

## **Fiscal Year 2019 Activity Report of the Japan Sanitation Consortium (JSC)**

The activities of the Japan Sanitation Consortium (JSC) outlined below are as stipulated in article 4 of the JSC's Term of References:

- 1) Networking
- 2) Information gathering
- 3) Knowledge dissemination and information sharing
- 4) Support to international donor organizations

The results of the FY 2019 business activities are reported hereafter.

### **1. NETWORKING**

(Cooperation with international organizations, and constitution of a network with sanitation-related organizations from different countries)

#### **1.1 Networking based on the work commissioned by the Ministry of Land, Infrastructure, Transport and Tourism (MLIT)**

JSC provided support for a project commissioned by the Ministry of Land, Infrastructure, Transport and Tourism (MLIT), entitled '*Research and Examination Assignment of Strategy Measures for Overseas Expansion in the Sewerage Field*' (project due period: April 17, 2019 to March 13, 2020; joint venture with the Mitsubishi Institute Inc.). This project included the holding of the following meetings:

- ① Asia Wastewater Management Partnership (AWaP) Operations Committee; Technical Seminar and related activities; August 8, 2019; Yokohama City, Japan.
- ② The 13<sup>th</sup> Japan-Vietnam Regular Meeting on the Technical Cooperation in Sewerage/Drainage and Wastewater Treatment between the Ministry of Construction, Vietnam, and MLIT, Japan (meeting on the national standardization of the pipe jacking techniques in Vietnam); December 11, 2019; Hanoi.

#### **1.2 Visit from ADB PRC Resident Mission, Beijing Office**

On September 24, 2019, Mr. Hubert Jenny from the People's Republic of China Resident Mission - Asian Development Bank (ADB) visited JSC to introduce the concept of an innovative carbon capture project in China using fecal sludge.

#### **1.3 Visit and Meetings at BMGF**

At the request of the Asian Development Bank Institute (ADBI), a visit was organized at the Bill &

Melinda Gates Foundation (BMGF) in Seattle, Washington, USA, and meetings (also joined by the Chief of the United States Office of the Japan International cooperation Agency-JICA) were held on June 4 and 5, 2019. During these meetings was introduced Japan's decentralized wastewater management system and discussed the establishment of a partnership program to improve decentralized wastewater management in developing countries. From JSC participated Mr. Kazushi Hashimoto (Advisor), Dr. Pierre Flamand (Manager of International Affairs) and Dr. Shinhi Kumokawa from the Japan Education Center of Environmental Sanitation (JECES; a member organization of JSC).

#### **1.4 Field Survey on Decentralized Wastewater Management in Warangal City, Telangana State, India**

The Administrative Staff College of India (ASCI), with the support of the Bill & Melinda Gates Foundation (BMGF), is working on improving decentralized wastewater management in Warangal City, Telangana State, India. At the request of ASCI, JSC's Advisor – Mr. Kazushi Hashimoto – was sent to this city and state from July 10 to 13, 2019, to assess the progress in sanitation. In addition, Mr. Hashimoto discussed with the city and state government officials on the possibility of introducing the Johkasou system for the improvement of decentralized wastewater management.

## **2. INFORMATION GATHERING**

(Creation of a sanitation database for the Asia-Pacific Region and execution of country assessments for sanitation improvement in the countries of the region)

### **2.1 The 24<sup>th</sup> Asia-Pacific Water Forum (APWF) Governing Council Meeting**

The 24<sup>th</sup> APWF Governing Council Meeting was held on July 22, 2019, at the PUB WaterHub in Singapore. The main agenda items of this meeting were the 3-year APWF Action Plan, the 4<sup>th</sup> APWS (4<sup>th</sup> Asia-Pacific Water Summit), the Asia Focus Session at the 2019 Stockholm World Water Week and the 9<sup>th</sup> World Water Forum. Mr. Ravi Narayanan (APWF Chair) and Ms. Changhua Wu (APWF Vice-Chair) chaired the Governing Council Meeting in which Dr. Pierre Flamand (JSC Manager of International Affairs) participated on behalf of JSC.

