

Johkasou Act (1983)

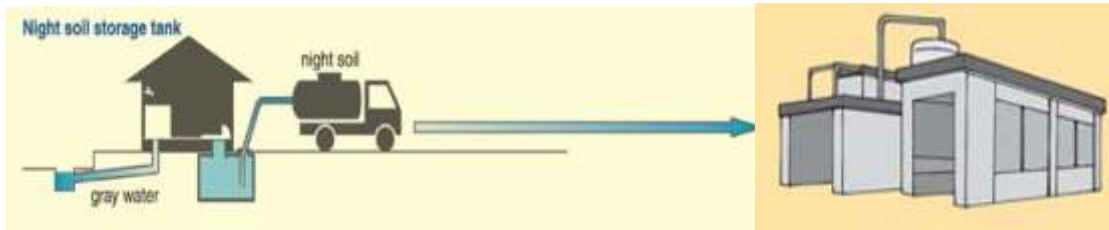
Comprehensive Reform of Onsite Sanitation & Wastewater Management in Japan

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[Background ①]

In Japan, prior to 1970, most urban/rural residents used vault toilets, non-flush toilet accompanied by nightsoil storage tanks.

By 1970, a fecal sludge management (FSM) system had been established nationwide.



In the 1970s, nationwide development of sewerage system started. But it took a long time. Residents in rural/periphery areas, who were unlikely to be connected to the sewerage system soon, opted to install the old-type Johkasou for toilet flushing, which treated black water only.

[Background ②]

From the early 1980s, the pollution of public water e.g., eutrophication, became highly visible, particularly in closed water bodies.



In areas where the old-type Johkasou are prominent, pollution in public water bodies was largely linked to untreated domestic wastewater (gray water) as well as improper installation and/or maintenance of the Johkasou.

The Johkasou Act (Japan's On-Site System Law) was enacted in 1983 to address these issues.

Promulgation process of Johkasou Act (1983)

In 1977, the Johkasou-related associations organized themselves as the Japan Federation of Johkasou Association, and made a petition to the Government/Parliament to establish such a law.

Thus, this law was drafted by the parliamentarians supported by the stakeholders of Japan's on-site sanitation and wastewater management system, such as the Johkasou maintenance vendors and desludging operators who recognized its importance for their work.

With this law, the legal basis for the installation of manufactured Johkasou and its maintenance, inspection, and desludging became clearly defined. To securely translate these measures into reality, the responsibility and duties of the Johkasou owners/users were specified and state certification systems were established for both Johkasou installation workers and maintenance operators.

Institutional Framework established by the Johkasou Act

1. Manufacturing and Installation

Challenges	Institutional Framework
Improper design of the on-site facilities	Structural standard. New design of the on-site system needs to be tested by the testing institution designated by the central government and to be approved by the central government.
Lack of monitoring of compliance with the building standards of the on-site facilities	The building plan of houses/buildings including the on-site facility must be confirmed by the building officials of the local government, who have passed the national examination, before the commencement of construction.
Poor installation of the on-site facilities	Only the registered installation business which employ the certified installation workers, who have passed national examination or completed the training course, can do the installation works.

Institutional Framework established by the Johkasou Act

2. Sludge Management

Challenges	Institutional Framework
Improper management of the sludge generated by the on-site facilities by their owners or users	It is made legal obligation of the owner of the on-site facility to desludge his/her on-site facility regularly (once a year in Japan).
Unregulated De-sludging Operators working in the difficult conditions	Only the qualified desludging vendors which are approved by the mayor can do the desludging works in the municipality. The approval needs to be renewed every five (5) years.
Improper treatment/disposal of the on-site sludge	It is a legal obligation of municipalities to treat/dispose the on-site sludge safely. In Japan, more than 1,000 sludge treatment plants were built nationwide in 1960-70s.

Institutional Framework established by the Johkasou Act

3. Operation and Maintenance, Human Resource Development

Challenges	Institutional Framework
Improper operation and maintenance of the decentralized wastewater treatment systems	Legal obligation of the owner of the decentralized wastewater treatment systems to maintain them according to the frequencies established by the Ordinance. Only registered operation and maintenance vendors, which employ the certified operators, can do the work. In case of the large system (≥ 501PE), it is made legal obligation of the owner to deploy a Technical Supervisor to manage such system.
Lack of human resources for managing on-site sanitation system / Lack of awareness on the on-site sanitation management	A training / examination systems were established for installation workers, desludging vendors, operators and the inspectors of the Johkasou and other on-site facilities.

Institutional Framework established by the Johkasou Act

4. Monitoring and Accountability

Challenges	Institutional Framework
Lack of accountability	All the decentralized wastewater treatment systems are subject to annual inspection by the 3rd party inspection agencies designated by the prefectural governor. Compliance to the effluent standards of the large size decentralized wastewater treatment system is strictly monitored by prefectural governor in accordance with the provisions of Water Pollution Control Law.

For more details;

<https://www.adb.org/sites/default/files/publication/711441/adbi-cs2021-01.pdf>

