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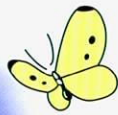
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INTERNATIONAL CENTER FOR ENVIRONMENTAL TECHNOLOGY TRANSFER



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COP10 Side Event

The Tenth Session of the Conference of the Parties (COP10) to the United Nations Framework Convention on Climate Change (UNFCCC) was held in Buenos Aires, Argentine Republic from December 6 to 17 in 2004. The COP 10 had a large number of participants, because it was the tenth anniversary of the UNFCCC enforcement, and also, it had become certain that the Kyoto Protocol would come into effect on February 16, 2005, following ratification by the Russian Federation on November 18, 2004. About ten different side events were held every day both inside and outside the La Rural Exhibition Center. Universities, research institutes, businesses and NGOs from various countries presented reports on current climatic change and their efforts to address such issues. In addition, the participants were actively involved in the discussion regarding the compliance regime for the Kyoto mechanism necessary to enforce the Kyoto Protocol. It reflected the public high interest in global warming issues.

The Climate Technology Initiative (CTI)¹, for which International Center for Environmental Technology Transfer (ICETT) serves as Secretariat, held a side event, called "Climate friendly technologies: roles of the governments, business and finance sector" on December 10, with more than 60 participants from both public and private sectors, including government officials, experts in technology transfer, energy saving and NGO. The side event began with a presentation on the CTI outline by Mr. Toshi Sakamoto, CTI Chair (Director of Global Environmental Affairs Office of the Ministry of Economy, Trade and Industry). It was attended by the Chair of UNFCCC Expert Group on Technology Transfer (from Canada), the vice Chair (from Trinidad and Tobago), former Chair (from Ghana), and others from the U.S. Department of Energy (DOE), U.S. Agency for International Development (USAID), and International Chamber of Commerce. The CTI event provided a useful forum for the participants to exchange various views.

Ms. Margaret Martin, Chair of the Expert Group on Technology Transfer (from Canada), made a report on the result of the "UNFCCC Workshop on Innovative Options for Financing the Development and Transfer of Technologies", which was held from September 27 to 29, 2004, supported by CTI. She said that it was necessary to reduce the risk in line with the related technologies in financing for climate-friendly projects. She also emphasized that understandable terminology needed to be shared among those in financial circles and those in charge of technology transfer, for further mutual understanding.

Mr. Terry Carrington, vice Chair of CTI and Mr. Morihiro Kurushima, CTI program manager and professor of Toyo University, made presentations on the result of the Jakarta Seminar and the Leipzig Seminar. They said that it was necessary to encourage people in broader fields to participate in the programs to promote further involvement of the industrial and private sectors. The outcomes of the seminars reaffirmed that in order to promote transfer of climate-friendly technologies to the developing countries and those in the transition to market economy, dialogue among stakeholders and continuous CTI activities for capacity building were needed. The panelists pointed out that partnership between the public and private sectors is indispensable for financing of environmental technology transfer.

ICETT is determined to work on environmental technology transfer activities through the secretariat work for CTI, other than the CTI side events. During the COP10, various side events were held including the following:

(1) "Activities and Prospects for Addressing Global Environmental Issues Through Industrial Technology" (NEDO)

New Energy and Industrial Technology Development Organization (NEDO) and Secretariat of Environment and Sustainable Development, Argentina co-sponsored the side event. NEDO presented its role and support for the research and development projects, known as CDM (Clean Development Mechanism) /JI (Joint Implementation) projects, for emission reduction. The Argentine government introduced current climatic change countermeasures, current CDM promotion projects and their issues, and co-operative activities with the Japanese government. A representative from the Japan External Trade Organization (JETRO) said that they wanted to engage in the activities in co-operation with NEDO, JBIC (Japan Bank For International Cooperation) and JICA (Japan International Cooperation Agency), in order to promote

¹The Climate Technology Initiative (CTI) serves as a multilateral Implementing Agreement of the International Energy Agency (IEA). It aims to establish an international cooperative system in order to develop, spread and carry out an environmentally and climate-conscious technology. The participating countries for the CTI play wide active roles in cooperation with developing countries, those in the transition to market economy and other international organizations.



CDM. A representative from Centro National University in Argentina introduced the CDM project concerning domestic garbage landfill. It was the world's smallest project in size which was being carried out by the national university members, with financial support from the city of Olavarria. It was emphasized that the project is replicable for it was able to secure financing, to involve the universities, and also to be carried out in a small community.

(2) Capacity Building for CDM (UNEP)

The Capacity building project, which was carried out by the United Nations Environment Programme (UNEP) with support from the government of the Netherlands, was presented. Representatives from Ecuador, Morocco, The Philippines and Viet Nam made presentations on the ratification status of the UNFCCC and Kyoto Protocol, CDM strategy, domestic agency for approving CDM and implementation projects in each country. The Hamburg International Economic Organization said that 20 to 25% of the global warming gas emission was attributed to land use, and that value for the CDM carbon credit (CER: Carbon Emission Reduction) was currently low. It also proposed to combine carbon sink CDM and energy issues, since reforestation did not benefit much other than in carbon credit acquisition. At the end of the

event, a number of questions were raised from the roomful of audience. In response, the panelists said that the reforestation was in high demand, but funds need to be secured for acquiring baseline data and carrying out the small-scale CDM projects.

