Japan Environment Quarterly

News from the Environment Agency

Vol. 5 No. 3 September 2000

ECO ASIA 2000

The Ninth Environment Congress for Asia and the Pacific (ECO ASIA 2000) was held in Kitakyushu, Japan, on 3 September, 2000. The Congress was chaired by H.E. Ms. Yoriko Kawaguchi, Minister of State and Director-General of the Environment Agency of Japan. The Hon. Dato' Law Hieng Ding, Minister for Science, Technology, and the Environment of Malaysia, served as Vice-Chair of the Congress. Two major topics were the Rio+10 meeting to be held in 2002, and momentum towards the success of COP6. Some of the main contents of the congress are noted below.

Regional Cooperation towards the Success of "Rio+10" (review of progress during the 10 years since UNCED, to be held in 2002)

Mr. Kazuo Matsushita of the Institute for Global Environmental Strategy (IGES) delivered a progress report on Phase II of the ECO ASIA Long-term Perspective Project. Following it, Dr. Klaus Topfer, Executive Director of the United Nations Environment Programme (UNEP), Mr. Lowell Flanders, Assistant Director of the United Nations Department of Economic and Social Affairs (UNDESA), and Prof. Motoyuki Suzuki, Vice-rector of the United Nations University (UNU) made leadoff speeches.

Many participants shared the view that "Rio+10" presented an excellent opportunity for countries to reaffirm commitments to the implementation of Agenda 21, and supported the proposal of holding the meeting in Indonesia. It was pointed out that in the follow-up of Rio+10, frameworks would be needed to make changes in society, such as globalization and the information technology revolution, motivation for sustainable development. Many countries of the Asia-Pacific region expressed their hopes for higher levels of financial assistance, technology transfers and capacity building from developed countries. In addition, the view was expressed that developing countries need not only infrastructure but also to establish environmental legal infrastructures, and environmentally-sound science and technology, as well as monitoring and

ECO ASIA 2000, Opening Session

(cont'd pg.2, ECO ASIA 2000)

Yoriko Kawaguchi was appointed a Minister of State and Director-General of the Environment Agency in 2000.

Prior to her appointment to the cabinet, she had been a managing director of Suntry Ltd. Since 1993, responsible for customer relations and environment.

Aside from her position, she serves as a member of the Trilateral Commission and a special member of the Japan Association of Corporate Executives.

Before joining Suntory Ltd., she worked in the Ministry of International Trade and Industry of Japan, as Deputy Director-General for Global Environmental Affairs.

C O N T E N T S

(from pg.1, ECO ASIA 2000)

assessment systems.

The Environment Minister for Japan, Ms. Yoriko Kawaguchi, proposed the creation of an eminent persons' meeting of this region for environment and development aimed at formulating new development models to help define equitable and environmentally-sustainable society, with a preparatory meeting to be held preferably by the end of this year. The participants welcomed the proposal.

Momentum towards the Success of the 6th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP6)

Dr. Jan Pronk, Minister for Housing, Spatial Planning and the Environment of the Netherlands presented a leadoff speech.

The delegates expressed the common view that the early entry into force of the Kyoto Protocol was a clear priority and called for strong political leadership in making COP6 the forum for overcoming any obstacles remaining in the path to the Protocol's ratification and entry into force. Participants agreed that a strong political message should be sent to the world for the success of COP6 and the early entry into force of the Kyoto Protocol, with many expressing the view that if possible it should go into force by the year 2002. In the discussion, many island states expressed deep concerns about their vulnerability to impacts of climate change, such as sea-level rise and coastal erosion and called for urgent international action to reduce greenhouse gas emissions.

Many countries and international organizations reported on a variety of initiatives they are undertaking to address climate change, and some problems that arise in their implementation. It was stressed that in dealing with global warming, it is important to promote energy efficiency and introduce renewable energy in the process of promoting sustainable development. It was also pointed out that balance is needed between the UN Framework Convention on Climate Change and the Kyoto Protocol—in particular the importance of international cooperation for technology transfers and capacity building was pointed out. The 10th Asia Pacific Seminar on Climate Change was introduced as a concrete example of regional cooperation. Many delegates expressed high expectations regarding the Clean Development Mechanism, in particular for its potential role in technology transfer and financial investment for the region.

