備えている。このような地域機関としてのSACEPは、SACEPプログラム自身に加え、その他の地域・国際機関が採択した行動計画や環境協力活動を実施・運営するための事務局としての役割を果たしてきた(Shihab, 1997)。

一方、南アジア7ヶ国の経済・社会的開発の促進を目的とする南アジア地域協力連合(SAARC)も、環境に関する地域協力を進めてきた。SAARCは自然災害、気候変動、有害廃棄物の越境移動など、特に越境汚染および地球規模の環境問題に注目し、「行動計画」を策定した。

さらに、これら2つの包括的イニシアティブに加え、南アジアでは個別の問題に焦点を絞った協力も進行している。その一つが海洋汚染に関するもので、1982年のUNEP理事会でSACEP加盟国の要請を受け、1983年に「UNEPプログラム指定地域」となった南アジア海洋プログラムである。(Abeyegunawardene, 1997)。このプログラムには、バングラデシュ、インド、モルジブ、パキスタン、スリランカの、南アジアの海洋5ヶ国が参加している。これらの国々は、1995年にニューデリーで開催された全権委員会議で南アジア海洋行動計画を採択、同計画は1998年に発効した。なお、この計画の実施を管理・調整する事務局として、SACEP事務局が指定されている。

一方、大気汚染に関しても1990年代後半に地域協力が始まった。1998年4月にモルジブで開催されたSACEP理事会の第7回会合で、「南アジアの大気汚染および越境汚染の規制と防止に関するマレ宣言」が合意された。SACEPの8カ国—バングラデシュ、ブータン、インド、イラン、モルジブ、ネパール、パキスタン、スリランカ—がこの宣言に調印した。同宣言の実施計画は3段階から成るが、このうち第1段階—国内および地域レベルのネットワークの確立、基礎調査、行動計画策定—が1998年5月から2000年3月まで実施された。実施にあたっては、国連環境計画アジア太平洋環境評価プログラム(UNEP/EAP-AP)、ストックホルム環境研究所、SACEPが支援を行った<sup>28</sup>。具体的には、UNEP/EAP-APはSACEPの協力を得てマレ宣言の実施を管理し、ストックホルム環境研究所は主に技術的な支援を行ってきた。なお、ストックホルム環境研究所の貢献は、スウェーデン国際開発庁(SIDA)の資金で運営される途上国地域大気汚染プログラムの一環として行われている。

また、2000年にUNEP/ROAPの協力を得て、SACEPは「環境教育訓練行動計画」を策定した(Pradham, 2000)。この行動計画では、「主な環境問題と取り組み、・・・[中略]・・・貧困、人口圧、

<sup>27</sup> 設立当時のSACEP参加8ヶ国とは、アフガニスタン、バングラデシュ、ブータン、インド、モルジブ、ネパール、パキスタン、スリランカを指す。1990年代後期には、イランもSACEPに加わった。ただし、アフガニスタンは国内の政治的事情によって、現在は活動に参加していない。

<sup>28</sup> マレ宣言の第1段階を実施するために、UNEP/EAP-APとSEIにより覚書が交わされた。

人口過剰、無駄の多い生産、人間の貪欲さ、開発の遅延などの環境の衰退の根本原因を根絶する必要性に対する感受性を育むための教育と訓練のための地域全体の枠組み」が提示されている (SACEP & UNEP, 2000)。

### 3.3 分析:地域環境協力のアクター(行為主体)

#### 3.3.1. 地域機構

地域環境協力における主なアクターの一つは、地域機構である。欧州では、地域機構は地域協力で取り組むべき問題を特定し、各国の活動を調整し実施を支援する上で、重要な役割を果たしている。これは商取引や製品生産などの経済活動に関する環境基準を統一しようとする EC/EU の活動事例からも明らかである。一方、長距離越境大気汚染 (LRTAP) 条約の場合は、条約自体の事務局は国連欧州経済委員会 (UN/ECE) が務め、各国間の調整を行ってきたが、EC/EU がもつ資金および技術移転メカニズムが、LRTAP 条約と公式にも非公式にも連携していたことに留意しておく必要がある。つまり、EU のもつ資金援助・技術移転メカニズムが、LRTAP 条約加盟国による条約及び議定書の遵守を高めるのに大きな役割を果たしたと認められるのである (Nordberg, 2000)。

アジアには、こういった EC/EU ほど強力な中央集権型の官僚体制をもつ地域機構は存在しない。ただ、東南アジアにおいては ASEAN がその事務局を通じ、ささやかながらも加盟国に環境協力プログラム策定と推進に関する支援を行い、また関連主体 (各国政府や国際機関等) との調整役を担ってきた (Tay, 2000)。このような ASEAN 事務局の支援によって、ASEAN では複数の地域環境行動計画—3 件の ASEAN 環境計画 (1978-1992)、2 件の戦略的行動計画 (1994-)、越境汚染行動計画 (1995-) 等—が順次起草された (ASEAN Secretariat, 1994, 1995)。

さらに ASEAN では、これらの各種行動計画やプログラムを支えるための組織機構も用意されている。これらの組織機構には、首脳レベル会議 (アセアン・サミット)、外務大臣会合、環境大臣会合、高級事務レベル会合、作業部会、ASEAN 事務局が含まれる。ASEAN はこのような組織的な環境協力を展開することで、互いに重複することなく環境協力の包括的・戦略的枠組を構築することができたとと言える。

一方、南アジアでは、SACEP と SAARC の両方が ASEAN と類似した役割を果たしてきた。SACEP が環境保護そのものを目的として設立されたのに対し、SAARC は経済社会開発に関する幅広い協力をねらいとしている。後者は、サミット、閣僚理事会、常設委員会、各分野ごとの技術委員会、SAARC 事務局といった組織機構を持っている。一方前者は、環境・森林大臣会合、上級事務レベル会合—協議委員会—、事務局によって構成されており、サミットは開かれぬ。これら二つの主要な制度—SACEP と SAARC—の間には、残念ながら協力のための公式な連携がない。そのため SACEP は資源を効果的に運用することができず、地域活動の実施に関してあまり大きな成果をあげていないことが指摘されている (Chatterjee, Mehra and Banerjee, 2000)。

SAARC と SACEP の環境協力活動を比較してみると、SACEP は地域レベルの問題のみならず各国共通の環境問題を取り扱い、また環境教育やトレーニングもとりあげるなど、幅広い活動分野を包摂している。一方、SAARC は気候変動や有害廃棄物の越境移動などの世界的・国際的問題に力を入れ、世界的な交渉における SAARC 加盟国共通の地位の確保に努めるなどしており、2つの制度の間には一種のすみわけが確認できる。しかしながら、これら 2つの制度の活動が重複する部分がないわけではない。

他方、北東アジアにおいては EC/EU、ASEAN、あるいは SAARC や SACEP に相当するような地域機構が存在しない。この特徴ゆえに、北東アジアでは、環境協力に関する多数の独立したイニシアティブが並存している。これらの各プログラム、計画、フォーラムの機能と活動には重複がみられるが、環境協力活動の調整を行うことができるような地域機構が存在しない以上、こういった重複は避けがたいものとなっている。

また、北東アジアに地域機構が欠如していることは、各制度がそれぞれ個別に組織機構を構築し資金メカニズムを模索しなければならないことも意味している。それゆえ、たとえば事務局の設

