



MODEL PROJECT REPORT



PROJECT REPORT ON BESAN PLANT

SWAVALAMBI BHARAT ABHIYAN

BESAN PLANT

1. INTRODUCTION

Bengal gram is called Chickpea or Gram. Bengal gram is a major pulse crop in India, widely grown for centuries and accounts for nearly 40 percent of the total pulse production.

2. PRODUCTS AND ITS APPLICATION:

BESAN is a product obtained by grinding, dried and decuticled Bengal Gram. Besan is a bengal gram flour widely consumed in India. It is yellowish in colour and possess characteristic bengal gram taste and smell. Khesaru dal and other colouring matter shall not be added to true besan flour.

3. INDUSTRY OUTLOOK/TREND

Indian snacks and namkeen industry is growing at the rate of 10% per annum with increase in urbanization, changing life style and growth in per capita income. Besan is rich in nutrition and it is very common in Indian food preparations. The growth in demand is also due to increase in population and rising exports of products made from besan.

4. MARKET POTENTIAL AND MARKETING ISSUES, IF ANY:

India is the major growing country of the world, accounting for 61.65 percent of the total world area under Bengal gram and 68.13 percent of the total world production. Bengal gram is widely appreciated as health food. It is a protein-rich supplement to cereal-based diets, especially to the poor in developing countries, where people are vegetarians or cannot afford animal protein. The pulse proteins are rich in lysine and have low sulfur containing amino

acids. It offers the most practical means of eradicating protein malnutrition among vegetarian children and nursing mothers. Bengal gram has a very important role in human diet in our country.

India has exported about 12,000 tons of besan worth Rs. 7800 lakhs in year 2015-16 (APEDA) mainly to USA, UK, Australia, Kuwait, Canada, New Zealand, UAE, Singapore, Saudi Arabia, Oman and other countries.

5. MANUFACTURING PROCESS:

Whole bengal gram delivered at the site are first physically cleaned and separated from stone, dust, dirt and other foreign material. Cleaned material is conveyed into soaking-cum-drying bins where it is conditioned with little water and dried by blowing air to loosen its outer skin for separation. This process take about four hours' time. It is then subjected for spilling outer skin (husk) in a dal mill. The spilt dal is again moisturized and conditioned for four hours. It is then subjected to final milling to extract maximum percentage of flour the final milling is carried out in emery roller machines. Thus obtained flour is further pass through battery of sieving machines to obtained super fine grade and fine grade material. The husk separated is collected from other chutes, whereas other sieved coarse material again feed-back for milling into roller machine. Finally, besan is packed directly in gunny bags, poly-line gunny bags for bulk selling and in laminated pouches or poly-bags for retail selling.

6. MANPOWER REQUIREMENT:

Requirement of Manpower

Manpower Total Requirements	Persons
Technical Staff	2
Marketing Staff	1
Labour	3
Total	7

Besan Plant

COST OF PROJECT

S.NO.	PARTICULARS	TOTAL COST	MARGIN 25%	LOAN
1	Land & Building		0.00	own or Rented
2	Plant and Machinery	5.00	1.25	3.75
3	Furniture & Fixture	0.40	0.10	0.30
4	Contingencies	0.50	0.13	0.38
5	Pre and Post operative and	0.20	1.00	0.00
6	Margin for Working Capital	28.95	7.32	21.63
	Total	35.05	9.79	26.05

MEANS OF FINANCE

S.NO.	PARTICULARS	AMOUNT
1	Own Contribution	8.99
2	Term Loan	4.43
3	Working capital	21.63
	Total	35.05

DE Ratio 2.90

PRODUCTION CAPACITY(Per annum)

Working Days : 300 days

S.NO.	PARTICULARS	Production/year	Weight/unit(gms)	Quantity(Tonnes)
1	Besan Plant			270.00
	At 100% Capacity			
	Total			270.00

TOTAL CAPITAL INVESTMENT

Rs.

1	Total Fixed Capital	6.10
2	Working Capital for 3 Months	28.95
	Total	35.05

FIXED CAPITAL

(i) Land and building Amount(In Rs.)

