

Case Study on Vermi Composting



Company/Organization/Players: Bruhat Bengaluru Mahanagara Palike (BBMP) along with MSGP Infratech Private Limited

Project Details:

The waste is placed in vermi pits made from Granite Stone slabs or bricks and cement. The beds are 1 metre wide, 0.75 metre high and 10 metre long. Two beds are placed next to each other and in between each set of two beds there is a passage way of about 0.6 metre. The beds are covered.

The beds have a layer of coconut husk or similar bedding material at the bottom to facilitate drainage and movement of the worms. Worms of the species *Eisenia foetida* will be released on top of the waste. Approximately 30 kg of worms or about 100,000 worms is required for each of the vermi bed.

Maturation

After 30 to 40 days, the vermi compost is harvested manually and the harvested compost is stored for about two weeks to allow cocoons to hatch. At the end of this period the worms in the compost are again separated and the worms are placed back in the vermi beds.

Screening

The compost is screened manually using inclined screens with mesh size of 8mm and 4mm.

Quality Control

In order to ensure that quality of the compost is tested in a lab to determine the nitrogen, phosphorus and potassium and organic content. The compost is also tested in the field by applying it in test plots.

Model:

PPP- DBOO (Design Build Own and Operate). Land and waste provided by BBMP whereas the private party made full investment for the plant and also for O&M Private party gets the revenues from sale of vermi-compost whereas BBMP's obligation to treat is also fulfilled.