(3) “Facts and Trends to 2050: Energy and Climate Change” (WBCSD)

The World Business Council for Sustainable Development (WBCSD) consists of 175 businesses in 20 major industries from 35 countries. In the site event, Shell International made a presentation on the current situation and the future trends of energy and climate change. They said that energy was indispensable for economic development, and that given the future energy demand and increasing emissions, energy demand control measures such as technology advancement were urgently needed. British Petroleum (BP), the world's leading energy company, stated that mankind should shift to natural gas, nuclear energy and renewable energy to reduce emissions, and that mass transportation by trains and development of fuel-efficient cars were needed for better energy efficiency. The following projection was also presented: To achieve a target of 1Gt carbon reduction, 300,000 units of 5MW wind generators are needed, instead of the current standard of 2MW.



Venue of COP 10



Side events





CTI Workshop on Energy Efficiency for Asian Countries, 2004

Introduction

ICETT launched the International Research Promotion Project on the Global Environment (assisted by Ministry of Economy, Trade and Industry) in fiscal 2004. This project was designed to improve the circumstances for promoting the international effort to address global warming by using the forum including CTI (Climate Technology Initiative), in order to solve the problem of global warming. ICETT has organized workshops both at home and abroad to introduce global warming research, technologies and methods for reducing CO₂ emission.

Among the workshops organized so far, the CTI workshop in Japan as part of the project is introduced in this newsletter.

Project outline

The CTI workshop in Japan was held for ten days from Oct. 18th (Mon) through 27th (Wed) in 2004. The participants were government staff and experts from various industries in six Asian nations (China, India, Malaysia, The Philippines, Thailand and Viet Nam). The purpose of the workshop was to help the participants fully understand the international trend for reduction of greenhouse gas (GHG) emission and the effective use of energy in the Asian region in particular. It was also to promote the efforts for effective use of energy in various countries and industrial sectors.

Recently, GHG emission has been on the rise. In particular, increasing GHG emission in countries undertaking rapid industrialization is a major cause of global warming. In addition to a large volume of CO₂ emission, a statistic shows lower efficiency of energy use in the Asian nations. Given the future economic development in the Asian region, GHG emission reduction and improved energy efficiency are expected to be major contributors for sustainable development.

Improved energy efficiency requires strong leadership from central government and industries, and cooperative efforts by those concerns as well. In the industrial sector, changes in technology, organization and management are needed at both factory and company level. The government is required to support and promote those changes by appropriate policy framework and measures. For that reason, the roles played by industry and government, and the partnership building between the two are very important for improving energy efficiency.

Given that idea, experts from the various governments and industrial sectors, who had broader insights on policies and countermeasures for better energy efficiency, were invited for the workshop. To achieve the goal, the workshop focused on the importance of various factors for the promotion including policies and systems, and their impact

as a forum for exchange of information and opinions among the governments and the industrial sectors.

The workshop placed importance on the interactive session for information exchange among the participants. To that end, programs were organized in order that the developed countries like European countries and Japan, and Asian countries could share their experiences. Each participant was actively involved in the workshop by making a presentation and through group discussion. Sharing knowledge and experience, they reaffirmed the necessity of the effort for further improvement in energy usage in their own countries.

Workshop in detail

The workshop consisted of the following two sessions;

Session 1: Energy Efficiency

The Agenda of session 1 consisted of national energy policy guidelines, activities for better energy efficiency and the actual technologies. Demand Side Management program of the International Energy Agency (IEA), energy policy and the related systems in Japan and the latest energy saving technologies were presented as the information from the developed countries. The participants asked a great number of questions. In particular, participants actively discussed energy management and its systems. With the cooperation of Chubu Electric Power Co., Inc., the participants visited the Kawagoe Thermal Power Plant, one of their plants, and were given some explanation on their energy-saving measures and technology.



The training participants in the discussion session



Group photo of training participants and staff

Representatives from China, India, Philippines and Thailand gave presentations on their governments' policies and laws, energy issues and countermeasures, and their experiences. Efforts by companies in India and Thailand were also presented. It was reaffirmed that improved energy efficiency in the businesses required the active involvement of all employees. In the group discussion, the participants discussed useful policies for improved energy efficiency, and cooperation of the participant countries in various fields including technological aspects.

Session 2: Cleaner Production

Session 2 confirmed the basic concept of Cleaner Production (CP) led by the United Nations Environmental Program (UNEP) in its dissemination. CP cases conducted so far were presented. The participants exchanged their views on the roles to be played by the government and companies, and governmental support necessary for small and medium sized enterprises (SMEs) to introduce CP.

Some participants said that CP was difficult to spread since it was a relatively new and vague idea and did not identify specific technology. Indeed, there are some challenges to the promotion of CP. In particular, several comments were made on what was important to promote CP among the SMEs. The participants visited the Nagoya plant of Kirin Brewery Co., Ltd. and learned about its environmental management.

In the 10-day-program, the participants learned about activities for effective energy use and GHG emission reduction in the International society by sharing their experiences, and discussed how to address the challenges in the Asian region and to cooperate within the region. It was significant that the experts in the Asian nations undergoing rapid development got together to have a discussion. The participants appreciated the workshop for its usefulness.



■ JICA Group Training ■

"Environmental Management Technology in Chemical Industries"

1. Introduction

The chemical industry has extended its range to pharmaceutical and agricultural products, functional chemicals, paint and dye, and others. In each area, diffusion of environmental management technology has been a major requirement. ICETT has long provided training courses on environmental management technology for the petrochemical industry; however, considering these diversified fields of the chemical industry, since the last fiscal year, we have offered them not only for the petrochemical industry but also for the chemical industry as a whole. In this fiscal year, we offered training for 10 participants including administrative officials engaged in environmental conservation from seven countries from June 14 to July 23, 2004.

