



**Advanced on-site  
Wastewater treatment system (Johkasou)**

**and its application to SMART CITY,  
especially for environmental protection of sewage**

## Who is “Kubota” ?

For Earth, For Life  
Kubota

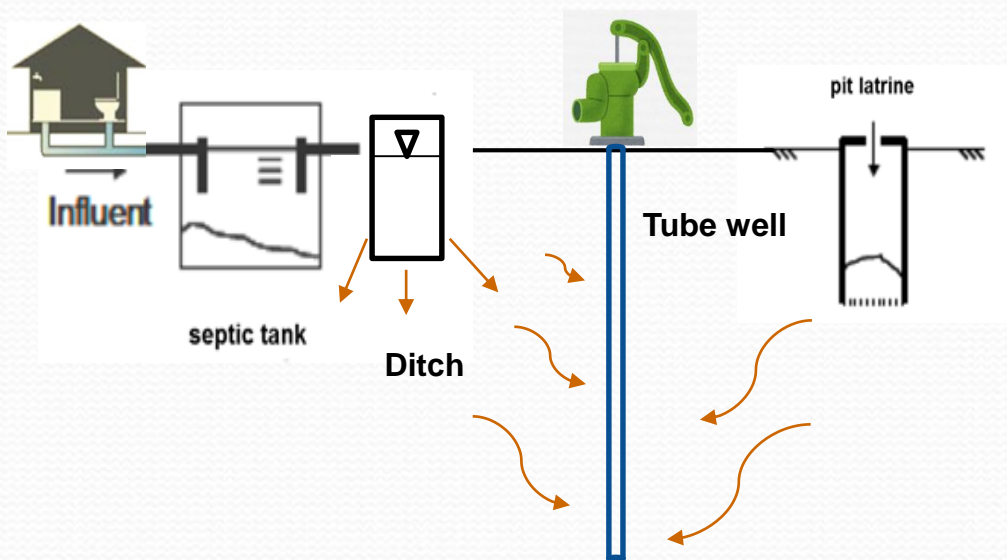
- Established in 1890
- Consolidated Sales 16.8 Billion US\$ in 2018
- Employee 40,202 Peoples (Dec.2018)



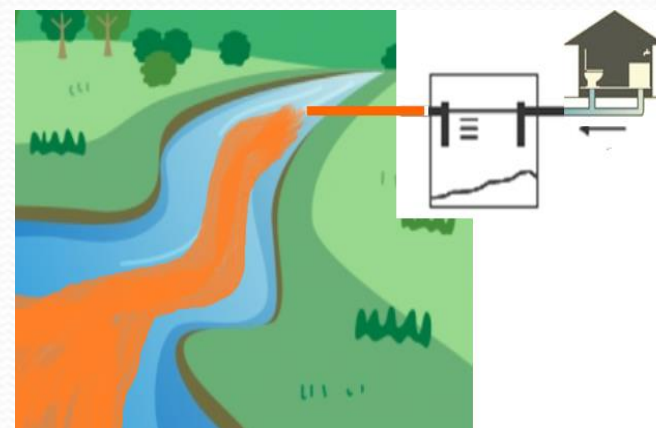


## What is “Sewage treatment” ?

### Variation of primitive Sewage treatment and pollution



Groundwater pollution,  
Crisis of hygiene



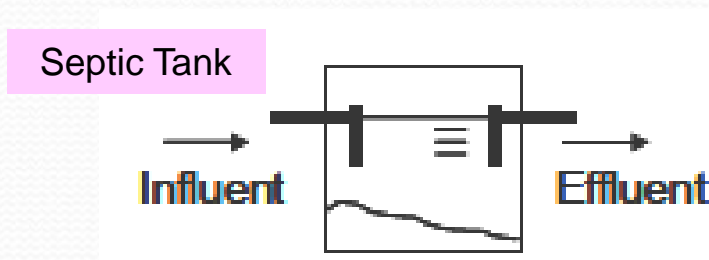
River pollution,  
Crisis of environment

**Septic Tank and Pit Latrine are used in many counties.  
However, the quality of treated water by it is not good,  
And groundwater, river, etc. are polluted by them**

