

PROJECT PROFILE

ON

DRIED OYSTER MUSHROOMS (RURAL WOMEN ONLY)

Month & Year Aug 2010

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Supported by

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DRIED OYSTER MUSHROOMS (RURAL WOMEN ONLY)

1. Introduction

Mushrooms are considered a delicacy the world over. They are a good source of protein and minerals. There are two major varieties of mushrooms grown i.e. the white button mushroom and the oyster mushroom. Of the two, the oyster mushroom is relatively easy to grow and is sold in the domestic market. The button mushrooms are grown, canned and mainly exported, although some quantities find their place in the local market. Oyster mushrooms have a tremendous local market potential. For the most part, they are being grown and sold in the unorganized sector.

Mushrooms find their use in preparations of soups, mixed vegetables, pickles and in combinations with eggs and meat. A variety of culinary treats can be prepared with mushrooms.

2. Market

Mushrooms have a very short shelf life of just a few hours after harvesting and therefore they are sold mainly in the fresh form locally in urban cities and semi-urban towns. The present market potential in cities and towns varies from 100 kgs to 500 kgs per day.

The product finds placement in all "A" class outlets, self service, departmental stores and supermarkets. The product has a lot of market potential if it is very hygienically processed and dried. There is an increasing awareness in the product because it blends well with both meat as well as vegetables.

3. Packaging

Mushrooms are best packed in polyethylene or polypropylene or BOPP pouches as primary packing. The pouch is placed in cartons and strapped prior to dispatch. The product is packed in weights of 50 and 100 grams.



4. Production capacity

- Eight hours per day and 300 days in a year.
- Estimated production per day is 100 kilograms.
- The estimated production per annum is 30,000 kilograms.

5. Sales revenue

• At an ex-factory selling price of Rs. 70 per kilogram of the product, the net sales revenue per annum will be Rs. 21.0 lakhs on full capacity utilization.

6. Production process outline.

- Dissolve 1.25 grams of Bavistin and 35 ml of formalin in 25 litres of water.
- Soak 2 kilograms of paddy straw for 30 minutes.
- Decant the water and recycle for use.
- Spread the straw in the open air on a concrete floor so that the surface moisture from the straw is removed.
- Mix the spawn contents from one bottle thoroughly with the paddy straw and fill it in five poly-propylene bags (30 cms X 45 cms) and tie the mouth with a string. Punch a few holes in the bottom of the bag.
- Keep the bags in a dark and humid place in a room for 20 to 25 days till the bags turn milky white.
- After the straw has turned milky white, cut open the bag. The beds are obtained and watering has to be done three times a day without fail.
- The mushrooms start appearing four to five days after cutting open the bag.
- Since mushrooms grow in flushes, there will be three to four flushes in each bed.
- Keep the bed for fifty days from the date of filling of the bags.
- Total produce from 2 kg of straw and one bottle of spawn will be 2 kg of mushrooms.



7. Quality specifications

- Moisture 88.5%
- Protein 3.0% on wet weight basis
- Fat 0.8% on wet weight basis.
- Minerals 1.4% on wet weight basis.
- Carbohydrates 4.3% on wet weight basis.

8. Pollution control measures

Not necessary as there are no pollutants or effluents.

9. Energy conservation measures

Common measures will do.

10. Land and construction cost for the proposed unit

The proposed unit is to be set up in a leased area. The area required is 3300 square feet vide details given below:

SI	Description	Sq. feet
1	Straw preparation room – 1	400
2	Straw preparation room – 2	400
3	Cropping room – 1	400
4	Cropping room – 2	400
5	Harvesting and processing room	400
6	Raw material storage room	200
7	Other ingredients storage room	100
8	Finished goods storage room	200
9	Packaging material storage room	100
10	Laboratory	200
11	Office space	200
12	Toilet space	200
13	Miscellaneous space	100
14	Total	3300

Lease rent per square foot - Rs. 5.00

Total rent per month – Rs. 16500

Lease advance – Rs. 100000



11. Costing of machinery and equipment

SI	Description	Rs. lakhs
1	Tray drier with 36 trays	1.600
2	Stacking racks – 2 nos	0.600
3	Holding trays and vessels – 10 nos	0.500
4	Weighing scales – 3 nos	0.250
5	Pedal sealing machines – 3 nos	0.220
6	Machine spares	0.100
7	Total	3.270
8	Laboratory equipment	0.500
12	Grand total machinery and equipment	3.770

