

Annexure-A

DESIGN AND DETAIL OF SPAWN UNIT

The unit has been designed as per the latest technology of mushroom growing. The following main structures are proposed.

Infrastructure	No.	Area (Sq Ft)	Unit Cost (Rs)	Total cost (Rs in Lakhs)
Boiling, mixing area	1	100.00	700.00	0.70
Inoculation room	1	120.00	900.00	1.08
Incubation rooms	1	114.91	1200.00	1.38
Corridor	1	30.00	600.00	0.18
Store/Facilities	1	120.00	700.00	0.84
Grain Storage area	1	71.82	700.00	0.50
Sale Room	1	90.00	700.00	0.63
Total	-	647		5.31
Boundary wall and flooring of open area (50% of above)	1	330	300	0.99
Total area (sq ft) (Lab+Open area)	-	977		6.30

Annexure-B

Equipment required and cost	No/kg	Rate	Cost (Rs. in Lakhs)
Autoclaves horizontal	1	600000	6.000
Autoclave vertical small for lab	1	50000	0.500
Laminar flow	1	150000	1.500
Stands for incubation rooms (sq ft area)	193.68	400	0.775
Stands for cooling room (sq ft area)	96.84	400	0.387
AC Unit for Incubation and cold room (TR)	1.9576	50000	0.979
AC system for cooling room	1	60000	0.600
Incubator	1	100000	1.000
Fridge	1	30000	0.300
pH meter	1	25000	0.250
Lab coats	4	500	0.020
Gloves, caps, footwears, masks, disposable coats, etc	2	1000	0.020
First aid box	1	5000	0.050
Fire safety equipment	1	10000	0.100
Gas/LPG cylinder, burner/spirit lamps, misc equip (per ton spawn)	20	200	0.040
Temperature and humidity meters	2	1000	0.020
UV tubes	2	2000	0.040
Hot air Oven	1	50000	0.500
Weighing balance	1	5000	0.050
Microwave oven/induction cooktop	1	10000	0.100
Total	-	-	13.23

Annexure-D**Raw materials:**

Main raw materials needed in the project are listed in Annexure –D. Annual requirement of the project are:

Raw Material required (per annum)	Quantity	Rate (Rs)	Total Cost (Rs)
Wheat/Sorghum/Bajra/ Paddy grains, etc (quintals)	111	2600	288889
Glass bottles (No.)	200	5	1000
flasks (No.)	4	500	2000
Plastic petri plates (pre-sterilized) (No.)	200	15	3000
Culture tubes (No.)	20	30	600
Non absorbent cotton/Polyfill (Kgs)	250	300	75000
PP bags/Microbial filter bags (kgs)	200	400	80000
PP rings (No.)	20000	1	20000
Parafilm for Petri plates (No.)	1	2500	2500
Paper bags, butter paper, tissue paper, rubber bands, etc(No.)	20000	1	20000
Data registers, standard labels for record & traceability (No.)	20000	0	6000
Forceps, inoculation needles, spatula, Bottle holders/ dispensers (No.)	4	500	2000
Misc items (No.)	2000	1	2000
Total (raw material)			502989
Chemicals require/annum and cost			
Calcium carbonate (kg)	556	1	556
Calcium sulphate (kg)	2223	3	6669
Spirit/sanitizer/alcohol (Bottle of half liters)	4	100	400
Agar-agar (kg)	0	10000	1600
Glucose (kg)	0	1000	120
Malt extract (kg)	0	6000	960
Potato (kgs)	2	30	48
Sodium hydroxide (500 g)	1	1000	1000
Hydrochloric acid (500 ml)	1	1600	1600
Floor cleaner (litres)	2	60	120
Yeast extract (kg)	1	4500	2250
Misc	0	5000	2000
Total (Chemicals)			17323
Total (raw material+Chemical) in lakhs			5.20

Annexure-E**Manpower:**

As per annexure E, competent persons are available and shall be employed. Manual laborer at reasonable rates are available in the project area.

Labour required and cost	No	Months	Salary/month	Annual Salary
Number of labour required per month	2			
Labour @ Rs. 8000/- month/person for 12 months	1	12	8000	96000
Skilled labour	1	12	10000	120000
Technical assistant	0	12	15000	0
Labour cost (Rs)			18000	216000
Total E (in Lakhs)				2.16

Annexure-F**Power and fuel:**

Power consumption of the Unit per year including sterilization, inoculation and incubation of mushroom spawn will be around 2900 KW, which will be obtained from State Electricity board. Diesel generator sets may be provided in the project to take care of disruptions / disturbances in the power supply. Details are given in the annexure F.

Electricity required and cost	Units	Rate/unit (Rs)	Cost/annum (Rs)
Electricity units needed per annum (kw)	18900	7	132300
Total (F)	-	-	132300
Total cost in Lakhs			1.32

ANNEXURE – G**PROFITABILITY PROJECTIONS**

Items	Cost (Rs. In Lakhs)	Rs in Lakhs
Raw materials		5.20
Power and fuel		1.32
Salary and wages		2.16
Interest on term loan (11%)	13.20	1.45
Interest on working capital (11%)	2.21	0.24
Depreciation		
Plant and Machinery + Misc Fixed Asset	13.83	1.38
Buildings + Land Development	8.28	0.41
Total		12.17
Sale	Rs.100	20.00
Profit	(B-C)	7.83

Financial Calculations

चेकलिस्ट

1. भू-स्वामित्र प्रमाणपत्र /अद्यतन भू राजस्व रसीद (न्यूनतम 1500 वर्ग फीट)
2. बैंक द्वारा ऋण देने की सहमती या बैंक ऋण स्वीकृति प्रपत्र
3. डी पी आर- अनुमानित परियोजना लागत का पूर्ण विवरण (चार्टर्ड अकाउंटेंट द्वारा हस्ताक्षरित)
4. सभी सिविल निर्माण का लेआउट प्लान और नक्शा (चार्टर्ड इंजीनियर द्वारा हस्ताक्षरित)
5. मशरूम स्पॉन के लिए आवश्यक मशीन का कोटेशन
6. मशरूम स्पॉन का प्रशिक्षण प्रमाण पत्र (न्यूनतम तीन दिवसीय)