

## VERMI COMPOSTING

### 1. INTRODUCTION

Hundreds of tonnes of biodegradable organic waste is being generated in cities and towns in the country, creating disposal problems. This waste can be converted into valuable compost by applying vermi-composting technology. This approach reduces pollution and provides a valuable substitute for chemical fertilizers. This process is profitable at any scale of operation, provided proper process parameters are maintained.

### 2. MARKET

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. Several farmers are successfully using vermi-compost. Studies in Maharashtra have shown that usage of vermicompost has improved the production and quality of grapes. There are many successful farmers' experiences of using vermicompost from different climatic zones of the country.

### 3. MANUFACTURING PROCESS

Soil is to be excavated in the four katcha sheds upto a depth of about one foot for preparing the beds which contain organic waste, vermi castings and cowdung. The length and width of the beds is 100 ft. and 5 ft. respectively. Some paddy straw should be spread evenly at the bottom of the excavations. Vermicompostings are placed over this straw and the shredded waste material and cow dung slurry are charged in order to feed the earthworms. Charging of waste and cow dung slurry should be continued till the heap of material is one foot above the ground level.

### 4. PRODUCTION CAPACITY PER ANNUM

Capacity	200 MT
Selling Price	Rs. 1000 MT

### 5. PROJECT COST/CAPITAL INVESTMENT

S.No	Description	Amount Rs.
1	Preliminary & Preoperative Expns	3000
2	Fixed Capital	45000
3	Working Capital for 1 month(s)	13675
Total Project Cost		61675

### 6. MEANS OF FINANCE

S.No	Description	%age	Amount Rs.
1	Promoter Contribution	15%	9251
2	Subsidy	20%	12335
3	Term Loan	65%	40088.75
Total			61675



## 7. FINANCIAL ASPECTS

## A. FIXED CAPITAL

## i. Land and Buildings

Rented

1000 per month

## ii. Machinery and Equipment

S.No	Description		Qty.	Rate	Amount Rs.
1	Power driven chaff cutter		1	16000	16000
2	Weighing Machine Platform type		1	4000	4000
3	Water Pump and Pipes for Water Sprinkling		1	10000	10000
4	Tools & Implements		1	10000	10000
5	Pre-operative Expenses		1	5000	5000
					0
	Total				45000

## B. WORKING CAPITAL

## i. Salaries &amp; Wages (per month)

S.No	Description	Nos.	Sal/mon.	Amount Rs.
1	Supervisor/Entrepreneur	1	3000	3000
2	Skilled Workers	2	2500	5000
3		1	0	0
4		0		0
5		0	0	0
	Total			8000

## ii. Raw Material (per month)

S.No	Description	Unit	Qty.	Rate	Amount Rs.
1	Biodegradable waste	MT	108	0	0
2	Vermi Castings - 85 Kg.	Kg	85	5	425
3	Cowdung Mnure	MT	25	100	2500
	Total				2925

## iii. Utilities (per month)

S.No	Description	Unit	Amount Rs.
1	Power	LS	1000
2	Water	LS	250
	Total		1250

## iv. Other Expenses (per month)

S.No	Description	Amount Rs.
1	Postage & Stationery Expenses	0
2	Transportation Expenses	500
3	Advertisement Expenses	0
4	Consumable Stores	0
5	Miscellaneous Expenses	0
	Total	500

## v. Total Working Capital (per month)

S.No	Description	Amount Rs.
1	Rent	1000
2	Salaries and Wages	8000
3	Raw Material	2925
4	Utilities	1250
5	Other Expenses	500
	Total	13675

## 8. COST OF PRODUCTION (PER ANNUM)

S.No	Description	Amount Rs.
1	Total Working Capital	164100
2	Depreciation @ 15%	6750
3	Interest @ 12%	4811
	Total	175661

## 9. TURNOVER (PER YEAR)

S.No	Description	Unit	Qty.	Rate Rs.	Amount Rs.
1	Soapnut Powder	MT	200	1000	200000
	Total				200000

## 10. FIXED COST (PER YEAR)

S.No	Description	Amount Rs.
1	Depreciation	6750
2	Interest	4811
3	Rent	12000
4	Salaries & Wages @ 40%	38400
5	Other Expenses incl. Utilities @ 40%	8400
	Total	70361

## 11. PROFIT ANALYSIS &amp; RATIOS

1	Net Profit	Rs.	24339
2	Percentage of Profit on Sales		12%
3	Return on Investment		39%
4	Break Even Analysis		74%