

Capacity utilization and income estimates:

Capacity utilisation is a measure of the extent to which the productive capacity of a business is being utilized.

Years	1 st yr	2 nd yr	3 rd yr	4 th yr
Installed capacity	3000	3000	3000	3000
Capacity utiliza-	60	65	70	75
Production (Kg)	1800	1950	2100	2250
Income (Rs)	18000	19500	21000	22500

Profitability Projection:

The financial viability of the vermicompost unit has been assessed using some financial tools such as break even analysis, benefit cost ratio, net present value (NPV) and Internal Rate of Return (IRR).

Years	1 st yr	2 nd yr	3 rd yr	4 th yr
Total fixed cost	6050	5500	4950	4400
Total variable cost	12100	12100	12100	12100
Total operational cost	15125	13860	13805	13750
Sale of vermicompost	18000	19500	21000	22500
Sale of worms	500	500	500	500
Total benefit	18500	20000	21500	23000
BEP	0.95	0.69	0.53	0.40
B:C ratio	1.22	1.44	1.56	1.67
NPV	22552.04			
IRR	61%			

Financial feasibility of small scale vermicompost producing unit

The investment in vermicompost production unit with a capacity of 1 tonne will be able to breakeven in the first year itself. The B:C ratio and NPV indicate a profitable investment. The IRR is high and higher than the capital cost (33%) which indicate a high growth rate of the investment.

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Financial Feasibility of a small scale Vermicompost Unit



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Introduction:

There are four main aspects which are essential for the awareness of the prospective entrepreneurs viz., Entrepreneurship nature and skills, Market knowledge, Technical knowledge and Financial feasibility. Financial feasibility is always done at last after all the technical requirements are known and a comprehensive market survey is done. It is done when one is aware about the costs involved in the production and the probable sale price of the product in the market. Financial feasibility analysis of a business unit helps in studying the potential of the business from financial angle.

The major components of financial feasibility are:

1. Cost of establishing a business unit
2. Means of finance or sources
3. Capacity utilisation and income estimates
4. Profitability projections

Small Scale Vermicompost Unit:

A small scale vermicompost unit can be set up in any non-economic place with shade, high humidity and cool temperature. It has a near near to nil opportunity cost and provide a great scope for earning extra income for the farm. Abandoned cattle shed or poultry shed or unused buildings can be used. It can also be produced in open area, by providing low cost thatched roof to protect the process from direct sunlight and rain.

Cost of establishing a vermicompost unit:

Materials required for vermicompost production: Vermi bin/cemented tank, Thatch roof, Polythene sheet (black), Biodegradable Waste materials: crop residues, weed biomass, vegetable waste, leaf litter, hotel refuse, waste from agro-industries, etc, Cow dung, water, gunny bags, vermi worm.

The cost of establishing a vermicompost unit using a cemented tank of the dimensions 10 x 4 x 2 feet is presented table 1. The maximum turnover of the compost is 75% i.e., if the total material accommodated in the pit is 1000 kg; the out turn will be 750 kg. The cost of production for vermicompost in the first year for a three cycle per year production is presented in table 2.

Table 1. Total Fixed Cost for vermicompost unit in the first year

SL No.	Description	Value (Rupees)
1	Land Rent	-
2	Working Shed	2000
3	Vermi Tank	3000
4	Tools and implements	500
5	Depreciation @ 10 %	550
Total Fixed Cost		6050

Table 2: Cost of production for vermicompost unit in the first year

Description	Unit	Quantity	Value (Rupees)
Material Costs:			
Agricultural Wastes and Cow dung	Kg	3000	900
Earthworms	nos	4000	4000
Labour Costs:			
Pit filling	MD	3	600
Worm separation	MD	3	600
Watering	MD	24	4800
Collection of wastes	MD	3	600
Sieving	MD	3	600
Total variable cost			12100
Total operating Cost			15125
Total Production	Kg	1800	18000
Gross profits			2875
Cost of production			8.40

Means of finance or sources:

The common means of finance are term loan, subsidy or equity. Repayment terms vary with institutions and with schemes. In case of both term loans and subsidy, it is required of the entrepreneur to provide comprehensive information of one's profile, financial strength, personal assets/liabilities and the detailed cost components of the proposed production unit.