### **2.2 The 25<sup>th</sup> Asia-Pacific Water Forum (APWF) Governing Council Meeting**

The 25<sup>th</sup> APWF Governing Council was held at the Good Wood Park Hotel in Singapore on February 25, 2020. Due to the impacts of the new coronavirus infection, rallying in Singapore was kept to a minimum and, like most of the APWF members, Dr. Pierre Flamand (JSC Manager of International Affairs) joined through a remote connection. The Governing Council Meeting was chaired by Professor Eduardo Araral (APWF Vice-Chair) who led the following topics of discussion: 1) program (draft) of the 4<sup>th</sup> APWS (4<sup>th</sup> Asia-Pacific Water Summit), main themes and concept of the 4<sup>th</sup> APWS and the Kumamoto Declaration, composition of the subcommittees, etc.; 2) priority themes of APWF

for 2020 (including the Asia Focus Session at the 2020 Stockholm World Water Week), 3) 9<sup>th</sup> World Water Forum.

### **2.3 Examination of Measures for the Expansion of Wastewater Treatment in the AWaP Participating Countries**

As part of a project commissioned by the Ministry of Land, Infrastructure, Transport and Tourism of Japan (MLIT), Mr. Tatsuhiro Ueda, Mr. Yoshiharu Imajima, Mrs. Yumi Kaneko, and Mr. Akira Kumagoe from the Japan Sewerage Works Agency (JS; a member organization of JSC) conducted a series of field studies in Yangon, Myanmar, and Svay Rieng, Cambodia. In order to accelerate the overseas expansion of Japanese wastewater treatment technologies, the export of a package considering both the sewerage and Johkasou systems was considered. Dr. Shinhi Kumokawa and Dr. Yurie Shirakawa from the Japan Education Center of Environmental Sanitation (JECES; a member organization of JSC) were subcontracted by JS to also participate in the field studies and were in charge of the feasibility study for the introduction of the Johkasou system.

## **3. KNOWLEDGE DISSEMINATION AND INFORMATION SHARING**

(Diffusion of knowledge and experience in sanitation from Japan and other developed countries; and organization of international seminars to exchange information and knowledge with developing countries)

### **3.1 The first Asia Wastewater Management Partnership (AWaP) Operations Committee and Technical Seminar**

On August 8, 2019, the AWaP Secretariat, the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) and the Ministry of the Environment (MOE) of Japan launched the first AWaP Operations Committee in Yokohama City, Japan. In addition to Japan, the participating countries were Cambodia, Indonesia, Myanmar, Philippines and Vietnam. These countries worked together on the preparation of the AWaP Annual Report and discussed the second AWaP Plenary Meeting to be held in Kumamoto City, Japan, in October 2020. Following the Operations Committee, six Japanese companies presented their products and services in a technical seminar. Dr. Pierre Flamand (JSC Manager of International Affairs) moderated these two events.

### **3.2 Stockholm World Water Week**

JSC Advisor, Mr. Kazushi Hashimoto, and JSC Sewage Works Expert, Mr. Yoshiharu Imajima (International Affairs Office, Japan Sewage Works Agency-JS; a member organization of JSC), participated at the Stockholm World Water Week, which was held from August 25 to 30, 2019. During one of the meetings of the Asia Focus 2019 Session hosted by the Asia-Pacific Water Forum (APWF), entitled '*Water Cycle Management: Towards Water Security in Asia and Pacific*', Mr.

Imajima presented the '*Water Environment Improvement Project in Ho Chi Minh City, Vietnam*' as an example of good practices, and introduced the Asian Wastewater Management Partnership (AWaP).

### **3.3 The 7<sup>th</sup> International Workshop on Decentralized Domestic Wastewater Treatment in Asia**

On September 24, 2019, the 7<sup>th</sup> International Workshop on Decentralized Domestic Wastewater Treatment in Asia was held in Hanoi, Vietnam. The Ministry of the Environment of Japan (MOE) hosted this event with the support of JSC in the persons of Dr. Shinhi Kumokawa, who also chaired a session, and Dr. Yurie Shirakawa. Japan and nine other countries made altogether sixteen presentations focusing on decentralized domestic wastewater treatment, which were followed by discussions on this theme. In addition, a site tour of Johkasou-related facilities was conducted for the overseas participants. In total, the workshop gathered about 130 participants.

### **3.4 Roundtable on Financing Water**

The Roundtable on Financing Water is a series of meetings that has been initiated through a joint proposal from the Organization for Economic Cooperation (OECD), the World Water Council and the Dutch Government. OECD is a global public-private platform that has for objective to encourage actions from governments, finance organizations, international organizations, charities, academic institutions and civil society organizations. Previous meetings have been held in Paris, Tel Aviv and New York while the present meeting took place in Asia at the ADB headquarters in Manila, The Philippines, on November 26 and 27, 2019. Mr. Yoshiharu Imajima, (JSC Sewage Works Expert and member of the International Affairs Office of the Japan Sewage Works Agency-JS) and Dr. Pierre Flamand (JSC Manager of International Affairs) were invited for JSC. In Sessions 7, entitled '*Practical Example to Increase Financing Flows for Water-related Investments in Asia*', Mr. Imajima made a presentation on the financing of wastewater management in Japan. Among additional comments, Dr. Flamand emphasized, in addition to PPPs and other funding schemes for wastewater management, on the importance of public awareness for the use of private funds through central government subsidies, local government bonds and wastewater charges.