2. Outline of the training

The training was divided into 4 sessions as follows;

Session 1 "Introduction to environmental measures in the chemical industry"

Session 1 focused on the measures and policies of Japan regarding chemical substance management, including the history of environmental improvement in Japan. It provided an example of Yokkaichi Pollution and the management system for chemical substances, so that the training participants could understand the present situation of environmental management in Japan. Also, aiming at smooth progress of the training, they made a presentation on the country and job report so that people involved in the training could share common and individual problems in the chemical industries in developing countries.

Session 2 "Recent trends of technology in the chemical industry"

We introduced recent technology and concepts of environmental management in the chemical industry in Japan. International treaties and Japanese measures for

chemical substance management were also included. A wide range of environmental management technologies such as GHS (Globally Harmonized System), LCA (Life Cycle Assessment), responsible care, zero emission, cleaner production, etc. were introduced for their edification.

Session 3 "Environmental management technology in the chemical industry"

Based on the training up to Session 2, they visited factories so that they could strengthen and apply the knowledge obtained through the training. In the factory visit, they learned how to reduce environmental burden through improvement of production processes. Efficient running of facilities was covered in the lecture given by staff in charge of environmental management in the factory and later they actually visited the factory for better understanding. The training participants were also encouraged to transfer the environmental management technology to their countries after returning home.

Session 4 "Wrap-up"

Each training participant drew up a final report to wrap-up the training. They presented specific Environmental Action Plans to be applied after returning home, which were also the achievements of the training.



Group photo of training participants and staff

3. After the training

We selected 10 participants out of the total 30 applicants after receiving numerous applications this fiscal year. The training participants were all highly motivated and attended lectures and inspection tours very seriously and positively. The training proceeded very smoothly due to their cooperative participation. They were all in good health during the training and able to return to their home countries safely. In order not to bore them in the course of the long training and to keep their motivation high, we planned various activities such as an exchange gathering with an elementary school, tea ceremony, birthday party, and home stay/visit. These activities were voluntarily conducted by ICETT and not included in the official curriculum; however, we feel that they play a very important role for the training participants to deepen their understanding of and feel familiar with Japan.

Also, we had to be very careful about their daily meals.

Although we had to prepare special menus according to their religion, thanks to the efforts and cooperation of the canteen staff, the training participants were satisfied with the fare, saying "meals at ICETT were very good". ICETT is located in a perfect place for training surrounded by the Suzuka Mountains, but unfortunately the training participants seemed unable to enjoy private and social occasions. We assume that meal times are the only and most enjoyable occasions for them. In addition, the quality and skill of an interpreter is very important for training. We asked Ms. Okamoto of JICE to be an interpreter in the last and also this fiscal year. She is well trusted by lecturers and factory staff and was very active in various activities including showing her very beautiful voice at the farewell party. We really appreciate her as a very valued interpreter. Finally, taking this opportunity we would like to thank JICA and numerous related people for their cooperation. We would like to ask for continued assistance.



JICA Country-focused Specific Training "Environmental Management Administration" for Jordan

1. Introduction

ICETT offered this training, entrusted by JICA, for 5 weeks from January 19 to February 20, 2004.

Jordan is a country which faces a shortage of water resources as a large portion of the country is arid or semiarid. The country will have a serious problem in the future in that the amount of water available per person will be the lowest in the world due to its population increase. Recently, various environmental problems have occurred, such as wastewater from households and waste disposal due to recent rapid urbanization especially in the capital, Amman. There is also water and soil pollution caused by wastewater from factories, air pollution due to emissions, high salinity water caused by excessive pumping from wells.

Under these circumstances, the Ministry of Water and Irrigation is the largest ministry in the country and water issues including the water environment represent the most serious challenges. A total of six training participants, including one woman, from the Ministry of Water and Irrigation (3), the Ministry of Municipal, Rural and Environmental Affairs, the Ministry of Industry and Trade, and the Royal Scientific Society participated in the training which deals with the water environment.

The official name of Jordan is "The Hashemite Kingdom of Jordan" and it is a constitutional monarchy. The head of the state is the king, who has a wide range of authority such as having constitutional permission to exercise administrative authority in cooperation with the Cabinet and having the right to unilaterally dissolve the parliament. The king took the initiative to establish the Ministry of Municipal, Rural and Environmental Affairs in January 2003. According to the training participants however, the ministry took over the personnel and business just as they had been under the predecessor, GCEP (General Corporation for Environment Protection) and it is a fact that the change has been in name only. They say that at

present the ministry deals mainly with waste issues.

For your information, the Ministry of Foreign Affairs of Japan called the country "*jurudan*" until the year before last; however, they started calling it "*yorudan*", as it is now commonly known, from last year.

2. Training objectives

The objectives of the training were to help to "strengthen the enforcement system of environment-related laws" in Jordan and to improve the policy-making and planning ability of her environmental administrative officers, taking an example of the water environment.

In addition, other objectives were 1) to comprehensively understand the environmental administration in Japan and 2) to recognize the importance of regulatory and preventive measures. The final objective was to obtain the basic knowledge necessary for reinforcing the environmental administration in Jordan, by learning about cases of water pollution (water quality management) caused by wastewater from households and factories.

3. Training in detail

(1) Curriculum

The curriculum was drawn up so that the training participants could learn the history of Japanese environmental administration starting from cases of industrial and urban pollution in the past. Following this, the system of environmental laws, and how Japan is addressing the issue today were covered. This was so that they could consider what was necessary to effectively enforce the environment-related laws in Jordan. Specifically speaking, taking cases of "water quality management" as an example, they learned about

regulatory measures and technology for the water quality control in Japan and actually visited public and private related facilities.