置場所も制度ごとに異なっており、NEASPECはUN/ESCAP、NOWPAPはUNEP、TRADPは中国、EANETは日本、NEACはホスト国による毎年交代制など、個々バラバラな状況にある。各制度への参加国も、域内の外交関係やホスト機関を務める国際機関への参加状況如何によって左右されている<sup>29</sup>。

### 3.3.2. 国際機関

国連機関は、環境に関する地域／小地域協力の推進役、あるいは調整役としての役割を中心に、様々な活動を行っている。このうち小地域レベル環境協力の促進に関する UNEP の最大の貢献は、地域海洋プログラムの設立と域内各国の調整に関する役割であろう。このプログラムには北西太平洋行動計画(NOWPAP)、東アジア海洋(EAS)行動計画、南アジア海洋行動計画(SAS)が含まれる。

また UNEP は、小地域レベルでの環境協力推進を特に優先しており、地域海行動計画以外にも、様々な小地域環境プログラム・行動計画の草案作りや、実際のプロジェクトへの技術・資金援助などにも尽力してきた(Natori, 2000)。

UNDP は貧困層の生活水準改善のために、途上国が自然資源管理に対する総合的アプローチを採用できるよう支援する中で、途上国世界における小地域環境イニシアティブに資金・技術的支援を行ってきた。一方 GEF は、アジアにおける生物多様性と気候変動のプロジェクトに対し、技術援助のための助成金を提供している。これらには、インドネシアにおける森林火災による煙害防止のための緊急対応プロジェクトや、豆満江流域開発計画のための戦略的行動計画の立案プロジェクトなどが含まれる。

アジア開発銀行(ADB)や世界銀行などの国際金融機関は、国内だけでなく地域レベルでの環境活動に多額の資金援助を提供している。このうち、ADB の地域技術援助助成金は、多国間環境協力の促進に関して重要な役割を果たしてきた。特に、東南アジアにおける越境煙害防止プロジェクトは、ASEAN と域内各国にとって非常に重要であった。というのも、この資金援助を受けたために、ASEAN 地域煙害防止行動計画の実施は好スタートを切ることができたのである(Pippinyo and Prasiddha, 1999)。

一方、5年ごとに環境と開発に関する大臣会合を開催してきた UN/ESCAP は、UNCED のフォローアップとして、アジア太平洋全域を対象に、持続可能な開発のための5カ年間にわたる地域行動計画を策定している。このプログラムの実施を効果的に確保するために、ESCAP は小地域ごとの協議を実施している。この目的に合わせ、ASEAN、NEASPEC、SACEP を含む小地域レベルでの環境協力活動が、2000年に日本で開催された第4回 ESCAP 環境開発大臣会合でレビューされた。

また、ESCAP は、特に環境保全のための地域機構が欠如している北東アジアを対象に、地域レベルでの協力活動の維持と円滑化に努めてきた。北東アジアの場合、UN/ESCAP は域内各国の要請に応じ、1997年以来 NEASPEC の暫定事務局を引き受け、活動の調整を行ってきた。さらに、1990年代後期に ESCAP は、環境協力のための地域機関が存在しない中央アジアで高級事務レベル会合を開催し、小地域環境計画の策定プロセスに着手した(Karim, 1999)。

しかしながら、国際機関の役割には限界がある。例えば、国際機関が小地域環境協力プログラムの資金的・技術的支援を全面的に行うわけにはいかない。にもかかわらず、南アジアと東南アジアにおいては環境活動実施の財源を欠いており、ほとんどの財源を国際機関あるいは二国間援助という外部からの資金援助に頼らざるをえない状況にある。こういった資金援助は主にプロジェクトごとに提供され、多数のプロジェクト案が単に援助する側の注目を集めることができないという理由で、実施されずに終わるといった事態が起きている。

<sup>29</sup> たとえば、北朝鮮はUN機関が開催するものを除き、ほとんどの小地域プログラムに参加しない。北朝鮮はADBに加盟していないため、その援助を受けることができない。台湾はAPECとADBの加盟国だが、国際政治における位置づけが不安定なため、利用できない国際協力イニシアティブが多々見られる。

北東アジア地域への国際機関からの資金援助額は、中国その他の途上国に対する二国間資金・技術援助を除けば、他の小地域よりも更に少ない。これは同地域内に日本と韓国という 2 つの先進国があることと大きな関係がある。その代わりに、国際機関はこの地域の弱点—つまり難しい政治的関係を補完するサービスを提供している(Shrestha, 2000)。NOWPAP と NEASPEC はその例である:前者は UNEP が管理し、後者は UN/ESCAP が管理している。また 2002 年以降、酸性雨モニタリング・ネットワークの事務局が UNEP/EAP-AP に設置されるため、このネットワークもこのリストに加わることになる。ただし、NEASPEC に関しては、同地域の国々は UN/ESCAP が今後も事務局を継続することを望んでいるが、UN/ESCAP はこの役割を返上したいと願っているようである。

### 3.3.3. 各国政府

各国政府は環境協力活動を実施していく上で、最も重要なアクターと言える。地域協力は通常、諸国間の自発的なイニシアティブに基づいて行われるべきものである。越境汚染あるいは地球規模の環境問題でさえ、各国国内あるいは局地的レベルでの人間活動に起因しており、実際には発生源に最も近いレベルで取り組みが行われるのが最も効果的である(Kato, 2001)。各国政府の真剣な取り組みがない限り、地域環境協力の成功はありえない。

アジアの各国政府の多くは、環境保護と持続可能な開発全般を重視すると表明している。だが、言葉と行動の間には常に温度差がある。具体的な協力活動や公約に関する協議の場では、各国がそれぞれ異なる考え方をもち、さまざまな観点が提示され、地域協力の進展が阻害されることも少なくない。

ASEAN のこれまでの方針は、そのような相互に批判し合う状況を避け、いわゆる ASEAN Way (ASEAN 流)の規範—他国への介入を行わず、強力な中央官僚機構を避ける—を適用するというものであった。ASEAN が立案する行動計画で重視されるのは、拘束力のない国内政策・計画の策定である。UNEP 等国際機関による援助は重要な役割を果たしてはいるものの、計画の策定および実施は各国の能力次第ということになる。

そういった意味で、越境煙害問題は ASEAN にとっての試練であったといえる。それまでの ASEAN Way に反し、ASEAN 加盟数カ国は、隣国に迷惑をかけながらも厳しい緊急対策を講じないとしてインドネシアを名指しで批判した。また地域煙害行動計画が採択されてからは、ASEAN 大臣会合においては、地主が焼畑を行うことを禁じる規制を各国とも国内法に盛り込むべきであることが、繰り返し強調された。

だが、既存の法令による直接規制の程度も、法や政策の執行能力や遵守率も、国によって異なる。インドネシアの場合、焼畑を完全に禁じる厳格な法令が導入されるとは考えにくい。たとえそのような法令が導入されたとしても、その遵守はインドネシアの政治的不安定性によって大きく妨げられると予想される。

北東アジアの場合、域内各国は具体的公約について話し合う段階に達していない。経済発展の程度と政治体制の多様性により、北東アジア諸国は—特に中国、日本、韓国の3国—環境協力のテーマに関し、異なる観点を持っているように見受けられる。