### **3.5 The 16<sup>th</sup> International Specialized Conference on Small Water and Wastewater System**

From December 1 to 5, 2019, as part of the work commissioned by the Ministry of the Environment of Japan (MOE), Dr. Shinhi Kumokawa from the Japan Education Center of Environmental Sanitation (JECES; a member organization of JSC) participated at the '*16<sup>th</sup> International Conference on Small-Scale Water and Sewerage Systems*' of the International Water Association (IWA) held in Perth, Australia. Further to his attendance, Dr. Kumokawa delivered a keynote speech at the conference and organized a side event, entitled '*Workshop on Decentralized Domestic Wastewater Treatment*', during which was transmitted information on the Japanese Johkasou system and its business

development overseas.

### **3.6 The 13<sup>th</sup> Meeting on the Technical Cooperation in Sewerage/Drainage and Wastewater Treatment between MOC, Vietnam, and MLIT, Japan**

On December 11, 2019, the 13<sup>th</sup> Japan-Vietnam Regular Meeting (*'13<sup>th</sup> Meeting on the Technical Cooperation in Sewerage/Drainage and Wastewater Treatment'*) between the Ministry of Construction (MOC), Vietnam, and the Ministry of Land, Infrastructure, Transport and Tourism (MLIT), Japan, with the support of JSC was held in Hanoi, Vietnam, under the theme of *'Challenges for the improvement of sustainability in the sewerage business'*. The two organizing countries have taken this opportunity to mark the 10<sup>th</sup> anniversary of the Memorandum of Understanding signed between Japan and Vietnam in the field of wastewater, stormwater and wastewater treatment, and to present the progresses made over this 10-year period as well as potential future developments. The Japanese side made a final presentation on sustainable sewerage management followed by a discussion on the direction for improvement of the current revision of the Cabinet Order on sewerage systems in Vietnam.

### **3.7 IWA Water and Development Congress & Exhibition**

From December 1 to 5, 2019, as part of the work commissioned by the Ministry of the Environment of Japan (MOE), Dr. Yurie Shirakawa and Mr. Satoru Takahashi from the Japan Education Center of Environmental Sanitation (JECES; a member organization of JSC) attended the *'IWA Water and Development Congress & Exhibition'* held in Colombo, Sri Lanka. In addition to the conference, they participated at the associated exhibition on behalf of JECES and displayed in the allocated booth a model of a small-scale Johkasou facility; the main decentralized wastewater treatment system used in Japan. Furthermore, during the Business Forum organized by IWA, JECES introduced in a presentation the legal framework of the Johkasou system in Japan, the structure for operation and maintenance, and the activities conducted to promote decentralized wastewater treatment systems in other countries. Finally, Dr. Shirakawa and Mr. Takahashi interviewed some of the persons in charge of water and sanitation at the National Water Supply and Drainage Board of the Japan International Cooperation Agency (JICA) Sri Lanka Office.

### **3.8 Promotion Support for the Diffusion of Johkasou Operation and Maintenance Techniques Overseas**

As part of the work commissioned by the Ministry of the Environment Government of Japan (MOE), Dr. Shinhi Kumokawa and Dr. Takeshi Yahashi from the Japan Education Center of Environmental Sanitation (JECES; a member organization of JSC) made two visits to Jiaxing City, Zhejiang Province, China (July 14-19, 2019, and October 20-25, 2019). On these occasions, they held a joint symposium with local administrative organizations (the Bureau of Housing and the Urban-Rural Development,

Jiaying City) and research institutes (the Yangtze Delta Region Institute of Tsinghua University, Zhejiang; the North Center for Rural Wastewater Treatment Technology, Ministry of Housing and Urban-Rural Development; and the School of Environment, Tsinghua University). Among the conducted activities, Dr. Kumokawa and Dr. Yahashi also provided technical support for the establishment of a structure for the operation and maintenance of the Johkasou installed in Jiaying (approximately 300 units) and the Johkasou made in China (over 20,000 units), the functional improvement of existing Johksaou, and the construction of performance evaluation test facilities.