ECO ASIA was launched in 1991 by the Environment Agency of Japan, in order to provide input from the Asia-Pacific region to the Earth Summit the following year, and is regarded as an important forum on environmental policy in the region. The congress this year was attended by 247 participants, including 23 Ministers, with 40 countries and 17 international organizations represented. It was hosted by the Environment Agency, the Fukuoka Prefectural Government and the Municipality of Kitakyushu.

ESCAP Ministerial Conference on Environment and Development in Asia and the Pacific 2000

Immediately following ECO ASIA 2000, the Ministerial Conference on Environment and Development in Asia and the Pacific 2000 was held in Kitakyushu, on 4 and 5 September. Prior to this, the Preparatory Meeting of Senior Officials (SOM) was held from 31 August to 2 September. The meeting, the fourth in a series of ministerial-level environment conferences held in the region every five years since 1985, focused on the development of new strategies and approaches for regional cooperation for environmental protection in Asia and the Pacific. Organized by the UN Economic and Social Commission for Asia and the Pacific (ESCAP) in cooperation with the Asian Development Bank (ADB), the United Nations

Environment Programme (UNEP) and the World Bank, this meeting was particularly significant as the largest regional gathering of environment ministers before the "Rio+10" review session in 2002.

The focus of the Conference was the development of a new paradigm of sustainable development for Asia and the Pacific region in the 21st century. Participants reviewed the underlying causes of environmental degradation in the region, namely increasing poverty and rapid population growth. Many of the studies presented indicated that environmental degradation is continuing unabated on virtually all fronts despite efforts in the past ten years to slow damage to the environment.

Main outcomes of the meeting are:

- Adoption of a regional action programme for environmentally sound and sustainable development, 2001-2005. Proposing areas for action at the national, sub-regional and regional levels, it focuses on strategies in eight areas: environmental quality and human health; biodiversity; coastal and marine environments; freshwater resources; desertification and land degradation; globalization and policy integration; climate change; and sustainable energy development.
- Adoption of a regional message for the 10-year review of the implementation of the outcome of the United Nations Conference on Environment and Development (UNCED).
- Adoption of the "Vision for the 21st Century: Ministerial Declaration on Environment and Development in Asia and the Pacific, 2000." This declaration reflects the commitment of governments to reverse environmental degradation in all areas.
- Adoption of the Kitakyushu Initiative for a Clean Environment, which is based on the host city's experiences in urban environmental rehabilitation. Opportunities will be sought to replicate and share these experiences in the region.
- Ministers welcomed an offer by the Government of Indonesia to host the UN "Rio+10" review session in 2002.

Representatives from 42 countries attended the Conference, which was hosted by the Government of Japan along with the City of Kitakyushu and Fukuoka Prefecture.

Contact: Mr. Rezaul Karim, Chief, Environment Section, Environment and Natural Resources Development Division (karim.unescap@un.org)
Internet: www.unescap.org

Dioxin Emissions Decline

Japan's Working Group on Dioxin Emission Reductions recently reported estimates that the country's total dioxin emissions in 1999 were between 2,620 and 2,820 grams of toxicity equivalency quantities (g-TEQ) compared to figures for 1997, which were between 7,300 and 7,550 g-TEQ. Based on this, it appears that Japan's dioxin emissions declined by more than 60% during the two years.

[Technical note on calculation method: As reported in the September 1999 issue of JEQ, the Working Group had completed a national inventory based on the Basic Guidelines for the Promotion of Measures against Dioxins which were adopted on 30 May 1997. Subsequently, the Law Concerning Special Measures Against Dioxins came into effect, and the definition of dioxins was revised. Under the new law, coplanar PCBs were included in dioxins. In addition, new toxic equivalency factors (TEF) were used (WHO-TEF (1998) instead of I-TEF (1988)). Based on these arrangements, the following two methodologies were used in the present inventories: (i) the new one based on the Law Concerning Special Measures Against Dioxins (i.e., adopting WHO-TEF including coplanar PCBs) and (ii) the former methodology (adopting I-TEF excluding coplanar PCBs).]

