

VERMICOMPOST FROM BIO-DEGRADABLE WASTE

1. INTRODUCTION

Biodegradable organic waste can be converted into a valuable compost by applying vermicomposting technology. This approach reduces pollution and also provides a valuable substitute for chemical fertilisers. This process can be profitable at any scale of operation provided proper process parameters are maintained. Municipal corporations and councils are encouraging entrepreneurs by providing required land and waste free of cost near waste-dumping sites.

2. RAW MATERIALS

Biodegradable waste

3. MANUFACTURING PROCESS

Soil is to be excavated in the four sheds upto a depth of about one foot for preparing the beds which contain organic waste, vermi castings and cowdung. Some paddy straw should be spread evenly at the bottom of the excavations. Vermi castings are placed over this straw and the shredded waste material and cowdung slurry are charged in order to feed the earthworms, charging of waste and cowdung slurry should be continued till the heap of material is one foot above the ground level. The entire bed should be sprinkled with water daily to keep the heaps moist. The heaps are covered with gunny bags to keep them completely dark. The temperature should be maintained at less than 28 deg. C. In two months time, the entire waste would have been digested by the earthworms and converted into dark brown compost rich in organic nutritive matter. After drying, this material is sieved and sold.

4. MANPOWER REQUIREMENT : 2

5. PROJECT COST

A. Fixed Capital	Rs.
Land & Building	Rental
Plant & Machinery	65,000
Miscellaneous fixed assets	10,000

Pre operative expenses	5,000
TOTAL	80,000

B. Working Capital (per month)

Raw Material & Packing	6,000
Utilities	2,000
Salaries and wages	6,000
Other overheads	5,000
	19,000
Working capital for 3 months	57,000
Total (A+B)	1,37,000

6. COST OF PRODUCTION / ANNUM

	(Rs.)
Annual recurring expenditure	2,28,000
Depreciation on machinery	5,000
Interest on investment	10,000
	2,43,000

7. PROFITABILITY

Sales turnover	3,30,000
Operating expenses	2,43,000
Annual profit	87,000
Return on investment	63.5 %

Market potential :

Vermi compost is a valuable input for sustainable agriculture and wasteland development. This also can be used widely in pot culture and in home gardens. Vermicompost is being successfully used by several farmers. There are many successful farmers experiences of using vermin compost from different

climatic zones of the country. There will be a lot of demand for vermin compost in future for developing cultivable land subjected to some form of degradation.

Annual Production capacity:

It is envisaged to produce goods worth Rs. 3,30,000/-

List of Plant, Machinery & equipment :

- 1 Power driven chaff cutter
- 2 Weighing machine platform type`
- 3 Water pump and pipes