Lecture scene

First of all, in the orientation session we explained ICETT, life in Yokkaichi, how to get information, how to use PCs, and the structure of programs. Next, we held a presentation session where the businesses and issues of each ministry and job descriptions of each training participant were presented. This was for the purpose of mutual understanding of the training participants and sharing of issues.

Then, the lectures started and were divided into five sessions as follows, with an expert invited to each session. The experts introduced the latest situations, technology, and other information.



Group photo after the opening ceremony

- ① Environmental administration in Japan
- ② Environment-related law system and environmental administrative system in Japan
- ③ Water environment protection
- ④ Status of water quality regulations in local administration and wastewater treatment technology
- ⑤ Environmental Action Plan to be made by each training participant as the outcome of the training

(2) Supporting organizations

As the course title “Environmental Management Administration” shows, we were able to receive cooperation and support mainly from administrative organizations such as the Ministry of the Environment, Tokyo metropolitan government, Aichi Prefecture, Sonobe Town in Kyoto Prefecture, Yokkaichi City and various institutions in Mie Prefecture, that is, a total of 22 institutions; six private and public institutions, university professors, and the UNCRD (United Nations Centre for Regional Development).

(3) Schedule

Although the training lasted for 5 weeks, we had only 18 working days excluding various orientations, presentations of training achievements, and holidays. During the 18 days, we made a whistle-stop tour of 14 places including 10 lectures at ICETT and lectures and tours at private companies and administrative institutions. The schedule turned out very arduous, spending holidays moving to Tokyo or Kyoto for training or staying with Japanese families. Despite the punishing schedule, they went shopping around Yokkaichi on holidays with no activities. The most popular purchases were digital cameras. Some training participants bought electric rice cookers or oil fan heaters. Their most favorite shop was, of course, a 100-yen shop.

(4) Training achievement

All participants drew up Environmental Action Plans describing what to do back in their countries. They considered the roles they could play and devised Environmental Action Plans as objectives to achieve. Each training participant made a presentation of their Environmental Action Plan with lecturers in attendance, who offered advice and suggestions in return.



Scene of Yokkaichi Cable TV Station making their program

4. Extracurricular activities and interaction with the local community

We made a plan of home stay/visit for them to experience Japanese culture and customs. We visited host families in cooperation with Yokkaichi International Association. Friendship was exchanged with host families and their friends joining parties or some training participants cooking Jordanian food for them.

Also, they took a half-day sightseeing tour to Tokyo with an English-speaking guide by “Hato Bus” and made a tour of temples and shrines in Kyoto, using holidays during the training. We hope that they could experience something of Japanese culture.

5. Others

A cable TV station in Yokkaichi recorded a program covering our activities on January 23, 2004. The title of the program was “Sincere Hospitality from ICETT - to People of the World.” They mainly introduced the staff who

supported training activities behind the scenes, as well as interviewing the training participants. The program was broadcast in the middle of February. The training participants were very excited to see the program and made recordings of the program to take home as souvenirs.

6. Message of gratitude

We think that the training objectives were accomplished in cooperation with the administrative organizations, private companies and citizens and that the training participants had a chance to experience something of Japanese culture. We thank you all for your cooperation and ask for your continued assistance.



Presentation scene



JICA Training

"Urban Waste Management for South American Countries"

Training on "Urban Waste Management for South American Countries" entrusted by JICA was conducted for 5 weeks, from October 4 to November 5, 2004. ICETT started to offer this training from this fiscal year, taking over from the former Japan Environment Corporation, which had conducted a series of training sessions up until the previous fiscal year. The participants were 11 staff members from administrative organizations or public corporations in 3 countries, Colombia, Ecuador, and Venezuela.

Currently, environmental pollution, especially waste disposal, has become a very serious problem in South American countries. Therefore, developing human resources for comprehensive waste disposal in city administrations has become a major requirement. Almost all urban wastes are reclaimed without incineration. Because medical wastes are also buried underground without being separated due to low awareness of waste separation, people are at risk of infection. Also, concerning introduction of the ISO environmental management standard, they have still only obtained the ISO 9000 series, which is the quality management standard. Given this situation, the aims of the training were to introduce Japanese government policies on environmental issues and waste disposal technologies and strengthen understanding of the establishment of a recycling society. Based on that, the training was planned to encourage the training participants to consider how to conduct and manage waste disposal in their countries and how to educate their citizens about it. The training included introduction of technology and its practice based on the system and legislation of waste disposal in Japan. The training started at an introductory level so that participants from the countries with different administrative systems could easily understand. They enjoyed the field visits to observe various activities.

They made an inspection tour starting from Kita-Kyushu, then Fukuoka, Nagahama (Shiga Prefecture), Osaka, and finally Kyoto. In Kita-Kyushu, they visited one of the largest ecological towns in Japan and spent one day there having lectures and observing facilities to deepen their understanding of the business. They observed the recycling business of fluorescent strip lights, medical wastes and others and were very much impressed by the large-scale ecological town and highly advanced recycling facilities.