Tenth Asia-Pacific Region Seminar on Climate Change

The Tenth Asia-Pacific Seminar on Climate Change was held from 9 to 13 July in Penang, Malaysia. The seminar was attended by experts from twenty-one countries, and eight relevant international and inter-governmental organizations.

The major objectives of the Seminar were to (a) exchange views on the Kyoto Mechanisms, focusing on technical matters of the Clean Development Mechanism (CDM) such as baselines and monitoring; (b) discuss measures to improve transfers of technology in the Asia-Pacific area; (c) exchange information on the latest activities of the Intergovernmental Panel on Climate Change (IPCC), including special reports on land use, changes of land use and forestry, and the report on how to handle best practices and uncertainty in greenhouse gas inventories; (d) discuss regional cooperation activities to address global warming impacts; and (e) discuss ways to promote the utilization of the Asia-Pacific Network on Climate Change (APNET). Highlights of five sessions are outlined below.

(I) CDM and Asia-Pacific region

Participants recognized that the technical matters of CDM design such as decisions on baselines were very important for insuring environmental conservation. They exchanged views on how to ensure more equal distribution of CDM projects, make good use of Official Development Assistance (ODA), shift current AIJ projects to CDM projects, and qualify projects.

(II) Transfer of Technology

After the current situation of the process of setting technology transfers was explained, presentations were made about opportunities, barriers, needs and concerns. Participants confirmed the importance of the implementation of Article 4.5 of the UN Framework Convention on Climate Change. A panel discussion ensued.

(III) APNET

Reports were given on the present status and planned future activities of APNET. Various options were presented for promoting the utilization of APNET.

(IV) Special Report from IPCC

An outline of the Special Report from the IPCC was presented regarding land use, land use change and forestry. Best practices of greenhouse gas inventories and the handling of the uncertainty were reviewed.

(V) Regional Cooperation to Cope with Climate Change

New activities of the Global Environment Facility (GEF) were explained, in which participants showed much interest. In addition the activities of World Meteorological Organization (WMO) were presented, emphasizing the cooperation of scientists and funding contributions. Opinions were exchanged about the present state of AIJ projects and the prospects of CDM projects at the non-governmental level.

For more information (including the Chairperson's Summary), please see the website of the Asia Pacific Network on Climate Change (http://www.ap-net.org)

Market Size of Eco-Business in Japan

Environment Agency made an estimate of Japanese present and future market size in "eco-businesses," based on categories used by the Organization for Economic Cooperation and Development (OECD) for "environmental goods and service industries." The estimate showed a market size of 24.7 trillion yen in 1997, accounting for just over 2% of domestic output. By the year 2010, this sector is predicted to be 39.8 trillion yen, having an annual growth rate of 3.7%. In the estimates, businesses involved in waste disposal and recycling to support a recycling-oriented society account for about 50% of the sector. The future estimate is based on past trends as well as governmental plans, such as for waste reduction. In terms of employment, 695,000 people worked in this sector in 1997, and this number is expected to increase to 86,100 in 2010.

The OECD classification of eco-business includes activities that offer products and services capable of measuring, preventing, limiting or correcting environmental damage such as the pollution of water, air and soil, as well as waste, noise and ecosystems. The future potential of the industry is probably bigger than these figures indicate, because they do not include fuel cell-powered vehicles or "inverse manufacturing," for which adequate data were not available.

Survey on Corporate Environmental Initiatives

Environment Agency recently announced the results of its fiscal year 1999 survey on environmentally sound corporate activities, which has been conducted every year since 1991. Questionnaires were sent to 2,441 companies listed on the Tokyo, Osaka and Nagoya stock exchanges, and 3,855 unlisted companies with more than five hundred employees. Valid responses were received from 1,147 listed and 1,620 unlisted companies. The survey results indicate that more companies than ever are gaining a better understanding of environmental issues and enforcing environmental conservation measures. The following is the gist of this survey.

• Environmental management

More companies are tackling this issue, with 61.6% of listed companies having established environmental management policies, 54.8% setting concrete goals and 50.8% implementing concrete action plans for environmental management.