深刻な公害、砂漠化、陸水と沿岸水域の汚染などの環境の荒廃に苦しむ中国は、地域協力の焦点をそれらの問題に絞るべきだという考え方をとっている。また、中国は地域内の先進国が環境プログラムの確立と運営に対する多額の資金援助と優先分野のプロジェクトへの技術援助を提供すべきだとする。中国は、中国が他国の環境を脅かすような汚染を引き起こしていると思なされることを良しとせず、「越境」という言葉の使用に関してきわめて敏感になっている。

日本は、二国間ベースでの政府開発援助により中国の要求を満たすべく、長年努力してきたと受け止めている。また、日本は多国間イニシアティブがさらなる開発援助のチャネルになりかねないと警戒しているようでもある。日本は各種環境協力プログラムに参加する国々が、ある程度まで費用を分担すべきであると考えている。日本は地域全体の環境の状況をモニタリングすること、あるいは一国レベルでは取り扱えないような越境汚染の問題のみに地域環境協力の範囲を絞るべき

だと考えているように見受けられる<sup>30</sup>。また、日本が主導し出資する多国間イニシアティブは、北東アジアというよりは、より広い東アジアまたはアジア太平洋地域全域を対象とするものが多く、その裏には、広地域を対象とすることで政治的な色彩を薄めようとする意図があるようである。

一方、韓国は、日本とは逆に、北東アジアに地理的範囲を絞った多国間環境協力の推進に熱心である。韓国は、多国間イニシアティブには中国が優先する技術プロジェクトと、日本が優先するモニタリング式の環境管理プロジェクトの両方を含めるべきだという考え方をとっている (Valencia, 1998)。そこで韓国は、NEASPEC の優先プロジェクトとしてエネルギーと大気汚染を提案することにより、中国と日本のアプローチを調整しようとしてきた。韓国は、そのような多国間イニシアティブには国際機関の存在が望ましいと考えている。韓国は環境協力のための調整メカニズムは、UNDP、UN/ESCAP 等の国際機関によって担われるべきこと、また資金に関しては ADB などの国際機関からの資金・技術援助が非常に大事であると考えているようである。

北東アジアの国際関係は、同地域内諸国間の多国間協力というよりは、米国との強力な二国間協力が支配的であった。この傾向は特に日本で強い。しかしながら、最近の傾向として、中国が WTO 加盟を希望するなど、多国間外交に関心を示し始めたことが指摘できる。このように考えると、今日では北東アジアの多国間環境協力を強化する絶好の機会を迎えているとも言える。にもかかわらず、地域機関の欠如および各国政府の見解の相違といった問題に加え、多国間外交の経験の欠如など問題が山積しており、北東アジアの国々は依然として大きな課題に直面していると言えよう。

最後に、南アジアについてであるが、この地域の国際関係も北東アジアと同様、圧倒的な大国であるインドとの二国間関係が支配的であると言える。このため、不適切な耕作、森林破壊、水質汚染によって崩壊の影響を受けているインド亜大陸北部の国際河川についての国家間協議も、ほとんどが二国間での取り組みとして行われてきた。

インドを除く国々は多国間協力を望ましいと考えていると判断してもよいかもかもしれない。だが、こういった国々のイニシアティブはあまり強力ではなかった。SAARC が環境問題に対して関心を示したのは、ようやく 1980 年代後期に、世界的な環境問題をめぐる国際交渉において共通の立場にたって主張する必要が生じた後のことである。だが、その SAARC による国際協力の進行は、インドとパキスタンの核実験による政治的緊張によって中断した。現在のところ、インドは SAARC の進行に技術レベルでしか協力しないと主張しているため、環境大臣会合の早期再開は見込めそうにもない。

こういった残念な事態にもかかわらず、もう一方の SACEP に基づく環境協力は活発化している。サミット・レベルの会合を行わないため、SACEP は外交関係から強い影響を受けず、むしろ独自に決定する自由を享受している。大気汚染に関するマレ宣言の実施には、インド、パキスタンの双方が参加しており、積極的かつ迅速に進められている。

こういった動きに加え、近年バングラデシュ、インド、ネパール、パキスタン、スリランカの科学者、研究者の参加を得て、南アジアの水質データの交換を促進する試みが行われた。このプロジェクトは米国政府が資金援助する研究所が提案したものであるが、同研究所は「南アジア諸国間の協力モニタリング・プロジェクトは、この地域に信頼関係を醸成し、関係を徐々に改善することにより、戦争の脅威と大量破壊兵器拡散の危険性を引き下げることができる」と期待している (Rajen, 1999)。

### 3.3.4. 市民、NGO、学術関係者

国際 NGOs や NGO ネットワークは、アジアの環境ガバナンスにおける新しいアクターとすることができよう。これら NGOs の多くは、特定の国の特定の環境問題を対象としているが、中には地域レベルでの環境保護アプローチを導入し始めた NGOs やそのネットワークも存在する。

<sup>30</sup> なお、地域で取り扱われる問題としては、海洋環境保護と酸性雨が二大問題であったようであるが、近年日本は、気候変動問題も地域にとって重要な政策課題の一つとして捉えているように見受けられる。



このうち一部の NGOs は、国際機関、地域機構や各国政府の後援を受けた地域制度と結びついている。その一例が、IUCN のアジア地域水圏生態系プログラムであろう。IUCN はメコン川委員会との強力な提携関係を維持しつつ、湿地保護区の指定、国内機関への支援、組織的能力の育成、ラムサール条約実施のための各国政府への援助、情報の普及、関係者間のコミュニケーションの促進、メコン川流域開発の環境影響評価等を実施してきた (IUCN, 2000)。

もう1つの好例は、渡り性水鳥の保護に関する NGOs の貢献にみられる。1990年代後期、ウェットランド・インターナショナル/アジア太平洋の管理・調整のもとで、水鳥保護に重要な場所を結ぶいくつかの水鳥ネットワークが設立されたが、ネットワークは水鳥の保護に関心を持つ研究者、自然保護活動家、政府担当官、その他の関係者を開かれたフォーラムで結び、共同研究および保護活動の基盤を提供している。

こういった若干の好例はあるものの、全体的にはアジアのどの小地域においても、多国間環境協力への NGOs の参加はこれまでのところ限られたものであったと言えよう。環境問題に取り組む地域イニシアティブがしばしばトップダウン方式で行われ、特に意思決定レベルを中心に、市民社会、現地自治体、NGO はほとんど参加していないという批判の声がしばしば聞かれる (Micro, 1999)。一般市民と NGO の参加を促すための適切なメカニズムは、今のところ存在しないと断言しても過言ではない。

一方、学術関係者—大学、研究所、科学技術の専門家—も、アジアの地域環境協力への新たな参加者である。学術関係者は、国際機関および各国政府が環境面での脅威を特定し、行動計画や協定の草案を行い、国際協定の実施状況を監視する上で、重要な役割を果たしている。現に、ASEAN、SACEP や SAARC の各種行動計画・プログラムの立案や協定草案に関する意思決定プロセスにおいては、アジア太平洋環境法センター(シンガポール)、ISEAS(シンガポール)、アジア工科大学(タイ)、タイ環境研究所、タタ・エネルギー研究所(インド)などの研究所の法律・科学専門家が数多く参加している。