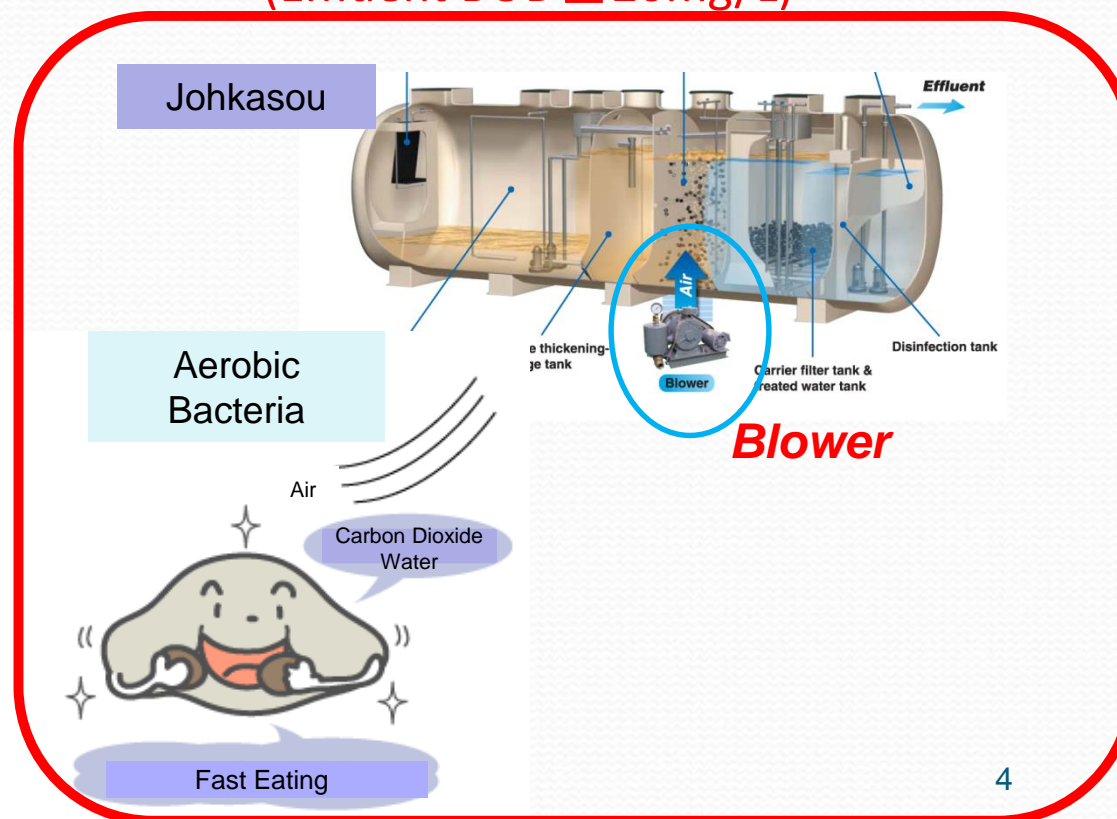
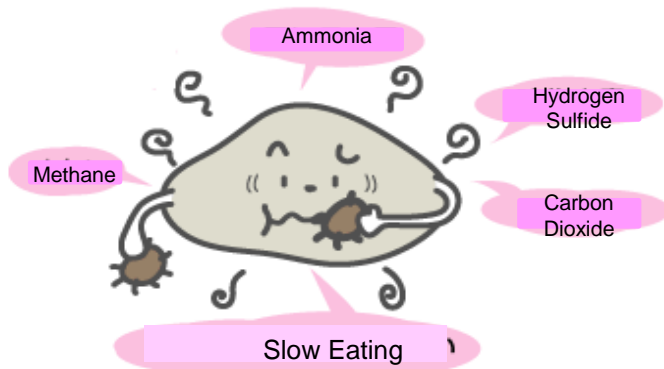
## What is “Johkasou” ?

- “Johkasou” is not just septic tank but small wastewater treatment package tank.
- “Johkasou” can treat various wastewater. (kitchen, toilet, bath, laundry, etc.)
- Quality of treated water by “Johkasou” is same as that of existing sewerage systems.

(Effluent BOD  $\leq 20\text{mg/L}$ )