• Environmental conservation and reducing the environmental burden

About 70% of all companies sort their waste and strive to reduce their consumption of paper. In addition, 38.8% of listed (20.3% of unlisted) companies replying to the questionnaire have already obtained certification for the ISO14001 series of standards for environmental management systems.

• Eco-business trends

More than 40% of listed (20% of unlisted) companies answered they offer environmentally sound services and products. This ratio rises to more than 60% (and 40%, respectively) when companies are included that intend to (or would like to) begin such activities.

• Accounting for environmental conservation costs

When preparing budgets, 25.9% of listed (19.0% of unlisted) companies have a special category for environmental conservation. These figures are reflected in the 24.7% of listed (16.6% of unlisted) companies that keep separate categories in their financial accounting for environmental conservation. 43.8% of listed (19.6% of unlisted) companies know about "A Draft Guideline for Measuring and Announcing Environmental Cost", the Japan Environment Agency announced in March 1999, and 9.9% of listed (4.0% of unlisted) companies have made practical use of this Guideline.

• Measures against global warming

About 70% of all companies that responded said that industry and the entire society must make efforts to reduce the greenhouse gas emissions.

More than half of respondents replied that they are already taking some action for this purpose. About 40% of all companies would accept (or accept, with certain conditions) the introduction of a carbon tax.

Japanese Companies Overseas—New Report on Malaysia

Industrial pollution can become an issue of concern when companies operate overseas. With this in mind, the Environment Agency conducted a survey in 1995 in order to grasp environmental aspects of the overseas activities of Japanese companies. One finding was that many respondents looked to the Japanese Government to supply information about environmental issues of each country. As a result, the Environment Agency started research in 1996 on environmental trends in relation to the activities of Japanese companies operating in Southeast Asia. The research includes concrete case studies and experiences of innovative environmental management.

A Philippine edition of the research report was published in 1997, an Indonesian edition in 1998, and a Thai edition in 1999. The Malaysian edition was published in March this year. The Environment Agency is distributing the latest edition to the Japanese Chamber of Commerce and Industry in Malaysia, as well as any other interested parties.

Malaysia Edition

Chapter 1: *Overview of Environmental Issues and Environmental Conservation Practices in Malaysia*

This chapter includes activities of Japanese companies, current environmental issues, environmental administration and legislation, industrial waste management, water pollution management, air pollution management, and environmental impact assessment in Malaysia, etc.

Chapter 2: *Environmental Conservation by Japanese Companies in Malaysia—Case Studies of Corporate Practices and Policies*

This chapter features approaches of Japanese companies in Malaysia, cases of having met strict water standards, cases of establishing an environmental management system, and other examples of innovative environmental practices.

More information is available in English on the Internet at http://www.eic.or.jp/eanet/coop/oemjc/.

Assessing Environmental Cooperation Projects

Since the beginning of the 1990s, Japan has been the world's top donor of official development assistance (ODA) to developing countries. In 1998 Japanese ODA amounted to 1.4 trillion yen (about 10.7 billion U.S. dollars) of which about 400 billion yen (about 3.1 billion U.S. dollars) consisted of aid in the environmental field (involving projects related to the residential environment, forest conservation, anti-pollution, disaster prevention, climate change, etc.). The Environment Agency started investigating assessment method of evaluating the results of environmental projects in 1998. The review committee responsible for this task recently released its interim report of study results for the fiscal year 1999.

The main purpose of this study was to develop a methodology to evaluate projects that have already been completed in host countries, and to determine what should be the essential elements for future assessments.

This survey targeted two types of technical cooperation projects: those supporting environmental management centers, and those developing systems to improve water quality. After considering various options, the committee decided that the main elements to be assessed should be (i) whether or not the host government has secured the necessary funds (e.g., for upkeep of equipment), personnel and organizational infrastructure even after completion of the project, (ii) whether or not the outcomes of the project (e.g., local use of monitoring technology) are being utilized in other areas throughout the host country, and (iii) whether or not the outcomes of the project (e.g., transfer of environmental monitoring technology) are being reflected in the policies of the host government (e.g., in establishing or revising environmental standards).

