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(NAAC 'A' GRADE accredited State University)  
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## **Composting Unit at University Campus**

The Department of Environmental Sciences has taken initiative to develop an in-house Composting unit (10ft.x5ft.x3ft.) based on traditional NADEP method. The unit converts the green waste, viz., leaf litter, twigs, weeds, etc. generated throughout the year at the university campus into compost. This compost is utilized for gardening and horticulture purposes within the campus. The horticulture team of the university is trained to manage the entire process full time.

The NADEP method of organic composting was developed by a Gandhian worker called Narayan Deotao Pandharipande of Maharashtra (Pusad). Compost can be prepared from a wide range of organic materials including dead plant material such as crop residues, weeds, forest litter and kitchen waste. Compost making is an efficient way of converting all kinds biomass into high value fertilizer that serves as a good alternative to farmyard manure.

The procedure for making NADEP Composting pit is given as Annexure A.

**Geotagged photographs of in-house developed NADEP Composting Unit at University Campus**



**IMAGE-01: Filling of Composting unit by different layers of green waste, cow dung and soil**



IMAGE-02: Filling of Composting unit by adding cow dung slurry, leaf waste and soil and final sealing of unit for 3months for formation of compost



IMAGE-03: Geotagged photo of Composting Unit

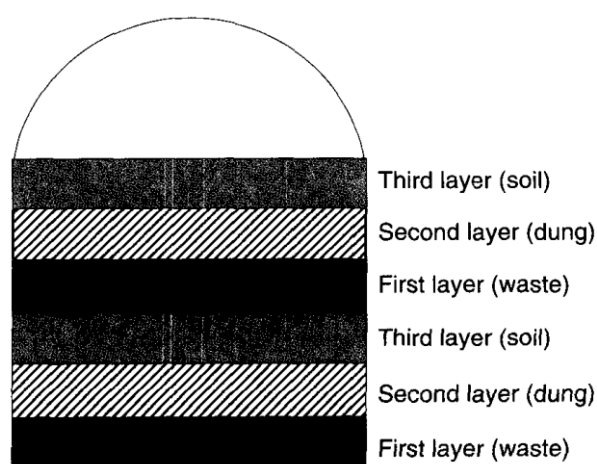
## NADEP COMPOSTING

### **RAW MATERIALS REQUIRED FOR FILLING TANK:**

Agricultural waste (Dry & green), Cattle Dung or Biogas slurry, Fine sieved soil, Water

### **PRODEDURE:**

1. Plaster the empty tank by dilute cattle dung slurry from all four sides.
2. Fill the tank in layers. Each layer is maintained as: 100 kg organic biomass: 4kg cow dung + 100 litres water + 60 kg soil. 4-5 layers are filled approximately.
3. After filling the tank, cover the biomass with 3 inches thick layer of soil and seal with cow dung + mud plaster.
4. After 15-30 days of filling the organic biomass in the tank gets automatically pressed down to 2 ft. Refill the tank by giving 2-3 layers over it and reseal it.
5. Moisten the tank at intervals of every 6-15 days while not disturbing the filled material upto 3-4 months.
6. If any crack is developed, it should be promptly filled up with slurry.



### **BENEFITS:**

1. Use of compost reduces the need for chemical fertilizers.
2. Compost can be prepared from a wide range of organic materials including dead plant materials such as crop residues, weeds, leaf litter and kitchen waste.