

Fiscal Year 2021 Activity Report

The activities of JSC outlined below are as stipulated in Article 4 of JSC's Term of References:

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

Due to the impact of the new coronavirus infection (COVID-19) in FY 2021 as well as the year before, it has become difficult to travel to and from overseas, so many scheduled meetings and events have been cancelled or changed to a web meeting.

1 . Networking

Cooperation with international organizations, creation of a network of sanitation related organizations and bodies from each country.

1 — 1 Networking based on work commissioned by the Ministry of Land, Infrastructure, Transport and Tourism (MLIT)

For the work commissioned by the Ministry of Land, Infrastructure, Transport and Tourism, titled "Examination of measures to promote overseas expansion in the sewerage field" (execution period: June 10, 2021 to March 18, 2022; joint venture between JSC, the MRI Research Associates, Inc., and the Mitsubishi Research Institute, Inc.), the following activities were conducted.

① Survey on sewerage development status overseas

Basic information (sewerage development status, current issues, technical needs, market competition status, etc.) needed to acquire market shares in the water business in the Middle East, Africa, Eastern Europe, island countries, etc. was sorted out. Hearings were also conducted with JICA officials and those who have experience in research work in the area of technology and regarding the feasibility of Japanese companies entering such market.

② Operational support for intergovernmental seminars

Based on the local situation, the necessary support for the management of the two following seminars was provided, including the examination of issues to be raised in these bilateral government seminars (focusing on two Asian countries/cities), the support for the preparation

of the seminars' materials, their organization and management assistance.

- December 20, 2021 Japan-Vietnam Technical Seminar
- March 4, 2022 Japan-Cambodia Technical Seminar

In addition, preparations were made for the online exhibition of the 4th Asia-Pacific Water Summit to be held in Kumamoto City in April 2022.

③ Examination of measures for overseas expansion of Japanese sewerage technology

Through the conduct of overseas expansion activities of Japanese sewerage technology for the surveyed countries, target technologies were selected, needed measures were examined, and a roadmap for the next 5 to 10 years was created.

1 — 2 **Networking with the Asian Development Bank (ADB)**

The ADB Sanitation Dialogue 2021 (ASD 2021, 12-22 April 2021) focused on the theme of "Accelerating Inclusive Sanitation". ASD 2021 was an opportunity to raise awareness and action on increasing access to inclusive sanitation with the aim that everyone has access to and benefits from sustainable sanitation services, and human waste is safely managed along the whole sanitation service chain. As the fourth edition of the dialogue, ASD 2021 aimed to amplify awareness on citywide inclusive sanitation (CWIS). The event gathered representatives of ADB developing member countries and members of the wider ADB community. Major partners, such as the Bill & Melinda Gates Foundation and the Urban Climate Change Resilience Trust Fund, as well as other multilateral development banks, related organizations, private sector, and civil society also participated.

Dr. Pierre Flamand (JSC Manager – International Affairs) made a presentation on 13 April, titled "Integrated Approach for Sanitation Development in Japan" in WEBINAR 2 (theme: "Coordination, Cooperation, and Collaboration for CWIS") in which he explained how Japan solved sanitation issues through the combination of both centralized and decentralized wastewater treatment facilities. The webinar was attended online by more than 150 people.

2. **Information gathering**

Creation of a sanitation database for the Asia-Pacific Region and execution of country assessments for sanitation improvement in each country of the region.

2 — 1 **The 27th and 28th Governing Council Meeting of the Asia-Pacific Water Forum**

The 27th Governing Council Meeting of APWF (Asia-Pacific Water Forum) was held online on 17 July 2021 and attended by Dr. Flamand on behalf of JSC. The main item of the meeting agenda

was the preparation of the postponed 4th Asia-Pacific Water Summit (4th APWF).

The subsequent 28th Governing Council Meeting of APWF was also held online on 24 January 2022. During this meeting, the level of preparation of the 4th APWF was verified and Mr. Ravi Narayanan's (Chair of APWF) announced his retirement for health reasons. Mr. Mark Pascoe was introduced as the new Chair of APWF.

