

Sanitary Treatment of Night Soil

Right after the 2nd World War, the Japanese government had made great effort to maintain a high public health level on the one hand, and to promote a policy of recycling night soil to increase the food production on the other hand.

The emphasis of developing night soil treatment technology at that time was placed on: a) be capable of treating night soil exclusively; b) be capable of killing parasite eggs and pathogenic bacterium; c) making improvement on the odor and the appearance of night soil; d) keeping the fertilizer effect but being free from pathogenic problems. In 1930 the Waste Cleansing Law was revised, from then the municipalities are required to be responsible for the collection and transportation of night soil.

During the rapid economic growth starting from the late 1950s, the traditional night soil recycling systems broke up due to the urbanization and the spread of chemical fertilizer, and night soil turned from 'fertilizer' to 'waste.' Meanwhile, sanitary treatment of the increasing night soil in major cities resulted in a serious social problem. To cope with this problem, municipalities carried out the facility development and the government promoted the technology development on the advanced night soil treatment.

In 1953, the government launched a subsidy program to promote the installation of night soil treatment facilities. And since 1963, night soil treatment facilities have been constructed based on the Waste Treatment Facility Planning.

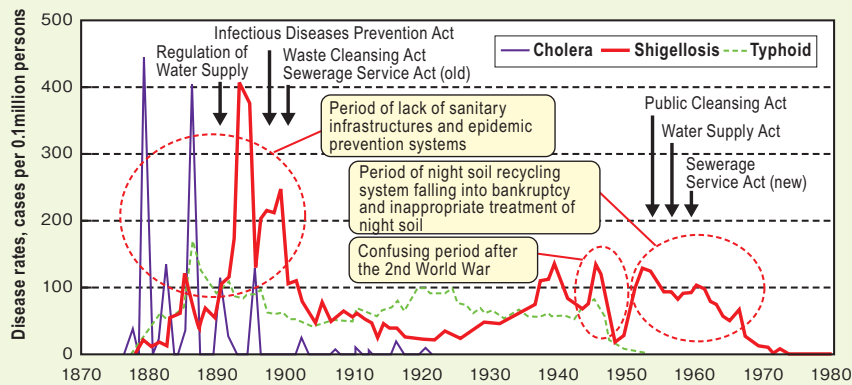


Figure 3 Trends of waterborne disease rates in Japan⁽³⁾

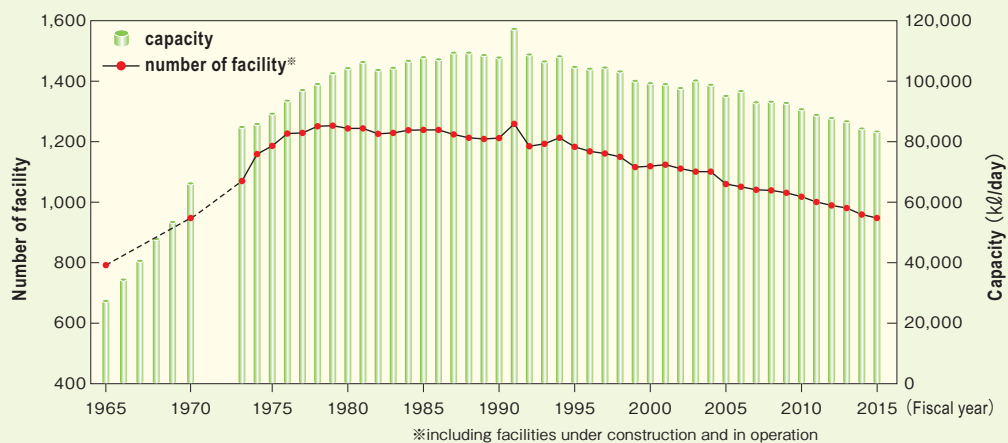


Figure 4 Trends of the number and capacity of night soil treatment facilities⁽⁴⁾

Table 1 Major events in Japanese sanitation history

Year	Event	Year	Event
1879	Regulation on Street Cleansing, Structure of Toilet and Desludging of Toilet	1958	Sewerage Service Act (new)
1890	Regulation of Water Supply	1967	Basic Law for Environmental Pollution
1897	Infectious Diseases Prevention Act	1970	Waste Disposal and Public Cleansing Act; Water Pollution Control Act
1900	Waste Cleansing Act; Sewerage Service Act (old)	1977	Guidance for Structure of Night Soil Treatment Facilities
1921	Regulation of Flush Toilet Use	1983	Johkasou Act
1930	Waste Cleansing Act revision	1987	Subsidy Program for Johkasou Installation
1945	End of the 2nd World War	1990	Guidance for Domestic Wastewater Treatment Planning
1950	Recommendation Regarding Resource Scientific Sanitary Treatment of Night Soil (GHQ) Building Standard Act	1993	Basic Environment Act
1953	Subsidy Program for Construction of Night Soil Treatment Facilities	1997	Night Soil Treatment and Organic Waste Recycling Center
1954	Public Cleansing Act	2000	Basic Act for the Promotion of the Recycling-Oriented Society
1956	Standard Structure of Night Soil Digester Tank		Guidance for Treatment Performance of Night Soil Treatment Facilities
1957	Water Supply Act		Guidance for Treatment Performance of Night Soil and Johkasou Sludge Advanced Treatment Facilities
		2005	Subsidy Program for the Promotion of the Recycling-Oriented Society