

Informational Seminar on the Taisei Soil System (TSS) in India



GM JaKal - Er. Raghuvendra Kumar taking handover of TSS technology from Mr. Hiroyuki Mihara, Director, Taisei Kougyou

Seminars were held on 17 June, and 21 June, 2023, hosted by the Varanasi Municipal Corporation and the Municipal Corporation of Muzaffarnagar, respectively. The seminars marked the official handover of the decentralised wastewater treatment technology called “Taisei Soil System (TSS)” which was being piloted in Indian conditions. The technology has demonstrated a reduction of 98% BOD (Biological Oxygen Demand) from wastewater being discharged from public toilets in Varanasi and boys' hostels in Muzaffarnagar in the last 3 years. The seminar symbolised the transfer of responsibility and also highlighted the immense potential for TSS technology developed by Japanese counterparts in combating water pollution in India.

The handing over ceremony in Varanasi unfolded at the Rudraksha Convention Centre. Additional Commissioner from Municipal Corporation Mr. Sumit Kumar and General Manager Jal Kal Er Raghuvendra Kumar highlighted the key role of decentralised solutions for sewage management in Varanasi city which is expanding rapidly and proposed Japanese counterparts to initiate a survey for 200+ public toilets in Varanasi.



The Municipal Corporation of Muzaffarnagar along with delegates from Japan and India visits the wastewater treatment plant (TSS) at SRGC to see its operability in treatment of sludge and wastewater.

The Municipal Corporation of Muzaffarnagar held its handover at the Shri Ram Group of Colleges (SGRC) campus, Muzaffarnagar. They orchestrated a splendid event on the campus, captivating attendees with their dedication to the environmental agenda. The collaborative efforts between the Municipal Corporation of Muzaffarnagar and JICA's partners further emphasised the shared vision of addressing India's water pollution crisis.

During these seminars, key documents and official declarations were signed, signifying the official handover of the pilot projects to the respective entities. The Varanasi Municipal Corporation and Municipal Corporation of Muzaffarnagar, alongside their partners, now bear the responsibility of spearheading the implementation and operation of TSS technology in their regions.

TSS technology itself stands as a testament to the Japanese expertise in wastewater treatment. It is a maintenance-free, zero discharge, zero electricity with an impressive lifespan of more than 40 years, proven successful in Japan. The technology with easy customisation and no applications of chemicals is able to treat black and grey waters under heavy load fluctuations. The three-stage tank system, combined with the proprietary technology “Tafgard” guarantees efficient filtration and purification of sewage water. This breakthrough technology offers immense promise for India, a nation grappling with pressing water pollution challenges.



Shri Kapil Dev Aggarwal, Minister of State for Vocational Education and Skill Development honouring Mr Koichi Ogyu from Japan International Cooperation Agency (JICA) along with Smt. Meenakshi Swaroop, Chairperson, Municipal Board, Muzaffarnagar; Shri Arvind Mallappa Bangari, IAS, District Magistrate, Muzaffarnagar; Mr. Hiroyuki Mihara, Director, Taisei Kougyou; Dr Soumen Maity, Chief Technology Officer, TARA; and Dr S C Kulshrestha, Founder Chairman, SRGC.

The seminars have set the stage for transformative change in India's sewage management sector. The events, celebrated with enthusiasm and determination, highlight the collaboration between India and Japan. As Varanasi and Muzaffarnagar embark on their journey towards cleaner water resources, the ripples of this remarkable initiative are expected to spread across the nation, leaving a lasting impact on India's environmental landscape.

Technology and Action for Rural Advancement (TARA) and entity of Development Alternatives is the implementation partner of the project.