The current study was intended to determine methodologies for assessment of environmental ODA projects. In the future it will be important to use case studies to determine whether the elements chosen are appropriate and can be used to conduct quantitative project assessments. It will also be important to expand the types of projects targeted in assessments.

Guideline for Scent Environment

Bouquet, fragrance, aroma, scent, smell, odor, and stench—they all are some of the many words describing what we perceive with our olfactory senses. In our daily life, we encounter a great variety of such smells.

A 1996 opinion poll by the Environment Agency showed that the public is concerned about both offensive odors and comfortable aromas in daily life. As a result, two aspects are required for good policies minimizing offensive odors and preserving comfortable aromas. To meet the demands, the Environment Agency has introduced a concept of "scent environment" and recently established a guideline to support local activities to create better scent environment through the identification of good smells (aromas) in their neighborhood, as well as the regulation of bad smells (odors).

This guideline contains two goals, one addressing offensive odors (titled "The Goal for Odor Environment (GOE)") and the other addressing comfortable aromas (titled "The Goal for Aroma Environment (GAE)"). GOE aims at "minimizing offensive odors to the degree that most local residents do not notice in their daily life." It will be necessary to establish quantitative targets for it (though the lack of science data prevents it at present). GAE, on the other hand, aims at "creating comfortable aroma environments where agreeable smells can be sensed." Since the perception of smells may vary with regions or individuals, it is important that local residents are involved in the process of creating comfortable aroma environments.

The guidelines which identify the roles of national and local governments, business sectors, and local residents will help the Environment Agency to take a variety of measures to promote the improvement of "scent environment."

Japan-U.S. Migratory Bird Treaty Meeting

Japan and the United States discussed common concerns about migratory birds at a meeting held in Anchorage, Alaska, from 6 to 7 May. The meeting was held under the Convention between the Government of the United States of America and the Government of Japan for the Protection of Migratory Birds and Birds in Danger of Extinction and their Environment (also known as the Japan-U.S. Migratory Bird Protection Treaty), which entered into force in 1974.

Academics joined participants from Japan's Environment Agency and the U.S. Fish and Wildlife Service. Discussions centered on institutional and policy arrangements for the protection of migratory birds. Presentations included topics such as the ecological status of sea birds, as well as the roles of local governments under Japan's recently revised Wildlife Protection and Hunting Law.

Another topic included network activities under Asia-Pacific Migratory Waterbird Conservation Strategy. The U.S. proposed that sites in Alaska be included in the existing East Asian Australasian Shorebird Site Network. Further discussions on this will continue in 2001. Japan announced an international workshop to be held in October 2000 in Naha, Okinawa, regarding said strategy.

Dealing with Urban Crows

Growing populations of crows in urban areas have been causing greater problems recently, such as the scattering of garbage and threatening or aggressive behavior toward people. Craws eat garbage exclusively and increase by adaptation to urban environment. There is few case worldwide. In order to promote preventative action, the Environment Agency recently distributed pamphlets and videos that provide the public with tips to reduce nuisances caused by crows in urban areas

The eight-page pamphlet is entitled "Crows in Urban Areas—Nuisances and What We Can Do About Them," while the eighteen-minute video (VHS format) is entitled "Why Crows are Increasing in Urban Areas—Reasons and Countermeasures." Both materials were produced in Japanese, with production work done by the Japanese Association for Preservation of Birds and the Wild Bird Society of Japan.

Crow Facts

Two species of crows are generally found in urban areas—the jungle crow (*Corvus macrorhynchos*) and the carrion crow (*Corvus corone*). Foraging in garbage is mostly done by jungle crows. Both can be seen at all times of the year in Japan.

Their breeding season is from March to July, and they make their nests on thick boughs or between the trunk and upper branches of trees.

Crows tend to gather to roost in the upper branches at night and these groups tend to grow in size in winter.

Public Participates in Survey on Aquatic Organisms

In July the Environment Agency released its report on the 1999 survey on aquatic organisms in rivers. The Agency has been conducting this survey annually since 1984, with participation from the public. A record 59,000 participants joined the 1999 survey at 4,646 sites in rivers. The large turnout is thanks to holding the survey during summer vacation, allowing more participants from schools (67% of the total) and children's or citizens' groups (20%).

