7.1.2.2. Management of various types of degradable and non-degradable waste in the Institution

The institute emphasizes holistic waste, water, and landscape management. Waste segregation at the source ensures effective processing. Leftover vegetable and food waste are treated in a 660 kg-capacity biogas plant, generating 25 kg of biogas daily. This helps reduce LPG consumption for cooking. Additionally, several vermicomposting pits are maintained across the campus, converting 12 tons of organic landscape waste into nutrient-rich manure annually.

Non-biodegradable waste is efficiently managed. Dry waste such as plastic, paper, glass, cardboard, and metal scrap are collected, sorted, and sent to recycling agencies. Sanitary waste is collected hygienically and disposed of safely using an incinerator. E-waste is regularly collected and sorted. Reusable components are retained, and the remaining materials are sent to authorized agencies for recycling in compliance with NPCB norms.

a. Segregation and management of biodegradable waste

Wet and dry waste is segregated at the source. Total organic waste is managed within the site with the help of a Bio-gas plant and vermicompost pits. The biogas plant treats wet kitchen and food waste from the canteen and hotel mess. Landscape waste is treated in the vermicompost pits to make compost.

Wet and dry waste bins in the building

Wet and dry waste bins on the campus

Biogas plant on the campus

Vermicompost pits

a. **Management of non-degradable waste** - Dry waste is collected separately and segregated at a central location on the campus. Paper, plastic, glass, metal scrap, etc. are segregated and given to the respective recyclers regularly.

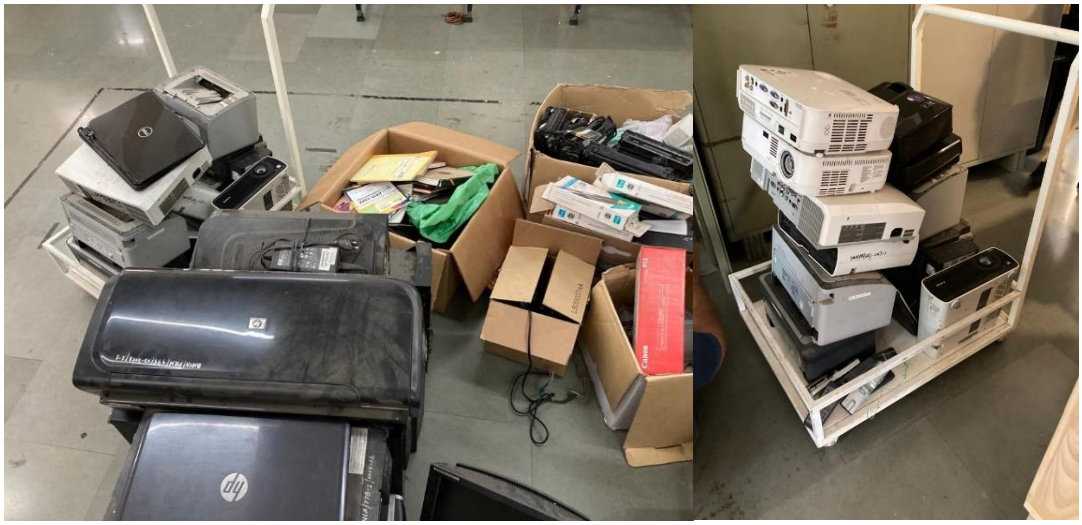
Dry waste segregation facility on the MKSSS campus

b. **Biomedical waste management**– Biomedical waste (sanitary napkins) is collected daily through an innovative chute system at the hostel level and separate dustbins in toilets at the institute level. Collected napkins are processed in the incinerator, where they are burnt safely in closure. The incinerator on average can burn 600 napkins per day. The ash remaining after burning is mixed with fertilizers that make good manure.

Sanitary napkin Incinerator on the MKSSS campus

Sanitary napkin Incinerator on the MKSSS campus

d. E-waste management- E-waste is collected at the institute level. Useful parts are kept aside for future use and other e-waste is sent to authorized agencies for dismantling and recycling as per NPCB norms. A permanent collection point for E-waste is set up in the college to facilitate the collection of e-waste from students and staff.



E-waste collected in a drive.

E-waste collection point in the BNCA building