こういった協力のほとんどは個別プロジェクト毎に任意に行われる場合が多いが、一部の研究所はより総合的な作業に着手し、地域全体の計画と制度の策定や、それらの実施状況の監視を行っている。その好例がストックホルム環境研究所である。同研究所は、長距離越境大気汚染防止に対する地域的アプローチに関する進んだ専門知識を利用し、「南アジアの大気汚染とその越境的影響の規制と防止に関するマレ宣言」の起草に際し、UNEP/EAP-AP と SACEP に対して大きな貢献を行った。また、同研究所は UNEP/EAP-AP および SACEP と共同して加盟国の共通モニタリング・ガイドラインの作成を支援し、技術・資金援助を提供し、実施プロセスの検討を行った。

なお、学術関係者間の国際共同研究も、1990年代から広がる傾向がある。APN や GEF のような国際的共同研究を恒常的に支援する資金メカニズムの設置により、1990年代半ばからこの傾向に拍車がかかっている。

ただし、このような活動が国を越えた「認知の共同体 (epistemic community)」つまり政策課題に対する価値観とアプローチを共有する専門家コミュニティの形成に直接結びつくという保証はない<sup>31</sup>。Haas (1990)によれば、地中海の海洋汚染防止に関する地域活動が成功したのは、「国際的アジェンダを設定し、自分の国を国際的な活動支援と国内での強力な汚染防止対策の導入へと誘導した生態学者と海洋学者の参加」のおかげだという。アジアでは、まだそのようなコミュニティは出現しそうもない。

それどころか、国際機関および政府機関と学術関係者、あるいは学術関係者相互間の結びつきは、任意で一時的なものでしかない。このように不十分な連携関係によって、科学者間や、科学者と政策担当者間、あるいは異なる国の政策担当者間においても軋轢が生じることがある。いくつかのケースでは、一国の科学者のみが地域イニシアティブに関する政策決定者と協議することができ、意思決定プロセスを支配しているという批判の声も上がっている (関係者談話)。

<sup>31</sup> Haas (1990)によれば、「認知の共同体 (epistemic community)」とは、「同じ因果関係を信じ、それらを評価するための実験を行い、共通の価値観を共有する専門家集団である。そのメンバーは共通の事実を共有するだけでなく、事実または観察結果から政策に関係する結論を導くための共通の認識の枠組、つまり「共同の認識」を共有する。」

### 3.4 結論:協力促進のための提言

本稿では、北東アジア、東南アジア、南アジアの 3 地域を対象に、環境協力のための制度について考察した。分析の結果、環境協力のメカニズムは、それぞれ小地域ごとに異なることが明らかにされた。結論部分では各小地域の協力メカニズムの主な特徴をまとめるとともに、若干の提言を行うこととする。

#### 北東アジア

この地域における環境協力のメカニズムの特徴は、以下のようにまとめることができる。

**複数の制度の並立:**北東アジアでは環境大臣、公式の外交チャンネル、環境省庁、NGO、学术界など、さまざまなチャンネルを通じ、複数の環境協力制度が設けられているが、各種チャンネル間の調整はほとんど行われていない。その結果、一部の制度間には重複がみられる。

**入れ子構造:**環境協力の制度が対象とする地理的範囲は、地球的規模から広地域、小地域にいたるまで様々であるが、北東アジアでは、北東アジアを対象とする多国間のイニシアティブ、東アジア地域全体、あるいはそれよりもさらに広いアジア太平洋地域を対象とするものが入り交じった、いわゆる「入れ子構造」の様相が見られる。このうち韓国は北東アジアに主眼を置く傾向があるのに対し、日本はより広い地域(東アジア)またはアジア太平洋地域全域を対象としている。

**異なる参加国:**外交関係や主催する国際機関への加盟状況如何により、参加国が各制度によって異なる。

**脆弱な組織・財政基盤:**ほとんどの環境協力制度は、組織的な構造を持たず、財政的基盤も弱い。そのため、協力の進展は遅々としている。その背景として、地域環境計画やプログラムを管理できる地域機関が存在しないため、各イニシアティブをとる者が交渉を一から始めなければならないことが指摘される。中には組織・財政上の進展が見られず、停滞しているケースもある。

本稿で分析したような北東アジアあるいは東アジア地域における環境協力メカニズムの弱点や不適切な点によって、現に酸性雨や海洋汚染の防止などの個別問題に関する地域協力の進行が妨げられている<sup>32</sup>。では、北東アジアではこの停滞状態から抜け出すことはできるのだろうか、抜け出すためにはどのような方策が可能であり、また必要であろうか。

酸性雨防止に関し、ヨーロッパで講じられた地域対策の第一段階は、酸性沈着、汚染物質排出量、反応・輸送・拡散メカニズムに関する科学的データの収集・解析であった。次の段階では、酸性雨防止のための効果的戦略が策定された。このプロセスで、いくつかの議定書が採択された。第三段階では、国内および局地レベルで汚染低減・防止対策が実施された。東アジアでは酸性雨モニタリング・ネットワークが定期的活動を始めたばかりであることを考慮すると、この地域は欧州の第一段階つまり、ヨーロッパで OECD によって酸性雨モニタリングが開始された 1970 年代半ば一であるといえる。ただし、ヨーロッパと東アジアの最大の相違は、東アジアではすでに第三段階が始まっているという点である。つまり、東アジア地域の国々では、大気汚染と酸性雨問題に対する懸念から、それらに関する国内法の整備や規制の強化が進んでいる。域内途上国はその計画や法律を実施するための十分な資金的・人的・技術的資源を持ち合わせていなかったが、それを補完するために、政府開発援助(ODA)と民間の海外直接投資の双方を通じて、中国をはじめとする域内途上国へ多額の環境投資が行われてきた。こういった環境改善のための経済協力は個々別々に行われ必ずしも効率的でないとの批判も多かったが、昨今では、中国への環境援助の調整を行う「チャイナ・カウンスル」のように国際的で民間ベースのハイレベルな諮問機関が創設される

<sup>32</sup> 酸性雨についてはTakahashi (2000a)とTakahashi & Asuka (2000)を、海洋汚染防止についてはValencia (1995)とHaas (1998)を参照のこと。



など、明るい見通しも出てきている。

このようにみえてくると、東アジアの酸性雨問題に関しては、実はすでにかかなりの協力が行われていると言っても過言ではない。ただ残念ながら、その協力の多くの部分が断片的にしか実施されておらず、その効率性も疑問視されるケースが多い。このため、この地域では、個別のイニシアティブと資金メカニズムの間、二国間および多国間援助プログラムの間、資金提供機関の間、そして地域協力イニシアティブと資金援助メカニズムの間に結びつきが必要とされている。このようなリンクを考察する上で、バルト海地域の事例は多いに参考になろう(Takahashi, 2000b)。

また、既存の環境協力の諸制度に関しては、類似あるいは関連したテーマに関する制度に着目しながら、全ての制度間に何らかの系統だった調整手段を整備する必要がある。これを行うのは容易ではないが、まず第一歩としては、透明性と情報の全面的開示を確保するシステムを構築することが重要である。最近、いくつかの地域および小地域レベルの環境協力イニシアティブが、インターネット上に独自のウェブサイトを開設した<sup>33</sup>。今後この傾向は促進されるべきであるし、また情報の開示度も高めていくべきであろう。

長期的には、包括的かつ戦略的な環境行動計画を中長期の目標として立案する必要がある。そのような地域行動計画はすでに EU、バルト海地域、ASEAN などの地域および小地域で成功を収めている。

