JESC NEWS

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Foreword

Hello, ladies and gentlemen. I am Hideto Yoshida, executive managing director of Japan Environmental Sanitation Center (JESC). It is my great honor to have an opportunity to bring word to those who participated in JICA and JESC training courses. A year and 8 months ago, I retired from the Ministry of the Environment, Japan. For 34 years, I had been engaged in the reformation of various systems concerning mainly waste management and recycling, soil contamination measures, water and so on. Particularly in the field of waste management, repeated amendment of waste management law, enactment and amendment of recycling laws for container and packaging, food, home appliance, construction material and end-of-life vehicles were made. Also, a 100% incineration system for burnable waste and 99% reduction of dioxins emission, and disposal system for PCB waste were established. For the past few years, I have been actively working on sharing the experience of Japan, making use of my experience, with other countries especially focusing on economically developing Asian countries. As for environmental issues, waste management is an imminent problem, and we are also facing the international challenge of establishing low-carbon society. Together with you, I hope to contribute in making progress to create a better environment, better world, and better earth for future generations.

Japan has contributed in the development of potable water systems in many developing countries as part of an ODA project. After securing potable water, many people expect to have a flushable toilet as the advance of civilization. In a flush toilet, a septic tank is installed and night soil is discharged into the environment after diluted with water more than ten times of the night soil. In many cases, this water reaches groundwater without appropriate treatment, and causes contamination with bacteria. It is not a problem for adults as they can get bottled water for drinking; however, it is not the same for children. They drink water directly from a tap and suffer from diarrhea, and in serious cases, it can result in death. Along with economic growth, reduction of such a misfortune is a major goal in developing countries. I have been dealing with this problem in Japan. I recognize that the way to tackle this problem varies from one country (community) to another, depending on the degree of development. I assume myself to be helpful in this field as well. In Japan Environmental Sanitation Center, there is Mr. Miyagawa, a liaison officer for international relations, and also there are Mr. Hayami and Ms. Nakamura. Please feel free to consult with them for assistance. Your requests will be surely conveyed to me. Moreover, in the field of night soil disposal, we have Mr. Nakano, an expert in the field. We are all in the same boat. Let's work altogether.

In Japan, the season for cheery blossoms has come. (Hideto YOSHIDA)

JESC Held "the 2nd 3R Conference for Asian Local Governments"



The Japan Environmental Sanitation Center, JESC, held "The 1st 3R Conference for Asian Local Governments" on 28th Oct. 2008 at Omiya Sonic City in Saitama. Following the 1st Conference, the 2nd conference was held on 25th Oct. 2009 at ACROS FUKUOKA in Fukuoka City, and 13 Asian local governments participated.

The conference was successfully expanded and 6 Japanese local governments including 2 prefectures, Fukuoka and Saitama and 4 cities, Fukuoka, Kawasaki, Kitakyushu and Sapporo, and 7 Asian cities including Phnom Penh/ Cambodia, Shenyang/China, Vientiane/Laos, Seberang Perai/Malaysia, Calbayog/Philippines, Ulsan/South Korea, and Hanoi/Vietnam.

In keynote speeches the representatives of Fukuoka prefecture, Japanese cities and Asian cities reported their activities to promote 3Rs and reduce disposable plastic bags. Subsequently, the participants including 2 commentators, Professor Yasushi MATSUFUJI and Ms. Yuiko TAIRA frankly talked about disposable plastic bags. Through the frank talking, diverse situations and policies regarding disposable plastic bags have become clear.

By the talks exchanged, every participant strongly recognized that disposal plastic bag minimization should raise awareness for preservation of natural resources as well as the reduction of waste generation and contribute to proper management of final disposal sites and reduction of greenhouse gas emitted by waste treatment. Also, the local governments which gathered at the place in Fukuoka reached an agreement to work further on disposable bag minimization. The fruitful



results of the conference were summarized as the FUKUOKA declaration.

We, Japan Environmental Sanitation Center

look forward to your participation in "the 3rd 3R Conference for Asian local governments".

(Shoichi HAYAMI)

Training Program of JESC "Comprehensive Solid Waste Management Course will be Renewed"

The Comprehensive Solid Waste Management Course, which JESC has conducted as a JICA training program for more than forty years, will be renewed in the next fiscal year. This renewed Comprehensive Solid Waste Management Course will start on June, 2010, changing its name to "Comprehensive Solid Waste Management and 3R".

From the fiscal year 2010, participants will be from the same organization in respective countries for three years, senior officials in the first year and mid-career officials in the following next two years.

Consequently, we expect that senior officials will find directions and strategies for improving their institution utilizing the knowledge obtained in the course, and mid-officials translate a plan into action based on the strategies.

This renewed course aims that the outcome of a training course will be materialized by participants in respective countries. Another renewal point is the additional subject of night soil disposal. In many developing countries, night soil disposal is an area of high priority for improvement and systematic measure has not been presently implemented.