The training participants moved to Hakata on the same day. On the way there, we heard that a typhoon was approaching. On the next day, we visited reclaimed lands and wastewater treatment facilities in the rain in Fukuoka and later in the day were caught in torrential rain. We were scheduled to go to Nagahama on the next day. However, as we had worried, the typhoon hit Hiroshima directly and the Shinkansen service was disrupted there. While JICE staff and I were running around for train tickets and hotel accommodation, we had the training participants wait in a concourse of the station, thinking we would explain to them after all emergency incidents were cleared. At length we realized that no trains would run. So we informed the anxious-looking training participants that we would stay in Hiroshima and what the revised schedule would be like. Although they seemed a bit confused by the sudden schedule change, taking advantage of this opportunity, decided to go to the Atomic Bomb Dome and Peace Memorial Museum in Hiroshima, in which they had been interested. We went there experiencing a tramway in the wind and rain caused by the typhoon. We were in trouble because nobody had brought an umbrella although we had told them to do so. The ribs of my umbrella were broken by the strong wind and rain of the typhoon, which rendered it useless. We wondered which was better, bringing no umbrella at all or bringing an

umbrella and having it broken. Each participant paid serious attention to the displays in the museum. They seemed satisfied with being able to witness what historical and miserable incidents left behind and were relieved from the confusion and anxiety caused by the typhoon.

Then, they participated in training in Shiga and Osaka and finally made a morning tour in Kyoto. They were supposed to have all the meals during the inspection tour individually as they like. They had been divided into two groups; some participants who had already given up trying Japanese food and others who were willing to take the precious opportunity to try Japanese taste although they were not familiar with Japanese food. Every day we Japanese, who ate Japanese food for every meal, were joined by some participants who wanted to try Japanese food.



YONO PET bottle recycle Co, Inc.

At the end of the training, they deepened their understanding of cooperation with the citizens. They learned about various activities run by government administration and NPO and understood those activities can be done by a change in each person's awareness even if the administration system is different. We introduced business cases of Nagoya City, Yokkaichi City and Mie Prefecture, among which they were especially interested in *Kuru Kuru Koubou*, which was an NPO activity in cooperation with Kuwana City. They were impressed by how extensive the activities were, for example, the flea market selling used goods, collection of separated wastes such as newspapers, blankets, curtains, fluorescent strip lights, dry batteries and others, and composting raw kitchen garbage. They said that they wanted to introduce similar activities in their countries. They were happy have the unexpected experience of the flea market and bought various goods suitable for souvenirs like *kimono*, *ochoko* (small cup for sake) and other things.



Eco town, recycling of fluorescent strip lights

The training ended with their presentation of action reports on how they would diffuse what they had learned through the series of training.

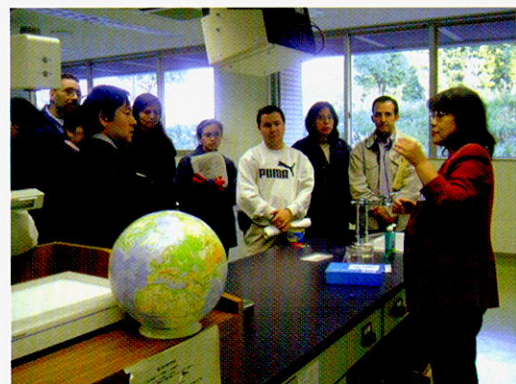
Just after their arrival in Japan, they had to miss planned week-end sightseeing and the home-stay program due to typhoons, and had a hard experience of the typhoon during the inspection tour. However, they do have the nature of South American people. They struggled to go out to buy beer, *sake* and snacks despite the typhoon and enjoyed "happy hour" on Fridays every week. They said that in their countries, they danced almost every day. They seemed to have enjoyed the party until dawn of the next day. We planned a barbecue for their good memory; however, it rained on this occasion, too. However, training participants who had missed their countries' food seemed satisfied and enjoyed a barbecue with food bought at a specialty store.



Concourse in Hiroshima station, wondering how things would turn out

The training turned out to be an unfortunate one because they were caught by as many as four typhoons during their stay here. Also, during the training, the Niigata Chuetsu Earthquake took place. Both are natural disasters; however, we keenly felt the abnormality of the environment. We would like to continue to make efforts to further develop the training conducted by ICETT, to strengthen friendship with other countries and to contribute to global environmental issues.

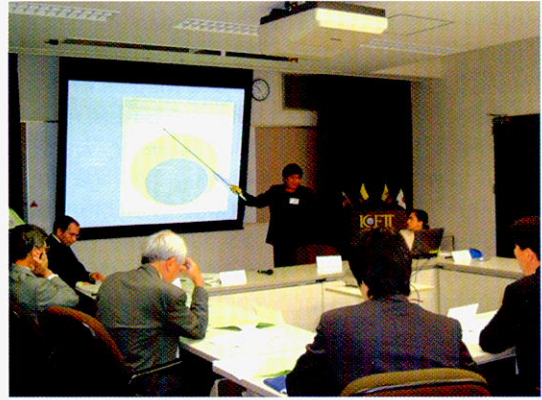
Taking this opportunity, we would like to thank those concerned in the project for their kind support and cooperation.



Enlightening Citizen Activity, Mie Prefecture Environment Learning Information Center



Barbecue



Presentation of Environmental Action Plans

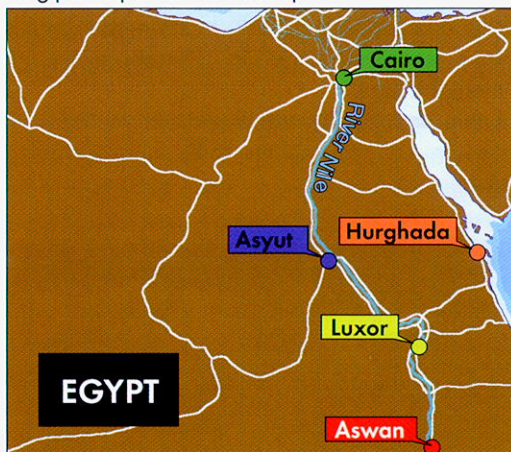
JICA Country-focused Specific Training

"Regional Environmental Monitoring for the Arab Republic of Egypt, 2004"

Introduction

A six-week training for fiscal 2004, commissioned by JICA, was offered for the staff of the Egyptian Environmental Affairs Agency from September 1 through October 13. (Fifth training/the last in the series)

The participants were young staff responsible for air pollution countermeasures and those responsible for water quality from three environmental analysis organizations in Asyut, Aswan and Hurghada, respectively. In total, six training participants were accepted.