もう一つの長期目標として、北東アジアの全関係者が参加できるような枠組を構築する必要がある。この地域の政治的安全保障の状況により、この目標は容易には達成できないであろう。そのため当面は、国際機関と NGO が域内各国をつなぐ上で大きな役割を果たすことが期待される。

さらに、この地域の各国政策担当者は、このような困難な状況に対処するための専門能力を向上させる必要がある。これは特に日本と韓国にあてはまる。この 2 国は環境協力を率先して推進する意欲があるという意味で、互いに共通する部分が多いにもかかわらず、目指す方向性は異なっている。その結果、独立した複数の制度が一貫性なく誕生し、一部の制度は停滞するなど、残念な事態を引き起こしている。両国は独自の利害のみならず、互いの利害、さらに地域の共通利害を織り込んだ地域環境協力戦略を策定する必要がある。

#### 東南アジア(ASEAN)

この地域における環境協力メカニズムの特徴は、次のようにまとめることができる。

**確立された制度・組織機構:** 東南アジアでは、環境以外の様々な分野で地域協力推進の経験を持つ ASEAN が中心となって、多数の環境行動計画やプログラムが策定されている。ASEAN の既存の組織機構はそのまま環境分野にも適用され、環境大臣会合、高級事務レベル会合、個別問題に関する作業部会、ASEAN 事務局環境担当係が設けられており、各組織機構の間には強い連携関係が築かれている。従って、ASEAN 内の環境協力活動の間にはほとんど重複は見られない。

**脆弱な財政構造:** ASEAN は財政面が弱体なため、環境活動の実施についてはほとんど外部からの資金援助に頼っており、援助は大部分がプロジェクト単位で行われる。このため、外部ドナーの注目をひかないプロジェクト案は、実施されずに終わるケースが多い。

このような弱点を克服していくためには、ASEAN 事務局や域内各国が各種環境計画の実施に必要な資金を確保する手段を考えなくてはならない。更に、優先活動分野の焦点を絞り、ASEAN 事務局の能力を強化する必要がある。近年の ASEAN の活動を見る限り、ASEAN はすでにその方向に進んでいるようである。1998 年にシンガポールを議長国として開催された ASOEN 会合では、これまでのプロジェクト中心のアプローチから、政策志向アプローチへの転換を謳い、「新たに発生する地域的および国際的環境問題に対する対応を促進するため、ASEAN 作業部会の

<sup>33</sup> たとえば、EANET、TEMM、TRDAP、ツル・ネットワークなどは、それぞれ独自のホームページを持っている。NEASPEC の共同活動も UN/ESCAP のウェブサイトで紹介されている。

再編成と合理化」を行う決定が下された。その結果、3つの作業部会—フィリピンを議長とする「自然保護と生物多様性」、タイを議長とする「沿岸および海洋環境」、マレーシアを議長とする「多国間環境協定」—のみが残された(Sunchindah, 1998)。

以上の点に加え、ASEANの協力方式—「他国の国内事情には介入しないという規範」を強調する「ASEAN精神」あるいは「ASEAN Way」—が環境面での課題との取り組みには不適切なのではないかという批判もある(Hamzah, 2000/Tay, 2000)。この意味で、越境大気汚染と越境煙霧の防止は、ASEANにとって真の試練となった。

だが、この傾向は徐々に変化しているようである。域内数カ国の環境大臣は、ASEAN会合の場で、領土権に関わる問題であるにもかかわらず、インドネシアの林業および土地利用政策を公式に非難した。ASEANは、拘束力を持つASEAN越境煙害防止協定の起草および締結に向けての交渉を進めている最中である。だが、法的拘束力を持つ条約が唯一の解決策というわけではない。各国に公約を守らせるためのメカニズムを構築することがより重要であろう。そのため、地域レベルの政策担当者は各国による公約の遵守を促すための国内措置と技術・資金援助メカニズムを、公式・非公式な方法を用いて調整する必要が出てくるであろう。

### 南アジア

この地域における環境協力のメカニズムの特徴は、次のようにまとめることができる。

**2つの制度の並立:** SACEPの設立は南アジアの多国間環境協力にとって重要な契機となった。

SACEPの下で多数の行動計画とプログラムが策定され、実施されてきた。一方SACEP設立の3年後にはSAARCが設立され、1980年代後半より環境に関する地域協力も進められてきた。これら2つの主な制度の間には公式な結びつきが無く、それらの活動の間には重複する部分がある。そのため、SACEPにとって各国の国内資源を活用し、独自の計画とプログラムを実施するための能力が著しく制限されているという指摘もなされている。

**脆弱な財政構造:** 人口増加、貧困、持続不可能な環境管理などの深刻な問題と直面している南アジアは、環境保護のための十分な財源が無いという問題を抱えている。資金は国際機関と二国間援助によって提供されるが、それは提供する側の意向にゆだねられる。南アジア地域内その他の資金源から提供される資金額では、計画されている環境活動の全部を実施するには不十分である。

2つの主な地域制度、SACEPとSAARCの間には正式なつながりが無いため、それらの機関は共同してそれぞれのプロジェクトや活動を調整し資源の効果的利用を図り、地域環境協力を強化していく必要がある。

だが、今のところそのような連携の徴候は見られない。インドとパキスタンの核実験によって引き起こされた政治的緊張により、SAARCによるあらゆる協力活動が中断された。このような不運な成り行きにもかかわらず、SACEPに基づく環境協力は活発化している。従って、SACEPは地域環境協力の戦略的目標達成に向けて前進し、この地域の持続可能な開発と相互の信頼感と平和の醸成という両面を推進する必要がある。この目標に向け、米国政府が資金援助する研究所が組織した南アジアの水質データ交換促進のための「南アジア水資源ワークショップ」の開催は一つの望ましい方向を示しており、このような活動は更に促進されるべきであろう。

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## Appendix 2

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### Whither NEAC ?

#### An Overview of the Past, Present and Future of Environmental Cooperation in Northeast Asia<sup>1</sup>

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Kazu Kato  
and  
Wakana Takahashi

#### 1. A Historical Perspective

- ◆ Globalization of environmental problems, perceptions and policy responses: as evidenced by the 1972 Stockholm Conference (UNCHE); UNEP created within the UN system
- ◆ The need for regional cooperation increasingly recognized, even prior to the Stockholm Conference, to address issues of common concern, particularly concerning the conservation and management of internationally shared natural resources  
<e.g.> International waters and semi-enclosed seas, fisheries and migratory birds/ animals
- ◆ Regional approaches promoted by UNEP  
<e.g.> Establishment of Regional Offices within UNEP  
Institutional support to UN Regional Economic Commissions, including ESCAP  
Regional Seas Programme
- ◆ Paradigm shift from “environmental protection” to “sustainable development”  
<e.g.> World Conservation Strategy (1980)  
WCED (the Brundtland Commission) report (1987)
- ◆ The Rio Earth Summit (UNCED 1992)  
Agenda 21 calls for global partnership and enhanced cooperation at regional and subregional levels.