### **3.9 Water Business Seminar of Yokohama Water Business Council**

The Water Business Seminar of the Yokohama Water Business Council was held on February 14, 2020 at the Yokohama City Small and Medium Enterprise Co-sponsorship Hall. On this occasion, Mr. Akira Morita from the Japan Environmental Sanitation Center (JESC; a member organization of JSC) made a presentation on wastewater management in Indonesia.

## **4. SUPPORT TO INTERNATIONAL DONOR ORGANIZATIONS**

(Organization and holding of training courses on sanitation, execution of project assessments, guidance for appropriate technology selection, and provision of experts to international donor organizations such as ADB and JICA)

### **4.1 Business Leaders' Policy Dialogue on accelerating sanitation for all**

The Bill & Melinda Gates Foundation (BMGF) and the Asian Development Bank Institute (ADBI) sponsored and held a policy dialogue at ADBI's office in Tokyo, Japan, on August 30, 2019. This event provided a venue for information exchange between Japan's Johkasou and sludge treatment industries, BMGF, international organizations, and sanitation-related professionals from India. Dr. Shinhi Kumokawa from the Japan Education Center of Environmental Sanitation (JECES; a member organization of JSC) and Mr. Kazushi Hashimoto (JSC advisor) chaired both a session, which respectively focused on the Johkasou system and fecal sludge management. On the day preceding the policy dialogue (August 29) was conducted a visit to sites where Johkasou are installed and from where could be observed how operation and maintenance is performed with these facilities.

### **4.2 Fecal Sludge Management Stakeholders Workshop**

The People's Republic of China Resident Mission - Asian Development Bank (ADB) held a stakeholder workshop on fecal sludge management on September 9, 2019 at the ADB office in Beijing. Dr. Pierre Flamand, Manager of International Affairs, was invited for JSC to present knowledge on fecal sludge management in Japan, mobile sludge dewatering/thickening vehicles, and sludge reuse technologies. In addition, Dr. Flamand, as a resource person for ADB, made a business trip to the ADB headquarters in Manila, The Philippines, from September 17 to 21, where he made presentations on related topics.

## 5. OTHER ACTIVITIES

### 5.1 The 13<sup>th</sup> JSC Steering Committee Meeting

The 13<sup>th</sup> JSC Steering Committee Meeting was held on May 31, 2019 at the Niigata Kenjin Kaikan in Tokyo, Japan. The meeting included the verification and approval of the minutes of the previous JSC Steering Committee Meeting, the report of FY 2018 activities, and a deliberation on the business plan for FY 2019, which was unanimously approved.

### 5.2 Participation in ISO/TC 224/ WG 11 (Stormwater Management) as a Secretariat Member

The Japanese government, through a team of experts selected by the Ministry of Land, Infrastructure, Transport and Tourism of Japan (MLIT), has been convening the Working Group (WG) 11 of the International Organization for Standardization (ISO)/Technical Committee (TC) 224 since 2015 for the development of a new standard entitled '*Guidelines for Stormwater Management in Urban Areas*' (ISO 24536). As a member of the WG 11 Secretariat and support team for the Secretary – Mr. Takashi Sakakibara –, Dr. Pierre Flamand (JSC Manager of International Affairs) participated at the 8<sup>th</sup> meeting in Copenhagen, Denmark, on June 26 and 27, 2019. The work items of the meeting included the final draft of ISO 24536 and its related technical report TR 24539.

### 5.3 Participation in ISO/TC224/WG8 (Operations and Maintenance of Basic Onsite Domestic Wastewater Services) as Experts

As part of a work commissioned by the Ministry of the Environment Government of Japan (MOE) for the development activities of a new standard from the International Organization for Standardization (ISO)/Technical Committee (TC) 224/Working Group (WG) 8 (ISO 24525: '*Guidelines for the management of basic on-site domestic wastewater services - maintenance activities*'), Dr. Shinhi Kumokawa from the Japan Education Center of Environmental Sanitation (JECES; a member organization of JSC) and Dr. Pierre Flamand (JSC Manager of International Affairs) participated as experts at the 8<sup>th</sup> meeting in Copenhagen (June 25-26, 2019) and the 9<sup>th</sup> meeting in Lisbon (January 27-28, 2020). In these meetings, the experts worked for the creation of new drafts for the standard under development.

### 5.4 The 14<sup>th</sup> JSC Steering Committee Meeting

The 14<sup>th</sup> JSC Steering Committee meeting was virtually held on March 19, 2020. The proposal for the election of a new director for JSC was circulated and it was agreed by all the members that Mr. Masanori Hatada would be appointed as Director on April 1, 2020.