

Chapter 1

Introduction: Environmental Issues and Japan's ODA in Asia

1.1 Japan's ODA in Transition

The objective of this report is to analyze the development of social capacity for environmental management in industrializing Asian countries and produce new ideas for Japan's future international cooperation.

International trends in environmental cooperation have been continuously changing since the early 1990s. The United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro in 1992 was one of the biggest events in its initial period. With the start of the 21st century, international cooperation also entered a new era, includ-

ing environmental cooperation. In September 2000, the United Nations announced Millennium Development Goals (MDGs) for the target year 2015. As shown in Table 1, there are eight main objectives and 18 specific targets, three of which relate to the environment and sustainable development. These environment-related targets are -we ought to say- not comprehensive for the diversified characteristics of environmental issues. The evaluation indicators and benchmarks under development so far do not satisfy environmental and international cooperation experts. Poverty Reduction Strategy Papers (PRSPs) prepared by developing countries with the World Bank's

Table 1 Development Approaches after 2000

Organization	Plan	Summary
United Nations	Millennium Development Goals (MDGs) (September 2000)	Adopted at UN Millennium Summit. Eight goals and eighteen targets to be achieved by 2015. 1. Eradicate extreme poverty and hunger 2. Achieve universal primary education 3. Promote gender equality and empower women 4. Reduce child mortality 5. Improve maternal health 6. Combat HIV/AIDS, malaria, and other diseases 7. Ensure environmental sustainability Target 9: Integrate the principles of sustainable development into country policies and programmes, and reverse loss of environmental resources Target 10: Reduce by half the proportion of people without sustainable access to safe drinking water Target 11: Achieve significant improvement in lives of at least 100 million slum dwellers by 2020 8. Develop a global partnership for development
The World Bank	Poverty Reduction Strategy Paper (PRSP) - Since September 1999. 72 countries done as of July 2002.	Prepared by developing countries based on the five core principles. 1. Country-driven 2. Results-oriented 3. Comprehensive 4. Partnership-oriented 5. Based on a long-term perspective
OECD	Capacity 2015 (August 2002)	Launched from Capacity 21. Community capacity development emphasized. 1. Capacity development for communities 2. Strategies for sustainable development 3. Capacity development for multilateral environment agreements 4. Capacity development for the small island developing states 5. Strategic capacity development facility
Japan	Koizumi Initiative at WSSD (September 2002)	Human resource development for sustainable development emphasized. - "The Decade of Education for Sustainable Development" - Assistance more than 250 billion yen over the next five years for education - Environment-related human resources development for 5,000 persons in the next five years

Box 1 Important Plans for Environmental Management in Koizumi Initiative at WSSD (August 31, 2002)

■ People and Hope (Human Resources Development)



- (1) "The Decade of Education for Sustainable Development"
- (2) Assistance more than 250 billion yen over the next five years for education

■ Ownership and Solidarity - Development -

■ Today's Complacency, Tomorrow's Plight - Environment -



I. Environment-related Assistance for Developing Countries

- (1) "Environmental Conservation Initiative for Sustainable Development (EcoISD)"
- (2) Environment-related human resources development for 5,000 persons in the next five years (beginning in FY 2002)

II. Climate Change

- (1) Promotion of the Kyoto Protocol
- (2) Clean Development Mechanism (CDM)

III. Forest

- (1) Asia Forest Partnership (AFP)

IV. Biodiversity

- (1) Early ratification of the Cartagena Protocol on Biosafety to the Convention on Biological Diversity

V. Water

- (1) Safe and stable water supply and development of hygienic facilities
- (2) Co-operation with NGOs and Women

VI. Environment-related Treaties

- (1) Early entry into force of the Stockholm Convention on Persistent Organic Pollutants
- (2) Early ratification of the Rotterdam Convention on Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade

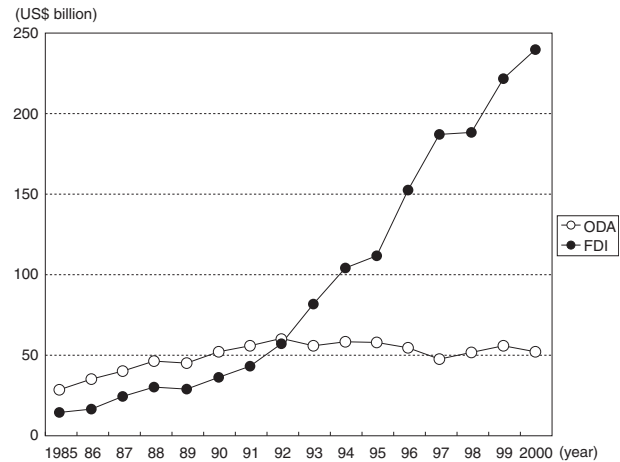
support are to be coordinated with MDGs in conjunction with overall goals among international organizations. Developed countries which individually have provided bilateral cooperation now must think how they can or should contribute to this big project or how they can make a difference in their cooperation approaches between multilateral cooperation and how they can meet the needs of developing countries as well as how bilateral donors can cooperate with each other for more effective and efficient outcomes.

The World Summit on Sustainable Development (WSSD) was held in Johannesburg, South Africa from August 26 to September 4, 2002 to summarize achievements in international cooperation till the year "Rio plus 10" and to extract some lessons for future directions. But in fact, the Summit was not as successful as UNCED in 1992 was in terms of producing a definite master plan for achieving sustainable development of the countries worldwide.