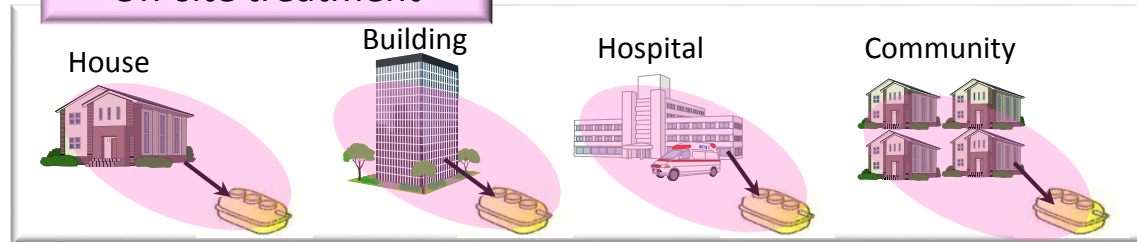
### Anaerobic Bacteria



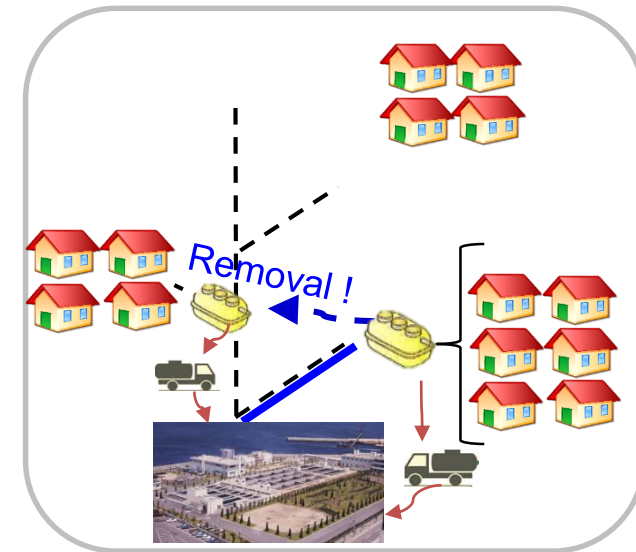
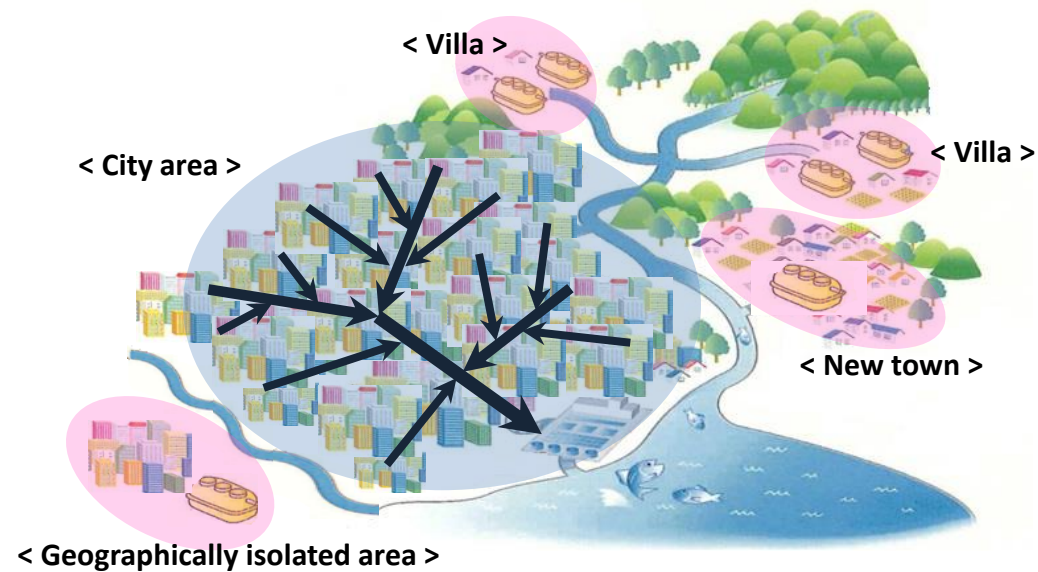
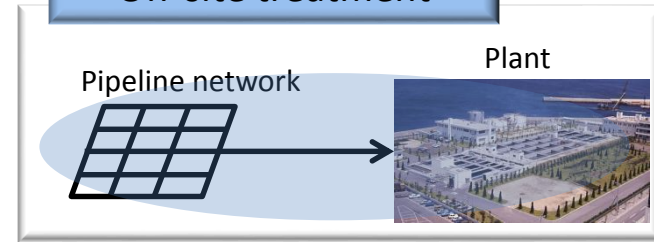


# Where is Johkasou installed in ?

## On-site treatment



## Off-site treatment



# Fabrication, Installation and O&M

For Earth, For Life  
KUBOTA

Fabrication



Installation



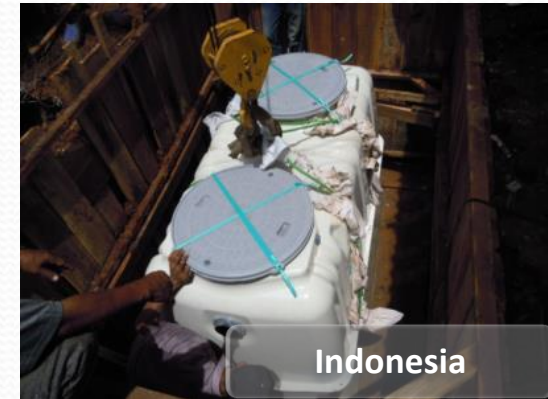
Maintenance





# Kubota Johkasou in Overseas

For Earth, For Life  
**Kubota**



Total 18 countries

**Thank you for your attention.**

**For Earth, For Life**  
The Kubota logo is displayed in a teal color, featuring a stylized 'K' followed by the letters 'ubota'.

<http://www.kubota.co.jp>