Hometowns of the training participants

2. Training purpose

The training has been offered since 2000, in order to improve the skills of the analysts of regional monitoring branches. It has focused on analysis training, and encouraged the training participants to do more accurate monitoring, to reaffirm the importance of proper data collection and to make the best of the training results for environment improvement for each home country.

3. Training in detail

(1) The curriculum was divided into four sessions as follows;

- ① Environmental administration policies
- ② Monitoring practice (Water quality /Air pollution)
- ③ Preventive technology for environmental pollutants
- ④ Wrap-up

In session 1, Environmental administration policies, an expert with experience of work in Egypt gave a lecture on environmental policies in Japan and suggested what could be done in Egypt. Also, a person who was long involved in the pollution reduction policies in Yokkaichi City gave a lecture on the case studies of pollution reduction in Yokkaichi City, focusing on how effective the monitoring was. The training participants reaffirmed how important the monitoring analysis was for addressing pollution problems. Each training participant made a presentation as a country and job report on the current situation in Egypt as a whole. They mentioned the environmental issues they had and wanted to solve in light of their current job responsibility in particular, and what they wanted to learn in this course in Japan. In the discussion with the technical adviser, they heatedly discussed what should be done to encourage the public to be more aware of environmental issues.

In session 2, Monitoring practice, the training participants visited the Public Health and Environment Research Division of Mie Prefecture to practice air and water quality monitoring. The monitoring lesson was sometimes held up by lots of basic questions, since they had little experience or some were still undergoing training in their areas. They were highly motivated,

however, to acquire lots of knowledge and had a very fruitful lesson.

For session 3, Preventive technology for environmental pollutants, the training participants visited an analytical instrument manufacturer to learn how to use the instruments. They received some advice for the instruments they used in their country, regarding usage and maintenance. Also they had an opportunity to see the environmental management methods used by companies in various industries (sugar manufacture, electricity, petroleum refining and cement). They learned what kind of businesses emitted what pollutants and how they were controlled. In addition, they were given environmental education on how to spread the knowledge they had acquired. They fully understood though the workshop just why the environmental education was necessary and how important it was that they should try what they had learned and never forget what they had tried, instead of just watching and listening to lectures.

For the session 4, Wrap-up, they made and presented an action report including what they would try and do in their current position after returning home.



Training participants enjoying the grass and leaves

4. Extracurricular activities and interaction with the local community

Two weeks after arriving at ICETT, the training participants, who gradually got used to living in Japan, had a chance to visit and stay overnight with Japanese families in Yokkaichi City, as a part of the interaction with the local community. They seemed to have good experiences trying Japanese daily life. Some of them found that they couldn't get along with some kinds of Japanese food. Nevertheless, staying with a Japanese family gave them a good experience, something they couldn't find out otherwise. The training participants appreciated the families who kindly accepted them.

We took the training participants to the Yokkaichi flea market at Yokkaichi Dome, because most of the Egyptian training participants in the previous programs had enjoyed visiting there. However, the training participants for this

year were not interested in shopping. Instead, they walked around the well developed surrounding area of Yokkaichi Dome and enjoyed seeing the landscape. It might have been because the age composition was slightly different from the previous groups of training participants.



Group photo of training participants and staff

5. Training effect

Many of the training participants said that they wanted to spend more time on practicing analysis. It was because explaining the practice in detail took more time than expected, since they lacked sufficient training at home and had little experience. All the more because of that, however, each training participant recognized that they needed more training back in their countries, and they petitioned the lecturer for advice for how to enhance their skill. In this respect, the training produced satisfactory results.

6. Observation from the staff

Before the training started, I looked at the map to find out where the RBO (Regional Branch Office) of each training participant was. I discovered that Asyut was in the desert in between Cairo and Luxor along the River Nile, and that Aswan was close to the neighboring country, Sudan, and it was famous for the Aswan High Dam, and that Hurghada faced the Red Sea, one of the favorite places for divers. The training participants are proud of their region accepting many foreign tourists, and want to prevent the sea water from being contaminated. In addition, they tried to understand the environmental issues as much as possible from the beginning of the training, considering how to increase the people's awareness over the environment.

I hope that they would motivate the people to preserve and improve the environment through environmental education and to offer it to the people close to themselves for a start and then spread it to the people in the local community and nationwide.

During the training, the training participants' behavior reminded me of an important thing about Japan. It happened on the observation tour soon after the training started. Some training participants walked out and sat

down on the tufts of grass near there, braving the mosquitoes at that time of September. Others just touched the leaves of the tree. Everyone looked so happy to feel and touch the grass and greenery, since they were never able to do such a thing in their region in the desert. Their happy faces in the grass reminded me of the blessings of nature we enjoy, that we had four seasons and could enjoy the changing colors of the grass and leaves.