In the Summit, the Japanese government announced EcoISD (Environmental Conservation Initiatives for Sustainable Development), which had been developed from ISD in 1997 and put importance in ownership and partnership of recipient countries and capacity development in the environmental field, and adopted aid plan of educational cooperation with the amount of 250 billion yen and support for human resource development (5,000 persons) in the environmental field in the coming five years (see Box 1).

However, Japan is now facing severe financial problems and lost the position of top donor of official development assistance (ODA) in 2001. On the other hand, foreign direct investment (FDI) has increased steadily in recent decades. As Figure 1 indicates, the amount of ODA from Japan has been taken over by FDI since 1992 and, in the year 2000, the difference in the amount is as much as five times. Taking these into consideration, both Japan and counterpart countries need to rethink the role of ODA with a broader

Figure 1 Inflows of ODA and FDI to Developing Countries (2001 year price)



Sources: DAC [2001] and UNCTAD [2002]

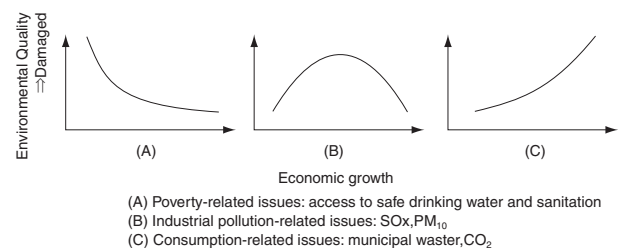
view of international cooperation and a more effective and efficient approach toward environmental cooperation which includes the contributions of the private sector and civil society.

In order to make the cooperation work more effective, one must know how societies of the recipient countries have developed in their environmental management and will develop and what kind of assistance is needed.

1.2 Economic Growth and Environmental Issues

Countries face different environmental issues upon levels of economic growth and industrialization. The World Bank [1992, pp.10-11] and Bai and Imura [2000] suggest that there are roughly three types of environ-

Figure 2 Economic Growth and Environmental Issues



Sources: Bai and Imura [2000]

mental issues from the viewpoint of economic level (Figure 2). The first type is so-called poverty-related issues such as access to safe drinking water and sanitation, which are monotonically improved as the economy grows. These represent environmental and living infrastructures.

Industrialization leads a country to the second stage of the issue categorization. SO_x or PM₁₀ are typical in this stage. Generally speaking, we assume inverted-U curves for these issues, so-called environmental Kuznets curves (EKC) in the relations of economic growth and environmental level, while the well-known original concept by Simon Kuznets is about economic growth and income disparity. Industrialization without effective regulations and rational disciplines worsens ambient conditions in a society and the situation improves through economic growth by strict regulation implementation and social pressure due to increasing public environmental awareness, improving educational level, and so on. The concept of EKC is well recognized but there are critical discussions whether it really exists. Not a few empirical studies have tried to observe real EKC (Grossman and Krueger [1995], Panayotou [1996], Kaufman et al. [1997]). Our research team tested EKC for six major environmental issues; SO_x, NO_x, CO₂, access to safe drinking water and urban sanitation facilities, and deforestation (Matsuoka et al. [1998]). They applied the elasticity analysis to cross-country data at two time points (1980 and 1990) found that only SO_x may have empirical EKC.

As industrial pollution is improved after reaching its peak and economic growth continues, a society faces new emerging environmental issue such as CO₂ or municipal waste management, which are consumption related issues. These problems, generally speaking, constantly worsen as economic activities and people's consumption increase.

Since environmental problems are becoming quite severe in industrializing developing countries and it is very critical to say

that a country can adopt either of them or both of them without doing anything, this report focuses on how Asian countries can deal with industrialization and environmental problems.¹

1.3 Social Environmental Management Systems in Asian Countries

Having many stakeholders involved is very important in solving social problems. The social point of view can withdraw the dynamics of the environmental problems. This report presents a new idea, Social Capacity for Environmental Management (SCEM), referring to the overall capacity of a society as a whole to deal with environmental issues and work for sustainable development. And an actor- and interrelation- oriented way of thinking leads us to a systematic analysis framework, that is, Social Environmental Management System (SEMS). SEMS has three main actors; the government, firms and citizens, and a focus should be put also on interrelations among the actors. The framework is also concerned with national and local relations in social environmental management. The concepts of SCEM and SEMS and their application are presented in Chapters Two and Three. Three development stages and evaluation indicators of SCEM are also proposed and applied in these chapters.

Based on the concept of social capacity development for environmental management, three experts from China, Thailand and Indonesia report their SEMS analysis research in their countries in Chapters Four to Six.

This topic report is based on the external evaluation on environmental cooperation focused on Japan's Environmental Center projects by the Japan Society for International Development (JASID) in the fiscal year 2002 and on the International Workshop on Social Capacity Development for Environmental Management and International Cooperation in Asia held on January 27 and 29 in Hiroshi-

ma and Tokyo (organized by the Graduate School for International Development and Cooperation, Hiroshima University).
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Note:

1. The categorization of environmental issues and economic growth is simple and broadly accepted but note the difference in what developing countries are experiencing and what developed countries experienced. It is often said that developing countries face different types of environmental problems together, not one by one like in the history of developed countries, due to rapid economic growth and globalization of the issues.

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