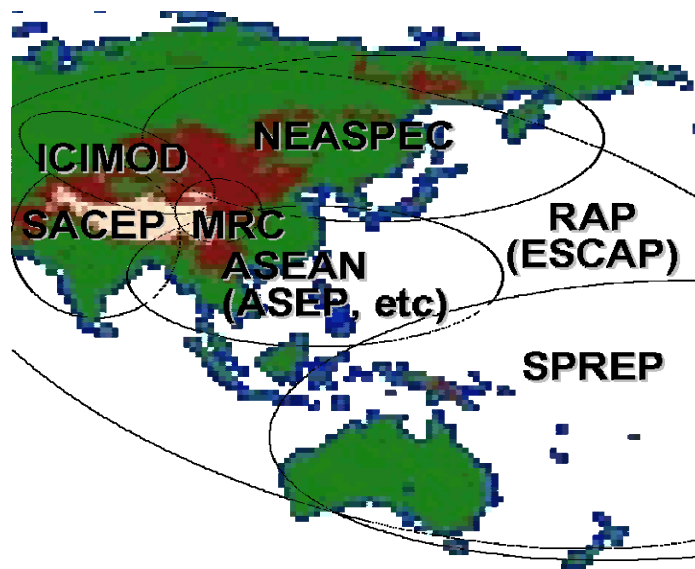
#### 2. Regional Environmental Programmes in the Asia-Pacific Region

##### *2.1 The Region as a Whole: the Regional Action Programme (RAP) for ESCAP on Environment and Development:*

- ◆ The 1<sup>st</sup> Ministerial Conference of ESCAP on Environment and Development held in 1985, releases the 1<sup>st</sup> State of the Environment report for Asia and the Pacific.
- ◆ The 2<sup>nd</sup> Ministerial Conference adopts a “Regional Strategy for ESSD.”
- ◆ Regional Action Programme 1996-2000 adopted by the 3<sup>rd</sup> Ministerial Conference.
- ◆ The 4<sup>th</sup> MCED (to be held in Kitakyushu, Japan in early September 2000) is expected to adopt a revised RAP, 2001-2005, emphasizing its ownership by member countries while calling for further regional cooperation and subregional delivery.

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<sup>1</sup> This is a summary of the presentation made at the 9th Northeast Asian Conference on Environmental Cooperation (NEAC), 26-28 July, 2000, Ulaanbaatar, Mongolia.



## 2.2 Subregional Environmental Programmes

### Southeast Asia

- ◆ ASEAN Initiatives: ASEAN Sub-regional Environmental Programme (ASEP I-III, 1977~1992), ASEAN Strategic Plans of Action on Environment, ASEAN Agreement on the Conservation of Nature and Natural Resources (1985, has not entered into force), ASEAN Cooperation Plan on Transboundary Pollution (1995), and Regional Haze Action Plan (1997)
- ◆ East Asian Sea Action Plan (1981~ , revised in 1994)
- ◆ The Mekong River Commission (MRC) revived and the Agreement on Cooperation for Sustainable Development of the Mekong River Basin signed in 1996

### The South Pacific

- ◆ South Pacific Regional Environmental Programme (SPREP) and the South Pacific Action Plan on Marine Environment (1982)
- ◆ Noumea Convention for the Conservation of Natural Resources and the Environment (1986)
- ◆ SPREP as an international organization established in 1992 (came into being in 1995)
- ◆ Revised Action Plans, and a new Strategy document being prepared for adoption in 2000

### South Asia

- ◆ South Asia Co-operative Environment Programme (SACEP) established in 1981
- ◆ South Asian Seas Action Plan (1995)
- ◆ Malé Declaration on Prevention and Control of Air Pollution and its Likely Transboundary Effects (1998)

### Hindu Kush/Himalayas

- ◆ International Center for Integrated Mountain Development (ICIMOD) established in 1983

### Central Asia

- ◆ International Fund for the Aral Sea (IFAS)

### 3. Environmental Cooperation in Northeast Asia

- ◆ The burgeoning (almost bursting) emergence of multilateral as well as bilateral programmes and forums, in the post-UNCED period
- ◆ At different levels of international and national governance, with a multiple layer of actors and participants
- ◆ With different geographical and thematic /issue coverage
- ◆ With different institutional arrangements (if at all)

#### *3.1 Cooperation at the Subregional Level*

##### Intergovernmental Programmes and Forums

- ◆ Northeast Asian Conference on Environmental Cooperation (NEAC)
- ◆ Northeast Asian Subregional Programme on Environmental Cooperation (NEASPEC)
- ◆ Action Plan for the Protection, Management and Development of the Marine and Coastal Environment of the Northwest Pacific Region (NOWPAP)
- ◆ Tripartite Environment Ministers Meeting (TEMM)
- ◆ Tumen River Area Development Programme (TRADP)

##### Cooperative Network of Local Governments

- ◆ Association of Northeast Asia Regional Governments

##### NGO Networks and Forums

- ◆ North Asia and North Pacific Environmental Partnership (NAPEP, formerly known as NEANPEF)
  - ◆ Atmosphere Action Network East Asia (AANEAA)
- And many others working on single issues, especially on migratory birds and wetlands

#### *3.2 Multilateral Cooperation Covering East Asia/ Asia-Pacific Region*

##### Intergovernmental

- ◆ Acid Deposition Monitoring Network in East Asia (EANET)
- ◆ Environment Congress for Asia and the Pacific (ECO ASIA)
- ◆ Asia-Pacific Regional Seminar on Climate Change
- ◆ Asia-Pacific Economic Cooperation (APEC)
- ◆ Asia-Pacific Network for Global Change Research (APN)

##### Intergovernmental, with NGO Support

- ◆ Asia-Pacific Migratory Waterbird Protection Strategy

##### NGO Initiatives

- ◆ Asia-Pacific NGOs Environmental Conference (APNEC)
- ◆ Asian NGO Coalition for Agrarian Reform and Rural Development (ANGOC)
- ◆ Asia Pacific People's Environment Network (APPEN)



Table: Major Environmental Cooperation Initiatives in Northeast Asia

	IG or Non-G	Geographic coverage	Thematic coverage	Inst'nal arr'ts/ Secretariat	Funding
NEAC	IG	NEA	C	Host country	EAJ & host countries
NEASPEC	IG	NEA	C (3 priority areas)	SOM/ ESCAP	ADB, ESCAP as necessary
NOWPAP	IG	NEA	Marine environment	UNEP	Countries & UN system
TEMM	IG	NEA (China, ROK, Japan)	C (4 priority areas)	MOEs	3 Gov'ts
TRADP	IG	NEA	Pollution, biodiversity	UNDP	UNDP, GEF and other donors
Ass'n of NEA Reg. Gov'ts	Local gov'ts	NEA	C	Rotating	Local gov'ts
NAPEP	Non-G	NEA + North Pacific	C	Exec. com'ttee/ IGES	External sources
AANEA	Non-G	NEA	Atmosphere	ROK NGOs	External sources
RAP	IG	AP	C	ESCAP	Countries & UN system
ECO ASIA	IG	AP	C	EAJ	EAJ
EANET	IG	EA	Acid deposition	EAJ (interim)	EAJ (interim)
Reg. Seminar on CC	IG	AP	Climate change	EAJ	EAJ/ UNFCCC etc
APEC	IG	AP & N&S America	C	APEC Sec.	Self
APN	IG	AP	C (global)	GOJ/ Hyogo	GOJ/ Hyogo
Migratory Waterbird Strategy	IG/ Non-G	AP	Migratory waterbirds	Ramsar Con-vention sec.	Self
(e.g.) NEA Crane Network	IG/ Non-G	NEA	Cranes	Network	Self/ External sources
APNEC	Non-G	AP	C	ROK/ Japan	JEC/ External sources