12. Project cost

SI	Description	Rs. lakhs
1	Land	On lease
2	Civil works	On lease
3	Plant machinery	3.270
4	Laboratory equipment	0.500
5	Transport vehicle (Tata Ace)	3.760
6	Pollution control equipment	0.000
7	Energy conservation equipment	0.000
8	Cost of power connection	0.100
9	Cost of electrification	0.200
10	Erection and commissioning	0.200
11	Cost of machinery spares	0.020
12	Cost of office equipment	1.000
13	Deposits if any	0.500
14	Company formation expenses	0.100
15	Gestation period expenses	0.250
16	Sales tax registration expenses	0.100
17	Initial advertisement and publicity	2.000
18	Contingencies	0.200
19	Working capital margin money	0.500
20	Total	12.700



13. Working capital requirements per month

a. Salaries and wages

SI	Description	No of persons	Total salary / month (Rs. lakhs)
1	Production Supervisor (female)	1	0.100
2	Assistant supervisor (female)	1	0.080
3	Administrative staff (female)	1	0.080
4	Unskilled workers	2	0.060
5	Total	5	0.320

b. Raw material requirement per month

SI	Description	Qty (kgs)	Rate / kg (Rs)	Value (Rs. lakhs)
1	Paddy straw	3000	0.50	0.015
2	Chemicals and formalin			0.012
3	Spawn			0.015
4	Total raw material	3000		0.042

c. Packaging material requirement per month

SI	Description	Qty	Rate / unit Rs)	Value (Rs. lakhs)
1	Polyethylene bags for straw	15000 nos	0.80	0.120
2	Pouches for finished goods	15000 nos	0.50	0.075
3	HDPE woven sacks	400 nos	6.00	0.024
3	Total			0.219

Total raw + packaging material = Rs. 0.0.261 lakhs

d. Utilities per month

SI	Description	Rs. lakhs
1	Power 200 kwh @ Rs. 5.50 per unit	0.110
2	Water	0.020
3	Boiler fuel	0.000
4	Total utilities	0.130

6



e. Contingent expenses per month

SI	Description	Rs. lakhs
1	Rent for processing shed	0.165
2	Postage and stationery	0.010
3	Telephones, fax etc.	0.050
4	Consumable stores	0.010
5	Repairs and maintenance	0.031
6	Local transports, loading and unloading	0.100
7	Advertisement and publicity @ 5% of sales	0.075
8	Insurance	0.006
9	Sales expenses @ 1% of sales	0.015
10	Miscellaneous expenses @ 1% of sales	0.015
11	Trade incentives @ 2% of sales	0.030
12	Taxes	0.000
13	Total contingent expenses	0.507

f. Total working capital requirement per month

SI	Description	Rs. lakhs
1	Salaries and wages	0.320
2	Raw material and packaging material	0.261
3	Utilities	0.130
4	Contingent expenses	0.507
5	Total	1.218

14. Means of finance

SI	Description	Rs. lakhs
1	Total Project Cost	12.700
2	Equity	4.175
3	Debt	8.525
4	Working capital margin money	0.500



15. Financial analysis

SI	Description	Rs. lakhs
1	Total recurring cost per year	14.616
2	Depreciation on land and building	0.000
3	Depreciation on machinery	0.700
4	Depreciation on furnaces	0.000
5	Depreciation on moulds and fixtures	0.020
6	Depreciation on office equipment	0.100
7	Interest on long term loan @ 13.5%	1.023
8	Interest on short term borrowings@ 13.5%	0.102
9	Total cost of production	16.561

16. Turnover per year

SI	Item	Qty	Rate/unit (Rs)	Total Rs. lakhs
1	Oyster	30000 kgs	70	21.0
	mushrooms			

17. Viability analysis

SI	Description	Value
1	Net profit before income tax (Rs. lakhs)	4.439
2	Net profit ratio	21.1%
3	Internal rate of return	32.6%
4	Break even percentage	43%
5	Debt service coverage ratio	2.018

List of machinery suppliers for oyster mushrooms

No machinery is required. Racks to be fabricated locally. Small instruments to be procured locally.