2 – 2 Participation in the Knowledge Sharing Roundtable hosted by ADBI and Stanford University

The roundtable (first held in 2018 and held every two years thereafter), jointly organized by the Asian Development Bank Institute (ADBI) and Stanford University, was held online on 22 September 2021. The theme of the conference was "City-wide Inclusive Sanitation (CWIS)". This meeting was attended by JICA officials, financial institutions, researchers at universities focusing on decentralized and centralized wastewater treatment, and officials from private companies. The meetings consisted of 3 sessions: Session 1 (Good Practices in Water and Sanitation Investments), Session 2 (Long-Term Financing of Water and Sanitation Projects) and Session 3 (Accountability Mechanisms and Institutional Arrangements). In addition to the invitation to the conference, JSC was consulted about the participation of companies in the field of wastewater treatment and Johkasou. Dr. Shinhi Kumokawa (Director of the Center for International Cooperation of Johkasou System at the Japan Education Center of Environmental Sanitation, a member organization of JSC) and Dr. Flamand from JSC attended and participated in the discussions that followed the presentations.

3. Dissemination of knowledge and information sharing

Diffusion of sanitation knowledge and experiences from developed countries; organization of international seminars to exchange information and knowledge with developing countries.

3 – 1 2nd Asia Wastewater Management Partnership (AWaP) General Meeting & Technical Seminar

The 2nd AWaP General Meeting and Technical Seminar were held online on Wednesday 18 August 2021. These events were moderated by Dr. Flamand. During the Technical Seminar, nine Japanese companies introduced their product through three sessions.

3 – 2 Participation in the Asia Focus Session of Stockholm World Water Week

At the Asia Focus Session of the Stockholm World Water Week held from 23 to 27 August 2021, Dr. Flamand made a presentation on the "Current Status and Vision for Wastewater Reclamation in Japan".

3 — 3 Preparations for the 4th Asia-Pacific Water Summit

The Parallel Thematic Session 5 (focusing on the access to appropriate and equal wastewater treatment facilities and the improvement of water quality) of the 4th Asia-Pacific Water Summit, held in Kumamoto City on 23 and 24 April 2022, had for specific theme: "Toward the realization of appropriate wastewater management to contribute to sustainable development". Through consultations with the co-organizers – namely, the Ministry of Land, Infrastructure, Transport and Tourism and the Ministry of the Environment of Japan –, JSC sent invitations and ensured the coordination with the speakers and panelists. In addition, Dr. Flamand facilitated the session during the summit.

3 — 4 9th Workshop on Decentralized Wastewater Treatment in Asia

The 9th International Workshop on Decentralized Wastewater Management in Asia was held online on 30 November 2021. This event was part of the projects of the Ministry of the Environment and was administered by the Japan Education Center of Environmental Sanitation (JECES, a member organization of JSC) as secretariat. The theme of this workshop was "Appropriate Fecal Sludge Management for Sustainable Decentralized Wastewater Management". From JSC, Mr. Kazushi Hashimoto (JSC Advisor) made a keynote speech and Dr. Flamand acted as moderator. In addition, speakers from China, India and the Institute for Global Environmental Strategies (IGES) were involved in this workshop, which was attended online by 99 people out of 176 registrations.

3 — 5 Johkasou Technical Seminars

As in the previous year, JECES held a "Johkasou Technical Seminars" supported by the Ministry of the Environment of Japan for Sri Lanka and Lao in order to promote the overseas expansion of Johkasou, which are advanced decentralized wastewater treatment facilities used in Japan. The Lao Technical Seminar was held online on 26 January 2022 with the cooperation of the Ministry of Public Works and Transport of Lao PDR, and was attended by staff from the offices of the Department of Public Works and Transport of all 17 prefectures of the country. The Sri Lanka Technical Seminar was held online on 10 March 2022 with the cooperation of the Ministry of Water Supply of Sri Lanka and the Ministry of Environment of Sri Lanka, and was attended by about 50 people involved in wastewater treatment, including the National Water Supply and Drainage Board of Sri Lanka.