1000 sq Ft area Rented
constructed area 500 sq mt

(Factory shed, godown, office)

(ii) Machinery and Equipment

S.no.	Description	Qty. nos.	Price/unit	Amount(In Rs.)
1	Jas Enterprises TW-IP-20 8 Hammer20HP Pulviliser 200-250 Kg per Hour	1	3,00,000.00 plus GST	354,000.00
2	Packaging Machine	LS		146,000.00
3				
4				
5				
6				
7				
8				
9				

Total 500,000.00

-

Total In Lac 5.00

Pre and Post Operative Exenses 0.20
Furniture and Fixture/ Office Equipment 0.40
Contingencies 0.50

Total Fixed Capital 6.10

TOTAL WORKING CAPITAL 1.50 MONTHS					Rs.
1	Salary and Wages				738,000.00
2	Raw Material				21,316,000.00
3	Utilities				265,656.00
4	Other selling and administrative Expenses				836,600.00
	Total				231.56
	Working Capital for 1.50 months		Rs in Lakhs		28.95

B. **WORKING CAPITAL**

(i) **Staff and Labour**

S.No.	Designation	No.	Salary(Rs.)	Total(In. Rs.)
1	Skilled Workers	2	10,000.00	20,000.00
2	Semi-skilled Workers	3	6,000.00	18,000.00
3	Helpers	0	-	-
4	Supervisor	0	12,500.00	-
5	Food Technologist	0	15,000.00	15,000.00
6	Salesman	1	12,000.00	12,000.00
7	Accountant	1	11,000.00	11,000.00
		7		76,000.00
	Total Annual Salary			912,000.00

(ii) Raw Materials

No of Days 300
Installed capacity 480 tonnes
Cap Utilisation 100%

S.No.	Particurs	Rate(Rs)	Quantity(Tonne)	Total(In. Rs.)
1	Bengal gram	44,000.00	480.00	21,120,000.00
2	Packeging and Printing Material	1Kg Pouches		196,000.00
	@			
	Total			21,316,000.00

(iii) Utilities

CALCULATION OF POWER EXPENSE			
Total Power Load Required		20	HP
No of Days		300	
No of Hours		8	
Total Power Expense		35808	KWH
(i) Power Supply from UPPCL	100%	35808	
COST OF POWER			
(I) Cost of power from UPPCL		250,656.00	
(@7/- per Unit)			
Add : Fixed Cost		15,000.00	
Add : Lubricants		-	
Total Annual Power Expense		265,656.00	

(iv) Other Expenses

S.No.	Particulars	Amount(In.Rs)
1	Rent	360000.00
2	Repair and Maintenance	15000.00
3	Postage and Stationery	5000.00
4	Telephone Charges	20000.00
5	Transporatation and Freight	72000.00
6	Insurance	15000.00
7	Sales Expenses	1% of Sales
8	Other Maufacturing Expenses	25000.00
9	Miscellaneous Expenses	75000.00
	Total	836600.00

FINANCIAL ANALYSIS

(i) Cost of Production

S.No.	Particulars					In. Rs.
1	Total Recurring Expenditure					231.56
2	Depreciation on Plant and Machinery @ 15%					0.75
3	Depreciation of Furniture/Fixture & Office Equipment @ 10 %					0.04
4	Finance Cost					3.13
	TOTAL COST OF PRODUCTION				(in Lacs)	235.48

(ii) Turnover (per annum)

S.No.	Particulars	Qty)	Qty(Nos.)MT	Rate (in Rs)	In. Rs.
1	Besan		384	65,000.00	24,960,000.00
	Remaining 96 MT(20%) will be husk and other process losses including moisture, dust removal etc				
	TOTAL TURNOVER				24,960,000.00
			Or Say	(In Lacs)	249.60

(ii) Profit [ii-i]	(In Lacs)	14.12
At 100% capacity utilisation		
Percentage profit on sales		5.66%

RATIOS :

i) **Rate of Return on Total Capital Investment**

= Net Operating Profit/ Invested Capital

= 40%

ii) **Return on Assets**

= Sales/Average total Assets

= 2.31

iii) **Return on Equity**

= Sales/ Stockholder's Equity

= 1.57

iv) **Debt to Equity Ratio**

= Total Term Liabilities/Total Shareholder's Equity

= 0.49

v) **Interest Coverage Ratio**

= Earning before Interest & Tax/ Interest Expense

= 5.52