Biodegradable waste initiative from hostels

In India, there is a huge problem of managing biodegradable waste, as same is the case with our campus. So, regarding this issues, the green office has taken a new initiative towards this problem. In collaboration with Solid waste lab of Civil Engineering department, the green office has started collecting kitchen or mess waste from different hostels and trying to fed into Rotary drum reactor, which is installed in solid waste lab.

Rotary Drum Composter is one of the in-vessel composting technique, currently, a pilot-scale (5m³) Rotary drum composter is successfully running with a daily feed of 200 to 300kg vegetable wastes collected from different hostels (Brahmaputra, Dibang, Manas and Lohit) of the campus on a daily basis, dry leaves are being used as binding material which are also collected in huge quantity from the campus. This reactor needs 15 days of commissioning period and can be used for different types of terrestrial and aquatic weeds, to convert waste into useful compost within a span of 21 to 23 days. Terrestrial weeds like *Mikania micrantha* and *Parthenium hysterophorus* are a huge threat to the agricultural fields and aquatic weeds like *Hydrilla verticilata* and water hyacinth are to aquatic life and ecosystem. This composting technique is an alternative to a huge load of organic waste generated in communities. The process of operation is given below:



shredder



Shredded vegetables



Cow dung



Adding dry leaves to the entire waste



Final compost



Active composting using reactor



Feeding to the reactor