The training program for Egypt ended with the training this time. I don't think that the training will dramatically improve the overall environment in Egypt, but hopefully the training participants will make a difference. I really expect the training participants will make a positive contribution to improve the environment. I appreciate the kind help and support given us by those concerned.



Inspection tour

Training on "Environmental Education" for Tianjin in China commissioned by Yokkaichi City



1. Background of the training

This training course was first offered in 1993 as a human development program, by ICETT. It was commissioned by Yokkaichi City, which in 1980 established a friendship city agreement with Tianjin City of the People's Republic of China. The purpose of this course is to enhance the environmental administrative capability of the Environmental Protection Bureau of Tianjin City and to educate the officials and engineers of the bureau.

At an early stage of the program, the training mainly covered the topic of pollution prevention, which was a pressing issue, including technology to prevent air and water pollution. Recently, as Tianjin City has been increasingly successful in preventing industrial pollution, the concern has shifted to environment management, including urban environmental measures and an environment management system. Given this situation, after repeated discussions with Tianjin city, ICETT offered a 15 days training course (Oct. 26 to Nov. 9) with the theme of "Environmental Education", participated in by six administrative officials from Tianjin Environmental Protection Bureau. This followed the "Yokkaichi and Tianjin Seminar on Environmental Conservation" with the theme of "Promoting Environmental education and its Enlightenment" held in Tianjin from August 24 to 26 in 2004.



The training participants talking with school pupils in the Global Environmental Workshop for Kids

2. Purpose of the training

Tianjin city has promoted numerous projects to address environmental issues. However, along with rapid economic growth, they are facing diversified environmental issues like urban and global environmental issues. This is in addition to the industrial-based environmental issues caused by traditional economic growth. Direct regulations and environmental technologies are not sufficient to deal with these problems. It is necessary to form an environmental policy plan involving the citizens and environmental management system, considering shifts in the social and economic systems.

The training focused on environmental education, enlightenment cases and environmental measures Yokkaichi city has worked on. The training participants not only listened to the lectures, but also met with a citizen's environmental volunteer group, municipal officials and some representatives from private companies to exchange ideas and participated in the Global Environmental Workshop for Kids. The training participants were expected to gain a deeper understanding through inspection tours and hands-on experience regarding the measures actually taken at sites and the knowledge of environmental education they had learned in the Tianjin Seminar. The training was designed to help the training participants to make a contribution to environmental education and its spread in Tianjin city.

3. Outline of the training

The training was divided into three sessions; (1) Introduction: Environmental education in Japan, (2) Case study: Environmental education and enlightenment activities by public and private sectors, citizens groups and schools, and participation in the Global Environmental Workshop for Kids (3) Wrap-up, as follows:

Session 1: Introduction: Environmental education in Japan
Session 1 introduced the history of addressing pollution in Japan, taking four major cases for example, how the environmental education in school has developed based on the lessons we learned, and what methods have actually been employed. This was in order to help the training participants to understand the background and current situation of environmental education in Japan. To ensure the training would proceed smoothly, each training participant made a presentation of a country and job report. This was done so that the training participants and training staff could share common issues on environmental education and enlightenment activities in Tianjin and the challenges faced by each training participant.

Session 2: Case study

In Session 2, environmental education and the ways to promote it in four different fields were presented. These four fields were; the government, businesses, citizens' groups and schools, so that the training participants could ascertain some idea of environmental education methods and principles in Japan. In particular, the training participants attended a meeting to exchange ideas with a citizens' environmental conservation group to learn about the environmental movement at grass-roots level in Japan.

The training participants also attended the Global Environmental Workshop for Kids, which was carried out by ICETT, commissioned by Yokkaichi City. They deepened their understanding of environmental education measures by trying out the environmentally friendly program with 18 elementary school kids.

Session 3: Wrap-up

Each training participant made a final report to conclude the training. They made a presentation of their own

Environmental Action Plan which was a specific plan to be carried out back in their countries and which was evaluated as the result of the training.



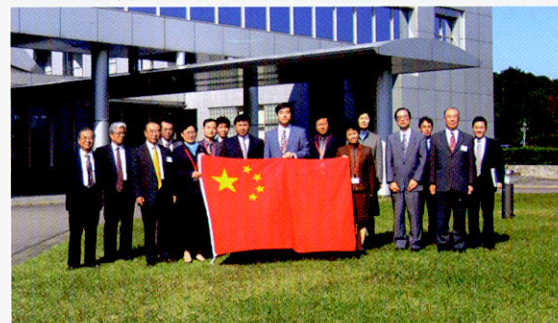
The training participants in the discussion session

4. Staff observation

The training schedule was tight, since it was in a short period of time of only 15 days. The training participants, however, actively participated in the lectures and inspection tours, and were cooperative throughout the course, so that the training itself was carried out without any problems. One of the training participants fell sick, but she soon recovered and all the training participants finished the course and left Japan in high spirits. Despite the tight schedule, the training participants had a chance to enjoy Japanese tea ceremony in a casual style on the weekend when no lecture was given, in order to experience Japanese culture for a limited period of time. It was their first time, but they seemed to enjoy learning the rules of behavior for the tea ceremony.

For better understanding over the limited period of time, the training was organized so that the training participants were able to get a quick overview in session 1, Introduction: Environmental education in Japan, followed by the inspection tours and discussions like company visits and opinion exchange with the citizens' group. They also attended the Global Environmental Workshop for Kids and discussed environmental issues with Japanese elementary school pupils. All the activities made the training a hands-on curriculum for the training participants. The training was given a most positive evaluation by the training participants. Some training participants said that the training was appropriate and satisfactory. In this respect, the purpose of the training was fully achieved.

