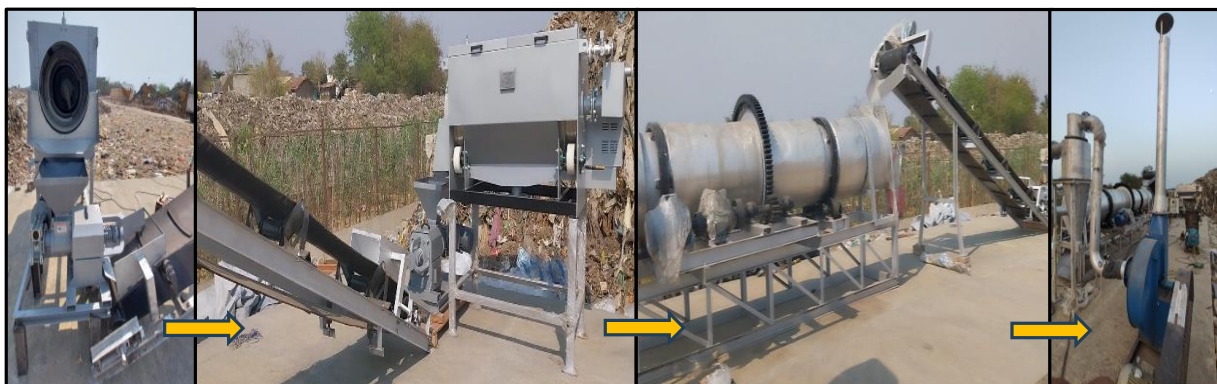


Faecal Sludge & Septage Management using Improved Mechanical Dewatering and Drying System (MDDS)

As per the Census of India - 2011, Registrar General & Commissioner, India (http://censusindia.gov.in/2011census/hlo/Data_sheet/India/Latrine.pdf) only 32.7 % of total urban households (UHH) are served by sewerage system. About 38.2 % of UHH are connected to septic tanks and 14.8% depend on Latrines (Pit/ Other/ Public). Thus, non-sewered sanitation systems comprise of 53% of total UHH. This indicates that nearly than half of the sewage generated in the Country is likely to produce Faecal sludge. With increase in sanitation coverage, there would be further increase in Generation of Faecal sludge. Further, Swachh Bharat Missions 1 & 2 target to achieve open defecation free (ODF) status to enhance sanitation conditions. This would also contribute towards generation of Faecal sludge. Accordingly, CSIR – NEERI has developed a novel process for treating FS and recovering FS as manure under IN-EU DST Funded Project. The novel scheme for treating the FS consists majorly four steps:

- Lime addition of 10% solution to eliminate the odor and increase filterability
- Dewatering and squeezing of FS to reduce the water content, and
- Finally drying to destroy the pathogens and further minimize the moisture content,
- FS thus obtained complies with the Indian Standards of organic fertilizer for further applications as manure (Ministry of Agriculture (Government of India) 2013).
- FSTP of 25 m³/ 8 hr. capacity based on the mechanical dewatering & drying system (MDDS) is under implementation at Chandrapur Municipal Corporation (CMC) Chandrapur.

FS thus obtained complies with the Indian Standards of organic fertilizer for further applications as manure (Ministry of Agriculture (Government of India) 2013).



Rotary Drum Screen and Screw Press Compactor → Belt Conveyor → LPG Fired Dryer