In the fiscal year 2009, we conducted JICA training courses including "Comprehensive Solid Waste Management": "Waste Management Technologies and 3Rs for Central and South American Countries," "Hazardous Waste Management and Appropriate Disposal for Asia," and country focused solid waste management courses for China, Turkey and Iran.

Other than JICA training courses, we also conducted a training course for Vietnam called "To Build Research Capacity for Improvement of Waste Management System" and "Workshop on Capacity Building of the Responsible Authority for Better Night Soil Disposal System in Asian Region" contracted by the Ministry of the Environment. We hope that participants who completed the training program will take an active part in their organization after returning to their respective countries.

(Takashi MIYAGAWA)

New perspectives for the Prevention and Solid Waste Management in the Dominican Republic

The city of Santiago, the second most important city in the Dominican Republic, with a population of almost 800,000 habitants (8% of country approximately) could be doing activities and actions that we are not mostly aware of, however it is worth mentioning one activity (among several) most related to the strategic city agenda, and international commitments such as the Kyoto Protocol.

I'm talking about the Final disposal of solid waste of Santiago City "Eco-Parque Rafey" now transformed in a Sanitary Landfill similar to the Fukuoka Methods, a project committed to perform technical and urban transformation in the final disposal of solid waste.

The transformation of SWM begins with an "open dumping site, to a sanitary landfill of a semi-aerobic type". The initiative was enjoyed the technical and economic support of the Japanese International Corporation Agency (JICA).

The FUKUOKA METHOD sanitary landfill type is a method of confining solid waste and is instituted as a CDM (Clean Development Mechanism) alternative of residue deposits which indicates, in a correct way, what is being done at Dom. Rep. in relation to international environmental agreements primarily including the Marco Convention of the United Nations for Climatic Change (CMNUCC. de 1992) the "Kyoto Protocol" of 1997.

For the purposes of a reference, the six identified gases under the Kyoto Protocol which are the object of reduction targets for emitted volumes or nominally assessed in the year 1990 all around the world for the period 2008-2012 are: nitrous oxide (N₂O), carbon dioxide (CO₂), and methane (CH₄). Just like HFCs (hydro fluorocarbons), PFCs (perfluorocarbons) and SF₆ (sulfur hexafluoride), being methane and carbon dioxide. This method applied in Santiago also has been used in Japan with proved effectiveness. Rather than economic considerations, the effectiveness resides in its positive environmental impact, its links as a Clean Development Mechanism (CDM), and as a local action link to the Kyoto Protocol, of which the Dominican Republic is a signatory.

As an international reference, the Dominican Republic represents a little less than 0.09% of the global territory (48,000 km² / 510,000,000 km²), and there is not real concept (not even



estimated) of its emissions. However as a matter of fact, we are not even in the high emission range on a global basis.

The introduction of a Japanese method (Fukuoka Method) for the final deposition of solid waste in Santiago opens a new perspective on the prevention and management of the solid waste in the Dominican Republic. In the country, there are more than 150 municipalities, but just Santiago represents 10% of the population of the Dominican Republic. Others



cities and local government are waiting for help and technical support to improve solid waste management.

Santiago is doing something, something more than what maybe it's doing in the rest of the country. At present it is independent, we are in the beginning of a road with many challenges and problems, a long road to walk; but more promising in favor of the present and future generations of the Dominican Republic.

(Edward MORETA)

Establishment of Material-Cycle Society in Hanoi through 3R Initiative — Hanoi 3R Movement—

[3R-HN Project]

Aiming to build a Material-Cycle Society through the introduction of 3R based on source separation, Hanoi City and JICA has been jointly implementing the "Hanoi 3R Project (3R-HN)" since November 2006. Project period is three years.

The population of Hanoi City was about 3 million in 2003 and is expected to increase to 4.5 million by 2020 due to economic growth. This growing population has led to a rapid increase in the amount of generated waste, which is becoming a serious issue in Hanoi City. The only landfill site in the city is expected to be filled up by 2014, and therefore, waste minimization is an urgent task in Hanoi. Under these circumstances, 3R-HN aims to minimize waste through the introduction of waste separation at source and composting of organic waste by taking two approaches; i.e., capacity building of officials/ government organizations in charge of waste management, and promotion of the proactive participation of citizens in the source separation.

[PR Activities and 3R Volunteers]

To familiarize "3R" to the Hanoi citizens, 3R-HN has been actively conducting PR activities. Firstly, the project team held a large-scale event in front of Hanoi Opera House at the launching of the project, and then carried out a series of PR strategies including TV commercials, newspaper advertisements etc. In the TV





commericials, "dancing collection workers" and a "3R song" by a famous rock singer were adopted, which gave citizens a sensational impression and contributed to spreading "3R" throughout the community. In response to these PR activities, various media in Vietnam featured the 3R-HN Project, and consequently the Project succeeded in breaking the dirty and negative image of "waste" by replacing the word "3R" that evokes the image of fashionable and fresh.