Last but not least, I would like to thank those concerned for their kind support and cooperation.



Group photo of training participants and staff



Training on “Environmental Management and Conservation Technology”

for the Kuwaiti Engineers, commissioned by Arabian Oil Co., Ltd.

I. Background and purpose of the training

1) Background

The Oil industry is vital to the Kuwaiti economy, but it has caused serious environmental problems due to a delayed environmental conservation approach. In particular, at the time of the Gulf war in 1990, many oil wells were destroyed, causing serious damage to the soil, water and air. The soil was contaminated because of the huge amounts of sea water needed to extinguish the oil well blazes, resulting in salt damage and oil lakes (which is an oil sludge made up of a mixture of salt deposition, seawater and crude oil when an oil well fire is extinguished by seawater).

The Concentration of NO_x and SO_x markedly increased in the air, harming living creatures. In addition, SO_x concentration in the emissions from power plants is over 4 %, which is much higher than the acceptable level.

For these reasons, the training in environmental management technology for air, water and soil pollution has become an urgent requirement for the engineers in Kuwait. In this respect, high expectation is put on the training for human resource development for environmental issues, to be organized in those countries with advanced environmental technologies.



Group photo after the opening ceremony

2) Training objectives

Given the situation, ICETT, commissioned by Arabian Oil Co., Ltd. (AOL), offered practical training courses to

the staff in engineering fields with the purpose of modernizing and upgrading the Kuwaiti oil industry, and contributing to global environmental conservation.

The training was designed to help the engineers understand the environmental administrative policies of both national and local governments, advanced technologies in the private sector, advanced environmental management measures, environmental preservation technology, cleaner production technology and zero emissions for global environmental conservation based on the principle to contribute to upgrading their environmental management.

II Outline of the training

1) Goal to be achieved

The goal of the training was that each training participant would learn about advanced technology, environmental management technology and also measures in the Japanese petrochemical industry. This was intended to develop their capability to make use of what they would learn through the training in their work back in their home country. Each training participant was required to draw up an Environmental Action Plan to utilize the technology and measures they had learnt for their own country.



Training participants in practice

2)Curriculum

Environmental conservation policies in Japan were explained as background information, then environmental management policy, environmental management system and specific environmental conservation technologies were presented through lectures and inspection tours.

By presenting the damage experienced by the Yokkaichi area in the petrochemical complex, we presented the concept of pollution prevention, the environmental management system, zero emission and cleaner production technologies, in which the corporate voluntary efforts were expected from the global environmental conservation point of view.

The training was divided into the following four sessions:

Session 1: Orientation (Introduction)

We had the orientation on training curriculum and living aspects, held the opening ceremony and clarified the purpose of training and the target of each session. Training participants were required to identify individual issues and the goal of the training in order to make their presentation of job reports.

Session 2: Environmental management in Japan

The training participants studied the outline of Japanese administrative policy and environmental management in the oil industry. Case studies of industrial pollution and the resulting impact on the economy and society were presented. The training participants reaffirmed the necessity for environmental conservation and its effective measures.

Session 3: Advanced technologies for environmental conservation

1) The training participants visited a petrochemical complex in the Yokkaichi area and learned about air pollution prevention technology, end of pipe technologies for wastewater and waste material treatment, equipment for pollution prevention and monitoring technologies for wastewater, soil contamination and air pollution prevention, through lectures and inspection tours.

2) Various advanced technologies were presented, including cleaner production technologies in the petrochemical industry and the corporate and inter-corporate approaches to zero emission.

Session 4: Wrap-up

As the conclusion, the training participants made a presentation on the Environmental Action Plan they would make as the deliverable part of the training to effectively work on environmental management in their department they belong to back in their country.

This was the first time for ICETT to offer the training for Kuwait alone. The training covered the latest technological movements (cleaner production technology and zero emission) in environmental management in the chemical industry. RC (Responsible Care) was covered through the lectures, and actual environmental management technologies were covered through inspection tours.

It seemed difficult for the training participants to understand voluntary management like RC, due to the differing nature of the governmental regulations and systems, and the sense of social value. However the training participants said they were 80% satisfied with the training and in this respect, the goal of the training was achieved.



Training using computer

The Seasons of Japan

Like previous issues, this issue also features festivals involving fire in Aichi Prefecture which neighbors Mie Prefecture, - "Tezutsu-hanabi (hand-held fireworks). This is a part of the Toyohashi Gion Festival on the third Friday of July in Toyohashi City, Aichi Prefecture. The Tezutsu-hanabi is a festival dedicated to the God of the Yoshida Shrine, heralding the end of the rainy season in the Higashi Mikawa area. It is known as the Fireworks festival of Sanshu Yoshida or the southern part of Aichi Prefecture and has long been famous nationwide as a spectacular firework festival on the Tokaido, one of the main arteries of Japan since the Edo period or about 400 years ago. Among the various events, the Tezutsu-hanabi is outstanding. As seen in the picture, young men hold bamboo stalks erupting a shower of sparks. It is said that they would launch the hand-held fireworks in front of their favored women, and wish that the object of their affection would fall in love with them, braving the falling sparks.

Sparks shoot out about 10 meters from the bamboo cylinders. The cylinders finally explode toward the ground and the flame spreads over the ground. People feel as if they were in the flame. The cylinders remaining after the explosion are prized as amulets since they are believed to contain the force of fire and the high spirits of the men. It is very difficult to get one due to the limited number of exploded bamboo cylinders. But why don't you come and see the festival? It is definitely worth seeing.



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