



## 17. PROJECT PROFILE ON VERMICOMPOST FROM BIODEGRADABLE WASTE

Category : Manufacturing

Total Cost of Project : Rs. 401,000/-

BEP : 43 %

### I. INTRODUCTION OF BUSINESS IDEA:

Hundreds of tones of biodegradable organic waste is being generated in towns in the country. Creating disposal problems. This waste can be converted into valuable compost by applying vermin composting technology. This approach reduces pollution and provides a valuable substitute for chemical fertilize. 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. This activity gives details of making compost from biodegradable organic waste using vermi-composting.

### II. PRODUCT AND ITS APPLICATIONS:

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.

### III. MARKET POTENTIAL :

Vermicompost is being successfully used by several farmers, studies in various places have shown that usage of vermicompost has improved the production and quality of grapes. Many successful farmers have used vermicompost in different climatic zones of the country. There will be lot of demand for vermicompost in future for developing cultivable land subjected to some form of degradation. The agricultural department and NGO's are popularizing organic agriculture using vermicompost by organizing awareness campaigns and film shown in rural and urban areas. Quality Vermicompost is sold at the rate of Rs. 5/- per kg and is being used in pot culture and kitchen gardens.

### IV. CAPACITY/REVENUE (1<sup>ST</sup> YEAR) :

Sl. No.	Production in 1 <sup>st</sup> Year	Qty./kgs.	Rate/ kg.	Total Amount (Rs.)
1.	Vermicompost	1,75,000 kg	5/-	875,000



## V. MANUFACTURING PROCESS & QUALITY:

Soil is to be excavated in the four-katcha sheds up to a depth of about 1 foot for preparing the beds which contain organic waste, vermin-costings and cow dung. The length and width of the bed is 50 ft x 5 ft respectively. Some paddy straw should be spread evenly at the bottom of the excavations, vermin-costings are placed over this straw and shredded waste material and cow dung slurry are charged in order to feed the earth worms charging of waste and cow dung 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 moisture. The heaps are covered with gunny bags to keep them completely dark. The temperature should be maintained at less than 28 degree C. In two months time, the entire waste would have been digested by the earth worms and converted into dark brown compost rich in organic nutritive matter. After drying this material is sieved and sold.

## VI. COST OF PROJECT AND MEANS OF FINANCE, INCLUDING WORKING CAPITAL REQUIREMENTS :

### A. COST OF PROJECT :

Particulars	Amount (Rs).
Building sheds 4 nos.	2,00,000
Equipments	75,000
Other fixed assets	20,000
Preliminary and preoperative expenses	10,000
Deposits	10,000
Working Capital Requirements	86,000
<b>Total</b>	<b>401,000</b>

### B. MEANS OF FINANCE:

Particulars	Amount (Rs).
Loan @ 75%.	300,000
Equity	101,000
<b>Total</b>	<b>401,000</b>

### C. WORKING CAPITAL REQUIREMENT:

S. No	Particulars	Basis	Period	Amount
1	Raw-materials	240,000/12 x 2	2 months	40,000
2	Bills recivables	875000/12x 1/2	1/2 m	36000
3	Working expenses	LS	1 month	10,000
	<b>Total</b>			<b>86,000</b>



## VII. MAIN INPUTS REQUIREMENT:

### A. MACHINERY:

Sl. No.	Particulars	No.	Total Cost
1	Power driven chaff cutter	1	40,000
2	Weighing m/c. Plat form type	1	10,000
3	Other fixed assets (water pump & pipe for water sprinkling)	-	25,000
	<b>Total</b>		<b>75,000</b>

### B. RAW-MATERIALS:

Sl. No.	Particulars	Qty	Rate	Total Cost (Rs.)
1	Raw materials	Per month	20,000	240,000
	<b>Total</b>			<b>240,000</b>

### C. UTILITIES :

Sl. No.	Particulars	Monthly Charges (Rs.)	Annual Charges (Rs.)
1	Electricity	400	4,800
2	Water	500	6,000
	<b>Total</b>		<b>10800</b>
	<b>Say</b>		<b>11000</b>

### D. MAN-POWER REQUIREMENT :

Sl. No.	Workers	No.	Monthly Salary (Rs.)	Annual Salary (Rs.)
1	Supervisor	1	7,000	84,000
2	Helper	2	4000	96,000
	<b>Total</b>			<b>180,000</b>

### E. MAIN INFRASTRUCTURE REQUIREMENT :

Building	Built-up area 50 x 5 sq. ft 4 nos. @ Rs. 200/Sq.ft.
Power	Commercial power connection requires.
Water	Water is required.
Collection & disposed charges	Rs. 30,000 @ Rs. 2,500 per month



### VIII. PROFITABILITY (ANNUAL) :

Particulars	Basis	Amount (Rs.)
Sales Revenue (Projected)	Ref : IV	875,000
Raw Materials	Ref : VII B	240,000
Man power expenses	Ref : VII D	180,000
Utilities	Ref : VII C	11,000
Interest	@ 12%	36,000
Depreciation	20% SLM	55,000
Overheads	Collection, disposal & transportation charges	100,000
<b>Total Expenses</b>		<b>622,000</b>
<b>Profit</b>		<b>253,000</b>

### IX. FINANCIAL INDICATOR:

<b>Break Even Point</b>		
$\frac{FC}{SR - VC} \times 100$	$\frac{1,91,000}{444,000} \times 100$	43%
<b>Payback period</b>		
$\frac{COP}{\text{Profit} + \text{Deprn.}}$	$\frac{401,000}{308,000}$	1 year 4 months

### X. ADDRESSES :

#### SUPPLIERS OF / EQUIPMENTS :

Jaihind Hardware  
Near Janatha Bazar  
Gadag

#### SUPPLIER OF THE RAW MATERIAL

Locally available.

### XI. SPECIAL NOTE :

Training in vermicompost is advised from Krishi Vigyan Kendras.