3 — 6 Online Training Course at the Administrative Staff College of India (ASCI)

As in the previous year, the 'On-line Course on Leadership Development for City-Wide Inclusive Sanitation', conducted by the Administrative Staff College of India (ASCI) with the support of the Asian Development Bank Institute (ADBI), was held twice from 26 June to 28

August 2021 and from 5 March 2022 to 14 May 2022. Mr. Hashimoto participated as a lecturer and explained the institutional framework for decentralized wastewater systems and sanitation management in Japan. The course will also be held in July-September 2022.

4. Support to international aid organizations

Organization of training courses on sanitation, execution of assessment for projects, advice for the selection of appropriate technologies, and provision of expert to international donor organization, such as ADB and JICA.

4 — 1 Bill & Melinda Gates Foundation (BMGF) / Asian Development Bank Institute (ADBI) Cooperation Strengthening

BMGF and ADBI have partnered to improve sanitation in developing countries and, in cooperation with Toyo University, established a training program with emphasis on decentralized wastewater management for sanitation professionals in developing countries and students of Toyo University. However, due to the impact of COVID-19, this training program originally planned to be held physically in Japan, was replaced by an online training course. JECES made a contract with ADBI on behalf of JSC on 17 December 2021, and the online training course was held from 27 February to 6 March 2022 under the title: “ADBI-Toyo University Program on City-Wide Inclusive Policy and Innovation in Sanitation in Asia with Focus on Japanese Experiences”. From JSC, Mr. Hashimoto, Mr. Iwasaki, Mr. Imajima, Mr. Morita, Dr. Flamand, Dr. Shirakawa, and Dr. Kumokawa provided on-demand lectures.

In addition, a training course organized jointly by the Japan International Cooperation Agency (JICA) and ADBI on City-Wide Inclusive Sanitation (CWIS), including decentralized wastewater treatment systems such as Johkasou, was held from 15 to 19 November 2021. In this course, Mr. Hashimoto, Mr. Morita and Dr. Kumokawa participated as lecturers on behalf of JSC.

5. Other activities

5 — 1 Participation in activities of ISO/TC 224/WG 8 (Onsite Domestic Wastewater Management Using Low Technologies)

In November 2018, the Ministry of the Environment commissioned the activities related to the creation of the new ISO/TC 224/WG 8 standard (ISO 24525) "Activities related to drinking water and wastewater services – Guidelines for the management of basic on-site domestic wastewater services". JECES and JSC took part in this work to share with each country knowledge on the management of decentralized wastewater treatment systems in Japan. In 2021, two meetings were held online, on 23 February and on 28 and 29 April, in which Dr. Kumokawa and

Dr. Flamand participated.

5 – 2 Participation in activities of ISO / TC 282 / SC 2 / JWG 1 (Guidelines for Cost Analysis in Planning of Decentralized Wastewater Treatment in Urban areas)

In order to share with each country knowledge on the Japanese decentralized wastewater treatment technology (Johkasou), JECES and JSC participated, as part of the contract project commissioned by the Ministry of the Environment of Japan, in the activities for the creation of ISO standard 24575 "Guidelines for cost analysis in planning of decentralized wastewater treatment and/or reuse" (tentative) through the joint working of ISO/TC 224/WG 8 and TC 282/SC 2.

In this fiscal year, Dr. Flamand, Dr. Shirakawa and Dr. Kumokawa participated at the online meetings on 10 May and 22 November 2021. In the meeting held on May, Dr. Kumokawa introduced the cost concept for the selection of centralized or decentralized wastewater treatment facilities based on a typical prefectural concept plan as well as case studies.

5 – 3 Survey for simple wastewater/sludge treatment and installation methods in local communities

As a JSC-specific activity discussed during the JSC Secretariat regular meetings last year, the installation method of small-scale and simple wastewater and sludge treatment systems targeting the Southeastern and South Asian regions and communities was considered. Materials on sewerage planning and installation methods were collected; methods for the elimination of undeveloped areas, the use of quick sewerage projects, and business support methods which include consignment/the use of organizations and systems to develop sewerage on behalf of lower level institutions. In the future, information on small-scale sewerage technologies such as vacuum sewer as well as small-diameter sewer construction and small-scale treatment methods will also be gathered. JSC aims to introduce such findings as low-cost technologies, quick and flexible installation methods to the trainees of the JICA task-based training course on "Sewerage Management" to meet the needs of developing countries.