It was the young generation in Hanoi City who responded promptly to the Project's 3R promotion. After discovering the project through the media, many university students and high school students began to gather to join the project activities. They established a "3R Volunteers Club" and now more than 200 students are registered as volunteers. Now about one year has passed since the establishment, and the club started planning and conducting their own program of 3R environmental educations (e.g., games, picture shows) for children at schools and on a street, in addition to joining the activities planned by 3R-HN.

[Activities of 3R Partners and Mottainai Fair] To extend such proactive citizens' participation and create a "Hanoi 3R Movement", the 3R-HN Project undertook efforts to organize "3R Partners" involving many citizens (individuals, enterprises, NGOs, etc) who support 3R activities. On October 2008 and March 2009, the "Mottainai Fair" was planned and held as a "3R Partners Project" at the initiative of the "3R Partners" members. The main activity of the event was a flea market for used clothes and thousands of used clothes have been provided by Hanoi citizens. The event attracted about 4,000 visitors and widely reported in the mass media.

[3R Stars Conference and Hanoi 3R Council]

In tandem with the proactive promotion of citizens' participation, 3R-HN is facilitating the "3R Stars Conference" for the purpose of building a partnership among the 3R-related stakeholders. The 3R Stars consists of about 80 members from government, communities, businesses and academic institutions, and has been discussing strategic plans and action plans for 3R promotion as well as amendment of Hanoi City regulations on waste management. In March 2008, the conference adopted a "3R Stars Declaration" made up of 10 items to share the responsibility for the 3R promotion among the stakeholders. Recently, "Hanoi 3R Council" composed of decision makers of related government departments in Hanoi has been established and future direction of 3R in Hanoi is being discussed.

Reflecting such a growing movement among citizens, the government is becoming more aggressive about 3R promotion as well as the introduction of source separation. government decree (Decree No. 59.2007) which stipulates "waste segregation and recycling". However, there are only a few cases of success. Therefore, waste management officials highly expect the "Hanoi-model source separation" introduced under the 3R-HN to be expanded throughout the country. 3R-HN implemented by JICA has been receiving numerous inquiries from other cities in Vietnam.

[Future Development of 3R-HN]

In Vietnam, many local governments are trying to introduce source separation in line with a Hisashi YAMAUCHI Team Leader of 3R-HN Project, Yachiyo Engineering Co. Ltd.

Setting up Japan Sanitation Consortium (JSC) 2nd Secretariat Office

The 2nd Secretariat Office of the Japan Sanitation Consortium (JSC) was established in the Japan Environmental Sanitation Center on December 11th, 2009. The Japan Sanitation Consortium is "the knowledge hub on sanitation" which is a diffusion base of sanitation related knowledge and information in the Asia-Pacific region and jointly managed by sanitary organizations in Japan.

The setting up of the knowledge hub on sanitation was approved at "the knowledge hub meeting" at the Asia-Pacific Water Forum and the Japan Sanitation Consortium was established by four organizations: the Sewerage Business Management Centre, the Japan Environmental Sanitation Center, the Japan Sewage Works Association and the Japan Education Center of Environmental Sanitation. The first steering committee was held on October 16th, 2009 and the Japan Sanitation Consortium was officially launched as the knowledge hub on sanitation. The 1st Secretariat Office was set up in the Sewerage Business Management Centre on the day mentioned above and the 2nd Secretariat Office was set up in the Japan Environmental Sanitation Center on December 11th, 2009.

The Japan Sanitation Consortium is devoted to: (1) the spread of basic sanitation thought, (2) the promotion of technical development of Jokasou and night soil disposal, (3) assistance concerning constructing sewerage and onsite disposal facilities, and (4) policy planning, capacity building and facilitation of investment related to sanitation in the countries of the Asia-Pacific region. The 2nd Secretariat Office, in collaboration with the 1st Secretariat Office, aims to build an information network for the diffusion of knowledge and information related to sanitation in the Asia-Pacific region, hold international seminars and carry out surveys for better sanitation in the regional countries.

(Hideaki FUJIYOSHI)

Editor's Comment

Although my career in international cooperation is limited, let me mention about some of the ways to have successful transactions with foreigners.

First, language is very important. Today English is the international language of our field. Therefore knowing technical terminology in English is helpful in actual communication. Second, straightforwardness is important. Indirect communication is often considered as dishonest and tactical. Third, understanding other cultures is also important. We should not impose our values upon other people, but give due respect to cultural differences. Concerning the third point, I would like introduce an example showing how difficult it is to perform cultural understanding.

It is said that Japanese are workaholics. So, let me refer to the work ethic of Japanese and describe how it differs from that of other countries. Japanese believe that work is necessary for them to gain social acceptance in the Japanese society. That is why most Japanese work so hard to maintain their membership in their company. Most Japanese have seen work as the most important thing in life. That is, they have tried to find the meaning of life through their jobs. Today however, the younger generation thinks quite differently. They are not job-centered as the older generation used to be, and a sense of dedication to jobs seems to be disappearing rapidly. These days, Japanese views on work are changing dramatically.

Anyway, we can have successful communication through this newsletter.

Please give me a letter or e-mail describing your news.

(Hideaki FUJIYOSHI)

