



PROJECT PROFILE ON MANUFACTURE OF VERMICOMPOST

Category : Manufacturing

Total Cost of Project : Rs 258,000/-

BEP : 42 %

I. INTRODUCTION OF BUSINESS IDEA :

Major part of soils in Karnataka are deficient in Nitrogen and Organic matter. The role of Vermicompost and other organic materials in maintaining and increasing soil fertility is well established. The added organic material provides several benefits in agriculture like stimulation of soil life, source of Nitrogen, Phosphorous, Sulphur and other micro nutrients. Now a days environment friendly organic farming is gaining importance. Vermicompost is playing important role in organic farming.

II. PRODUCT AND ITS APPLICATIONS :

Vermicompost is a constituent in organic farming in recent years. It is being used all over the world for enhancing soil fertility, crop production and waste land development (including mine dumps, eroded and saline lands) and effective waste management of non toxic organic wastes. The fertility of the soil is essential to the long term natural sustainability managing eco system. In North Karnataka, Vermicompost and Vermiwash are being used in cultivation of vegetables, sugarcane, horticulture, products.

III. MARKET POTENTIAL :

Due to popularization of organic farming farmers are preferring Vermicompost and Vermiwash to fertilizers. It can be marketed directly to the farmers or through the agencies. There is potential for vermicompost from other districts in north Karnataka where it is not being produced. Good potential is anticipated for the proposed unit.

IV. CAPACITY / REVENUE :

Capacity of the proposed unit is as below :

Sl. No.	Product	Qty.	Rate Rs	Sales Amount (Rs.)
1	Vermicompost	60 ton	5,000 per ton	3,00,000
2	Earthworms	200 kg	500 per kg	1,00,000
3	Vermiwash	11,520 lit	10 per liter	1,15,200
	Total			5,15,200



V. MANUFACTURING PROCESS & QUALITY :

The waste has to be collected into tanks/pits. This organic waste has to be mixed with cow dung in the ratio of 8:1. The waste should be left undisturbed for two weeks. Then earth worms have to be released on the surface at the rate of 1000 to 2000 worms per square meter. Based on the high consumption, assimilation and growth rate *Eudrilus Engeniae*, *Eiseniatetida* and *Perionyx excavatus* species are most suitable.

For faster decomposition and to increase the quality of vermicompost *Trichoderma*, *Aspergillus*, *Neem Cake* etc can be applied. 6 weeks after introduction of the worms vermicompost is collected from the tank and can be done on the ground in the form of small pyramid and left for few hours. The worms move down and form a cluster at the base. Which can be separated and reintroduced them into fresh waste.

The manure has to be dried in shade for two days and then sieved through a 3 mm sieve to separate the small worms cocoons and unfed on parts decomposed material. Then sieved vermicompost is to be packed in gunny bags for storage and transportation.

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

A. Cost of Project :

Equipments	125,000
Earth Worms	10,000
Other fixed assets (drying beds)	30,000
Preliminary and preoperative expenses	10,000
Deposits (Land Lease)	40,000
Working Capital Requirements	43,000
Total	258,000

B. Means of Finance:

Loan @ 75%	194,000
Equity	64,000
Total	258,000

C. Working Capital Requirement :

Sl. No.	Particulars	Basis	Period	Amount (Rs.)
1	Raw-material	$64000/12 \times 2$	2 month	11000
2	Bills receivables	$515200/12 \times \frac{1}{2}$	2 w	22000
4	Working exp			10000
	Total			43000



VII. MAIN INPUTS REQUIREMENT :

A. Machinery :

Sl. No.	Particulars	Qty.	Rate	Total Cost
01.	Sieve, Weigh Balance, Pickaxe, Collection Baskets, Cans, Drums for collecting water, pipes, motor ½ HP, brush, brooms, plastic sheets etc.			25,000
02.	Tanks constructed by bricks 20X20X3 size 16 pits			100,000
	Total			125,000

B. Raw-materials (p.a.):

Sl. No.	Particulars	Qty	rate	Total Cost (Rs.)
1	Organic/ Agriculture waste	100 tons		40,000
2	Cow dung	12 tons		12,000
3	Gunny Bags	1200 no	10 per bag	12,000
	Total			64,000

C. Utilities :

Sl. No.	Particulars	Total Monthly Charges. (Rs.)	Total Yearly Charges. (Rs.)
1	Electricity	500	6000
2	Water	400	4800
	Total		10800
		Say	11000

D. Man-power requirement :

Sl. No.	Workers	No.	Monthly Salary (Rs.)	Annual Salary (Rs.)
01	Skilled Workers	1	7000	84000
02	Helper	1	5000	60000
	Total			144,000

E. MAIN INFRASTRUCTURE REQUIREMENT :

Building	16 pits of size 20x20x3, drying bed 800 sq.ft. is required
Power	General Power connection is required.
Water	About 600 to 800 liters of water is required per day for maintaining dampness in the tanks.

VIII. PROFITABILITY PROJECTION (Annual) :

Particulars	Basis	Amount
Sales Revenue (Projected)	Ref : IV	515,200
Raw Materials	Ref : VII B	64,000
Man power expenses	Ref : VII D	144,000
Utilities	Ref : VII C	11,000
Interest	@ 12%	24,000
Depreciation	15% SLM	19,000
Overheads		80,000
Total Expenses		342,000
Profit		173,200



IX. FINANCIAL INDICATOR :

Break Even Point $\frac{FC}{SR-VC} \times 100$	$\frac{123000}{296200} \times 100$	42%
Payback period $\frac{COP}{\text{Profit} + \text{Deprn.}}$	$\frac{258000}{192200}$	1 Year 4 Months

X. ADDRESSES :

SUPPLIERS OF EQUIPMENTS :

Local

Suppliers of raw material

Agriculture University,
Dharwad

XI. SPECIAL NOTE :

Training from Krashi Vijnan Kandra, Hulkoti, Sirsi or Hanumanatti, Ranabennur is required