\* IG: intergovernmental (includes inter-ministerial/agency level)

\* Non-G: non-governmental

\*C (thematic coverage): comprehensive

#### 4. Major Features of Environmental Cooperation in Northeast Asia

- ◆ Compared to other subregions, the relatively recent (post-UNCED) emergence of a multitude of subregional environmental programmes, forums and bilateral agreements
- ◆ Some of these appear to be comprehensive in their scope of activities or issues to be dealt with (NEAC, NEASPEC, TEMM, NAPEP, ECO ASIA, etc.), or are at least intended to be so, while some focus on a single issue (EANET, Crane Networks).
- ◆ Some multilateral initiatives target the subregion of Northeast Asia, while some others target the whole region of East Asia or, more broadly, Asia and the Pacific.
- ◆ The initiatives were established through different channels. There has been little coordination among them, and there is considerable overlap and redundancy.
- ◆ Some do not have clear, long-term goals.
- ◆ Many do not have a solid institutional structure and secure source of funding, except for those provided largely by Japan.
- ◆ Priority areas identified include air pollution (acid rain), inland and coastal water pollution, loss of biodiversity and deforestation.
- ◆ The status of participating countries differs from one initiative to another, depending on the international membership of the host country/organization.
- ◆ The assistance and involvement of international organizations such as UN/ESCAP, UNEP, UNDP, and ADB have been crucial in facilitating such initiatives.

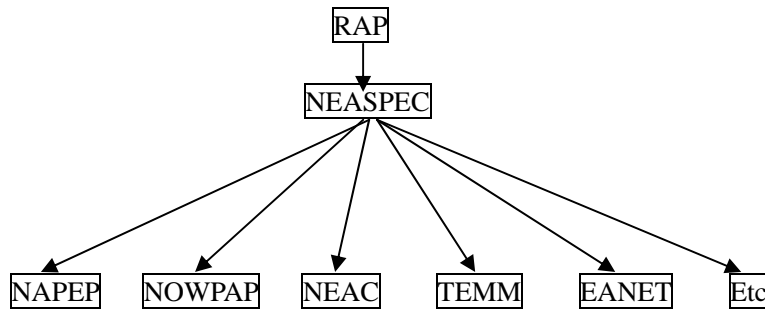
#### 5. Prospects for the Future

- ◆ Difficulties remain, especially in respect of the complex geopolitics of the subregion and the predominance of Japan as the single largest source of bilateral financial/technical assistance.
- ◆ But there are hopeful signs as well. South Korea's economy has quickly recovered from the "IMF shock", and coupled with the recent détente between North and South (a flurry of new diplomatic moves in the region surrounding North Korea), the ROK is playing an increasingly active leadership role in promoting multilateral environmental cooperation.
- ◆ Let a hundred flowers bloom? Definitely "Yes," especially in the early formative stages of environmental cooperation in Northeast Asia.
- ◆ However, there is clearly a need now to establish a systematic relationship among all the initiatives that will create synergy for strengthening cooperation among the various programmes and forums, including NEASPEC, NEAC, TEMM and NAPEP, by defining the role of each mechanism for environmental cooperation.

Conceptually, there are two options to put this into effect:

**Option A: Hierarchical Model**

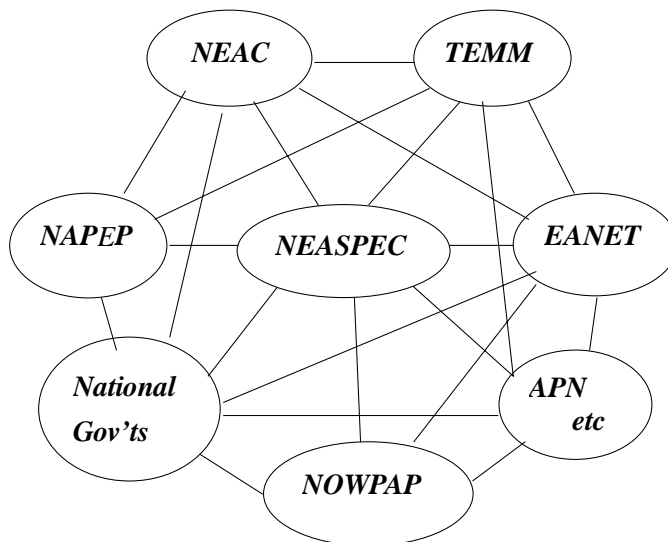
- ◆ NEASPEC to provide the overall framework for environmental cooperation in Northeast Asia as an official intergovernmental programme, itself within the framework of RAP 2001-2005 and beyond. All other existing programmes, projects, and forums would become a component (or a medium for implementing a part) of NEASPEC.
- ◆ NEASPEC would be designed to serve as a truly comprehensive programme of action, clearly setting out its objectives, goals and strategies, identifying priority areas and projects, providing for collaboration and partnerships with the private sector businesses, NGOs and scientific/research communities, and supported by an institutional structure built on a solid financial basis.



(NEA component )

**Option B: Horizontal/Multi-layer Linkage Model**

- ◆ With NEASPEC at the hub of a wheel, linkages with other programmes and forums would be provided by means of, for example, joint planning and implementation of projects, holding joint or back-to-back meetings and workshops, or by linking each other on the Internet.



N.B.: The two models are not mutually exclusive, and in reality, elements of both will have to be utilized, as exemplified in the “modular multilateralism” of the Baltic Sea region (Takahashi, 2000, p.13-15.) Alternatively, since Option B is closer to the present state of affairs, it could be adopted in the near term, in transition in the longer term to Option A.

## 6. What is the Role of NEAC?

- ◆ NEAC was started primarily as a forum for exchange of information and policy dialogue among environmental ministries/agencies of participating countries, but over the years has developed into an open and flexible channel of communication and discussion among environmental authorities of both national and local governments as well as experts from scientific and NGO communities.
- ◆ The range of topics covered by NEAC is very broad and comprehensive, often taking up issues which are only now emerging on the horizon or those related to other policy domains, sectors and disciplines.
- ◆ In either of the two options, NEAC can play a vital role by providing expert views on setting the agenda and priorities for NEASPEC, and by acting as a channel of communication between different programmes, forums, and other stakeholders, or even as a catalyst in implementing some of the programmes and projects.

