Less than 10% of India's sewage is treated. The 90% that is directly released into rivers, ponds or the sea contains bacteria and parasites that cause diarrhea, intestinal worms and other illnesses, killing children and adults and polluting the environment.

It is critical that we treat sewage scientifically before releasing or reusing.

**CDD Society** is a not-for-profit organisation delivering world-class, proven and robust solutions for wastewater and fecal sludge treatment.

We work with private businesses, educational institutions, government bodies and international development organizations to create a cleaner and healthier India.

CASS, the **Center for Advanced Sanitation Solutions**, is a leading technical training institution in the sanitation and water sector, and a resource center for the Ministry of Drinking Water Supply and Sanitation.

**Sectors of Application**

- Infrastructure Projects
- Urban Slums
- Houses, Colonies and Townships
- Large Office Buildings
- Hospitals, Schools and Universities
- Factories

**Notable Clients**

- Indian Institute of Technology, Gandhinagar
- Bangalore Metro Rail
- Aravind Eye Hospital, Pondicherry
- Government of Nepal [4 Towns - ADB Project]
- MMRDA, Mumbai
- PepsiCo
- ITC
- Pune Municipal Corporation
- Tamil Nadu Slum Clearance Board
- Anna University, Chennai

**DEWATS™ treats sewage and organic wastewater naturally at the lowest cost, so it can be released, or safely reused, without polluting the environment**

**DEWATS™ under construction**

**DEWATS™ at a housing complex, Bangalore**

**DEWATS™**: A proven technology-installations in over 17 countries

CDD and its partners have implemented over 350 systems across India, treating 11 Million liters of wastewater everyday.

System size from 1,000 - 1 Million liters per day--serving an individual house to large commercial complexes.
How DEWATS™ Works: Typical Modules

**Grease Trap**
A pre-treatment module to prevent oil and grease from entering the main treatment system.

**Settler**
A sedimentation tank that decomposes organic particles anaerobically and captures the effluent biogas which may be used for generating energy.

**Biogas Digester**
A sedimentation tank that decomposes organic particles anaerobically and captures the effluent biogas which may be used for generating energy.

**Anaerobic Filter**
A fixed bed filter where wastewater is brought into close contact with active bacteria growing on the filter material (such as rocks, cinder or slag) for treating dissolved matter.

**Anaerobic Baffle Reactor (ABR)**
Degrades suspended and dissolved solids anaerobically through a naturally occurring active sludge blanket. Its efficiency improves with increased organic loads.

**Polishing Pond**
A post-treatment process, it is a shallow pond that ensures aerobic treatment where pathogens are removed mainly due to exposure to natural ultraviolet rays in sunlight. The wastewater is enriched with oxygen and floating aquatic plants help to control algal growth.

**Anaerobic Filter**
A fixed bed filter where wastewater is brought into close contact with active bacteria growing on the filter material (such as rocks, cinder or slag) for treating dissolved matter.

**Planted Gravel Filter**
A shallow tank of graded gravel or pebbles and selected species of plants (such as Canna Indica or Cyperus Papyrus) to treat remaining pollutants by biological conversion, mechanical filtration and chemical adsorption. It can be integrated into the landscape.

**Biogas Digester**
A sedimentation tank that decomposes organic particles anaerobically and captures the effluent biogas which may be used for generating energy.

**Settler**
A sedimentation tank that decomposes organic particles anaerobically and captures the effluent biogas which may be used for generating energy.

**Stage Efficiency**
- **Primary Treatment**: 40 – 50%
- **Secondary Treatment**: 75 – 90%
- **Tertiary Treatment**: 95 – 97%

**Maintenance**
- Monthly Inspection
- Desludging every 2-5yrs

Testing water quality at each stage of treatment

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<tr>
<th>Stage</th>
<th>BOD</th>
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<tr>
<td>Primary</td>
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<td>Secondary</td>
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Comparison with Alternative Technologies

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<th>CapEx</th>
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<tr>
<td>Sequential Batch Reactor</td>
<td>Lower than DEWATS™</td>
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<td>Membrane Bioreactor</td>
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<tr>
<td>Stabilization Pond</td>
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<tr>
<td>Reed bed Systems</td>
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