



## TITLE: Pipe Composting Process at BGSIT Campus

### Photos



### Description

It is a kind of vermi-composting, often called Worm Tube Composting, carried out within a PVC tube, promoted by World Malyalee Council. This method of composting as a process of waste to wealth is a big success in states like Kerala, Karnataka. If you are a beginner to composting, start off with the most popular method: aerobic composting in a pipe. Aerobic composting is done above-ground with the help of microorganisms that consume and decompose organic waste matter in an aerated environment. You can buy the composting container pipe. Usually, number of pipes are used, stacked one next to the other.

### Methodology

- Segregation of hostel waste into dry and wet right in hostel kitchen. Fruit peels, teabags and leftovers of food, dried leaves are wet waste, while paper, plastic and packaging are dry waste.
- To start with, the PVC pipe of 2.4kgf/cm<sup>2</sup> pressure rating, ISI marked a diameter 8 inch, length of 6 feet is been used
- Top lid cover made out of Ferro cement/ Fiber/GI for 8 inch pipes is used Pit of 1 inch of diameter and depth has done in the back of Boys hostel building to fix the PVC pipe inside the pit
- On the commencement of process 2 kg cow dung mixed with water is added with 2 kg of Jiggery to start off the decomposition process.
- Wet waste has cut to small pieces and Daily 2 kg of waste has dropped to pipe. No liquid waste is been added to the pipe.
- One layer of soil and 5 liters of water is added weekly to the pipe. Lid is always closed after the pipe is filled. After the 90 days of period decomposed waste has taken out and using as a compost in the garden of the college campus

### Social Impact

- Pipe composting speeds up the natural breakdown of organic material into particles and nutrients. The particles and nutrients contribute to better growing condition for plants by breaking up heavy soils, increasing soil nutrient content helping soil retain air and water.
- Composting reduces landfill space, the energy spent on waste collection, disposal and reduces the need for fertilizers

### Project Team

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