Kazu Kato, IGES

In Conclusion,


### **Some Personal Observations & Suggestions**



- ◆ **De-emphasize the role of Japan (and of EAJ)** as the predominant financier and promoter of bilateral environmental programmes and projects in the subregion.
- ◆ At the same time, **more Japanese support should be directed towards subregional, multilateral programmes and mechanisms.**
- ◆ We are very much encouraged by, and strongly support, the **ROK's leadership and various initiatives** (such as TEMM) in taking the **subregional/multilateral approach to environmental cooperation in Northeast Asia.**
- ◆ NEAC should become **a truly open, transparent and comprehensive forum/process** for promoting cooperation and partnership among environmental authorities (national and local governments), private sector businesses, civil society organizations (CSOs), and research/academic communities.
- ◆ But it should **NEVER become a project-based or project implementation mechanism.**





Appendix 3: Table and Map of Major Subregional Environmental Initiatives in Asia and the Pacific



Takahashi & Kato, IGES

Title	Participating Countries	Profile	Major Events
<b>(1) Northeast Asia</b>			
			
<b>NEASPEC</b>	China, Japan, South Korea, Mongolia, North Korea, and Russia	Comprehensive and intergovernmental programme of environmental cooperation. Facilitated by the UN/ESCAP.	1993 1 <sup>st</sup> Senior Official Meetings (Seoul) 1996 Adoption of the “Framework for the NEASPEC” (Ulaanbaatar)
<b>NEAC</b>	China, Japan, South Korea, Mongolia, and Russia	An annual forum for government officials of environmental agencies and other environmental specialists.	1988 Japan-Korea Environmental Symposium 1992 1 <sup>st</sup> Conference
<b>NOWPAP</b>	China, Japan, South Korea and Russia	Intergovernmental programme for protecting and managing (transboundary) marine environmental issues in Northwest Pacific. Endorsed by UNEP.	1994 1 <sup>st</sup> Intergovernmental Meeting and adoption of the Action Plan
<b>TEMM</b>	China, Japan and South Korea	An annual meeting of the tripartite environment ministers	1999 1 <sup>st</sup> Meeting 2000 2 <sup>nd</sup> Meeting
<b>TRADP</b>	China, North Korea, Mongolia, Russia and South Korea	TRADP promotes regional economic cooperation. Apart from investment and trade, transport, tourism, human resource, development, telecommunications, and energy, environmental sector has been given priority.	1995 Memorandum of Understanding on Environmental Principles signed 1997 GEF decided to finance in developing a Strategic Action Programme (SAP) 2001 Action Programme (expected)
<b>NAPEP</b> (formerly <b>NEANPEF</b> )	China, Japan, South Korea, North Korea, Mongolia, Russia, and USA (Alaska, etc.)	A non-governmental network of environmental experts and NGOs	1992 NEANPEF formed in Seoul 1993 Irkutsk meeting and workshop, Russia 1996 Kushiro meeting and workshop, Japan 1997 Amur River workshop, Russia 1998 Dontin/Yueyang workshop, China

Title	Participating Countries	Profile	Major Events
<b>(2) East Asia</b> 			
<b>EANET</b>	China, Indonesia, Japan, ROK, Malaysia, Mongolia, Philippines, Russia, Thailand, Vietnam, (Laos)	Intergovernmental network for acid deposition monitoring. Endorsed by the government of Japan.	1993 1 <sup>st</sup> Expert Meeting 1997 1 <sup>st</sup> Intergovernmental Meeting 1998 Preparatory-Phase Activities 2000 Full operation(expected)
<b>(3) ASEAN (Southeast Asia)</b> 			
<b>ASEAN</b>	Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam	Under the framework of ASEAN, many cooperative efforts have been initiated.	1977 ASEAN Environment Plans (~1992) 1985 Agreement on the Conservation of Nature and Natural Resources(not enter into force) 1989 1 <sup>st</sup> ASOEN 1994 Strategic Plan of Action on Environment 1994 Cooperation Plan on Transboundary Pollution 1997 Regional Haze Action Plan 1999 Strategic Plan of Action on Environment II 2000 Environmental Education Action Plan

Title	Participating Countries	Profile	Major Events
<p><b>(4) Mekong River</b></p>  <p style="text-align: right;"><a href="http://www.theodora.com/maps">www.theodora.com/maps</a></p>			
<p><b>Mekong River Commission (MRC)</b></p>	<p>Cambodia, Laos, Thailand, and Vietnam</p>	<p>An intergovernmental organization for cooperation on all fields of sustainable development, utilization, management and conservation of the water and related resources of the Mekong River Basin.</p>	<p>1957 Creation of the Committee for coordination of investigation of the Lower Mekong Basin</p> <p>1978-95 Interim Mekong Committee (without Cambodia)</p> <p>1995 Signing of the Agreement on the Cooperation for the sustainable development Of the Mekong River Basin</p>
<p><b>(5) East Asian Sea</b></p> 			
<p><b>East Asian Sea Action Plan</b></p>	<p>Australia, Cambodia, China, Indonesia, ROK, Malaysia, Philippines, Singapore, Thailand and Vietnam</p>	<p>Intergovernmental programme for protecting and managing (transboundary) marine environmental issues in East Asian Sea. Endorsed by UNEP.</p>	<p>1981 Action Plan for the Protection and Sustainable Development of the Marine Environment and Coastal Areas</p> <p>1994 A revised Action Plan and a Long-term Strategy for the Coordinating Body on the Seas of East Asia (COBSEA)</p>



Title	Participating Countries	Profile	Major Events
<p><b>(6) South Asia</b></p>  <p style="text-align: right;"><a href="http://www.theodora.com/maps">www.theodora.com/maps</a></p>			
<b>SACEP</b>	(Afghanistan), Bangladesh, Bhutan, India, Iran, Maldives, Nepal, Pakistan, and Sri Lanka	An intergovernmental and comprehensive environmental programme	1981 Establishment of SACEP 1992 Adoption of South Asian Seas Action Plan 1995 Adoption of South Asian Seas Action Plan 1997 Male Declaration on control and its prevention Of air pollution and its likely transboundary effects 2000 Environmental education and training action plan
<b>SAARC</b>	Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka	An intergovernmental and comprehensive organization for economic and social development of member states	1987 Launch of environmental studies 1997 Action Plan on Environment Adoption of Common stand on climate change
<p><b>(7) Hindu Kush-Himalayas</b></p>  <p style="text-align: right;"><a href="http://www.theodora.com/maps">www.theodora.com/maps</a></p>			
International Center for Integrated Mountain Development (ICIMOD)	Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal, and Pakistan	An International center established by the governments of the region for the purpose of implementing various programmes to attain environmental stability and sustainability in mountain ecosystems and the eradication of poverty	1983 Development of the ICIMOD (center) 1984 Phase 1 work programme 1987 Establishment of core programmes 1990 1 <sup>st</sup> Quinquennial Review (QQR) 1994 Reorganization of the programmes Regional collaborative programme (1995-)

Title	Participating Countries	Profile	Major Events
<p><b>(8) The South Pacific</b></p> <div style="text-align: center;"> </div> <p style="text-align: center;">Source: <a href="http://www.ext.grida.no/ggynet/agree/mar-env/c044.htm">http://www.ext.grida.no/ggynet/agree/mar-env/c044.htm</a> (Yearbook of International Co-operation on Environment and Development 1999/2000)</p>			
SPREP	Australia, Cook islands, Fiji, France, Kiribati, Marshall islands, Micronesia, Nauru, New Zealand, Niue, Palau, Papua new Guinea, Solomon Islands, Tonga, Tuvalu, UK, USA, Vanuatu and Western Samoa	A regional organization established by the governments and administrations of the Pacific region for the purpose of managing environmental issues	<p>1973 Adoption of Programme for nature conservation</p> <p>1982 South Pacific Regional Environment Programme South Pacific Action Plan (marine environment)</p> <p>1986 Noumea Convention (marine environment: entry into force in 1990)</p> <p>1992 Agreement establishing the SPREP (1995: entry into force)</p> <p>1997-2000 Action Plan for Managing the Environment of the South Pacific Region</p>

\* This table and map was originally submitted to ECO ASIA long-term perspective Project (LTPP) 7<sup>th</sup> International Workshop, 22-23, Feb. 2000, Shonan International Village, Kanagawa, Japan. This is the revised version.