O&M Management Models

The state employs three primary institutional models for managing O&M:

- **Urban Local Bodies (ULB) Model:** The municipality directly manages the plant using its own staff.
- **Private Contractor Model:** ULBs outsource O&M to private firms through performance-linked contracts. This is often used for technical systems like Screw Presses or hybrid models.
- **Women's Self-Help Groups (SHGs):** A community-led model where trained SHGs manage natural treatment systems, promoting local employment and social inclusion.

Key O&M Components & Costs

O&M covers the entire sanitation value chain, from desludging at the household level to final disposal at the plant:

- **Desludging Services:** Standardized fees range from **₹700 to ₹2,600 per trip**, depending on distance (e.g., <10 km to >20 km) and vehicle type.
- **Treatment Capacity:** Most FSTPs in UP are designed for **32 Kilo Litres per Day (KLD)**.
- **Maintenance Frequency:** Critical infrastructure like Sludge Drying Beds (SDBs) typically require cleaning and sludge removal every 1–3 years.
- **Annual O&M Costs:** Estimated at approximately **₹26.91 Lakhs** for a standard 32 KLD facility, covering labor, electricity, chemicals (polymers), and routine repairs

Operational Guidelines

- **Mandatory SOPs:** As of 2024, it is mandatory for all ULBs to follow the CSE-developed SOPs that simplify technical procedures for both nature-based and hybrid systems.
- **Resource Recovery:** O&M strategies prioritize the conversion of treated sludge into **bio-solids** for use as agricultural soil conditioners.
- **Co-Treatment:** Several cities use existing Sewage Treatment Plants (STPs) for co-treating faecal sludge, which requires specific retrofitting of inlet and screening chambers.