Since aquatic organisms such as the river crab (*Potamon dehaani*) and stone fly (*Kamimuria tibialis*) provide good indicators of water conditions, by studying these organisms participants can judge water quality in an effective, simple and inexpensive way. An added bonus of such a survey based on public participation is the heightening of environmental consciousness. Based on the results of the study, water quality is classified into four categories: good, fair, dirty and very dirty. In all, 73% of the sites were found to be of good quality.

In fiscal year 2000, the Environment Agency will welcome more participants nationwide and make some modifications to indicators used in the survey.

Preventing Marine Pollution from Plastics

Marine pollution from plastic substances is a serious problem in Japan and in many places in the world's oceans. To find solutions, the Environment Agency has developed response measures based on a three-year study (from 1996 to 1999) that estimated the amount of plastic waste and marine pollution.

Research revealed that a large amount of plastic waste is drifting in the seas near Japan, flowing in rivers and washing up along shorelines. In order to reduce the impacts on marine life, the Environment Agency has decided to coordinate campaigns to prevent releases into the marine environment of plastic waste and resin pellets; and strengthen monitoring systems to track their routes, in cooperation with other countries involved in the Northwest Pacific Action Plan (NOWPAP).

Most plastic waste drifting in the ocean or washed ashore decomposes slowly, so it tends to exist in the marine environment for a long time, harming marine animals that mistakenly eat plastic substances, or get entangled in plastic objects. Resin pellets—made of lighter-than-water polyethylene or polypropylene and usually only a few millimeters in diameter—are used in the production of plastic products.

Some of the major findings of the study are:

- More than 90 % of artifacts (collected by towed net in thirteen marine areas) were made of plastic, with 0.1 to 45.1 (average 4.8) artifacts found per one kilometer.
- A similar survey at three river sites revealed that resin pellets accounted for about 50% of the artifacts, and that they may have came from manufacturing and transportation operations.
- Plastics accounted for about 20% by weight (50% by number of items) of garbage washed up on twelve beaches studied. It is estimated that about 10,000 to 20,000 tons of plastics wash up or are discarded on Japan's coastlines each year.
- A large amount of plastic waste bearing Korean, Chinese, or Russian symbols washes ashore along the Sea of Japan.

The Environment Agency plans to take steps to prevent marine pollution from plastics. Actions to reduce the dumping of plastics include public awareness campaigns in Japan, and cooperation with companies to recover plastic products (e.g., collection of plastic items at convenience stores near the sea), etc. Measures to deal with resin pellets include information campaigns targeting the relevant industries and consideration of new regulations to prevent releases of the resin pellets. Other activities will include supporting networks and promoting clean-up efforts at the national, local government, and citizen level; conducting further research into the routes and mechanisms of marine pollution from plastics; collaborating in studies with neighboring countries and promoting international efforts; and developing biodegradable plastics.

For more information about events and articles in JEQ please contact the Global Environment Department.

Japan
ENVIRONMENT
Quarterly

Published by the Global Environment Department, Environment Agency
1-2-2 Kasumigaseki, Chiyoda-ku, Tokyo 100-8975 Japan
Tel: +81-3-5521-8244 Fax: +81-3-3504-1634
E-mail: globe.dep@eanet.go.jp Homepage: http://www.eic.or.jp

EVENTS

2000

October

23-26 The 6th Working Group Meeting on the Acid Deposition Monitoring Network in East Asia / The 2nd Intergovernmental Meeting on the Acid Deposition Monitoring Network in East Asia (Niigata, Japan)

November

13-24 The 6th Session of the Conference of the Parties to UNFCCC / The 14th Session of Subsidiary Bodies of UNFCCC (Den Haag, the Netherlands)

27-29 OECD / Environment Policy Committee (Paris, France)

December

4-6 6th Intergovernmental Meeting on the Northwest Pacific Action Plan (Tokyo, Japan)

11-15 The 12th Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer (Burkina Faso)

11-15 The 1st meeting of the International Committee for Cartagena Protocol on Biosafety (Montpellier, France)

11-20 The 4th session of the Conference of the Parties (COP) for the Convention to Combat Desertification (Bonn, Germany)