

PROJECT PROFILE

CASHEWNUT PROCESSING

1. INTRODUCTION

Cashew are cultivated mainly in Kerala, Maharashtra and Goa. Cashew processing is a well established activity in Kerala and Goa but it is yet to pick up in West Bengal. Konkan region of Maharashtra is famous for cashew.. It is also attracting number of tourists due to its vast coast line and scenic beauty. Most of the cashew processing is undertaken manually and reportedly there are only few mechanized factories. There are some colleges imparting vocational training in cashew processing. Cashew processing has good potential in the state.

2. OBJECTIVES

The objective of the profiles is to encourage and assist prospective entrepreneurs in MSME sector in and guiding making them aware of the opportunities of this sector. It is also being developed by the Directorate of the Food Processing Industries, Government of West Bengal to help entrepreneurs with knowledge about raw materials availability, knowledge of market, source of technology and plant and machinery suppliers. M/s ITV Agro & Food Technologies Pvt. Ltd., New Delhi has helped in developing the project profile.

3. RAW MATERIAL AVAILABILITY

The only raw material required will be cashew fruits. They are grown in large quantities in Konkan area of Maharashtra and adjacent states of Goa, Kerala Andhra Pradesh, Karnataka & Tripura. Reportedly, around 20,000 acres of land is under cashew cultivation and the state government, as well as NABARD are encouraging cashew plantation. Hence, obtaining around 50 tons of cashew fruits per season even at 100% capacity utilization will not pose any problem. Packing material like

polythene bags and second hand corrugated boxes shall be available locally. Production of cashew nut in the state is estimated to 10,000 MT/ year.

4. MARKET OPPORTUNITIES

a) Demand and supply

Cashew nuts are high value dry fruits with retail price ranging from Rs. 400 to 600/- per kg. Their shelf -life is 4 to 6 months if processed properly or else they develop fungus or taste bitter. They are used in many sweet preparation, certain farsan items, dessert preparations and ice creams. They are also used as table enrichers in some exclusive restaurants and star hotels. Due to their high price, their regular domestic use is limited to elite families. Total export of dehydrated cashewnut from India during the year 2010-11, 2011-12 and 2012-13 is estimated at Rs. 1399.86 lacs, Rs. 4493.83 lacs and Rs. 6077.55 lacs respectively.

b) Marketing Strategy

Market for cashew is gradually increasing whereas its supply is limited . Cashew plants require a very special climate and hence they are grown in Konkan region of Maharashtra, nearby states of Goa and Kerala. Thus, demand for cashews is increasing and there are fluctuation in prices according to the supplies.

5) PROJECT DESCRIPTION

a) Product & Its uses

Cashew form an integral part of dry fruits and are used in many preparations since long. Raw cashews are plucked from plants and then they are processed and kernels are removed so that table variety can be obtained.

b) Capacity

The proposed capacity of the plant is to process 50 MT / annum of cashewnut .

c) Manufacturing process

The process of manufacture is well established. Cashew fruits are dried under sun and then they are boiled to remove all impurities and to facilitate removal of shell. Subsequently, they are dried in a dryer and then cracked to remove shell and take out cashews. They are once again dried and outer reddish skin is removed to obtain the table variety. Actual recovery of table variety is around 30% whereas 50% account for shell and remaining 20% is process loss. Cashew shells have market as they are used in cattle feed.

6. PROJECT COMPONENTS & COST

a) Land & Building

A plot of land of around 250 sq. mtrs. with built-up area of 100 sq.mtrs will be sufficient. Main processing area would require around 55-60 sq. mtrs. whereas storage and packing rooms would occupy the balance area. The total cost of building is estimated to be Rs. 6.00 lacs whereas that of land is around Rs. 1.25 lacs.

b) Plant & Machinery

This is a seasonal business and the factory would work for about 200 days every year. Keeping in mind the availability of raw materials and market prospects, processing capacity of 50 tons per season is suggested. This would require the following equipments:

Item	Qty	Price (Rs. in lacs)
Electrically operated Boiler	1	3.50
Tray-drier (24 trays)	1	5.00
Cutters	10	2.00
Weighing Scales	2	0.80
Automatic sealing machine	2	0.60
	Total	11.90

c) Miscellaneous Assets

Some other assets like furniture , fruit crates, SS utensils, storage racks, working tables etc. shall be required for which a provision of Rs. 1.60 lacs is made.

d) Utilities

Total power requirement will be 10 HP whereas water required for washing the cashew fruits and for sanitation and potable purpose will be 10,000 ltrs. per day. Per season cost at 100% utilization is likely to be Rs. 1.70 lacs.

e) Prel. & Pre Operative Expenses

There will be many pre-production expenses like establishment & administrative charges, travelling, interest during implementation, trial run expenses and so on. A provision of Rs. 1.40 lacs is made towards them.

f) Working Capital Assessment

(Rs. in lacs)

Particulars	Period	Margin	Total	Bank	Promoters
Stock of raw material & packing material	½ month	30%	0.66	0.46	0.20
Stock of Finished goods	½ month	30%	1.10	0.83	0.27
Receivable	½ month	30%	1.36	1.02	0.34
Total	1 month		3.12	2.31	0.81

g) Project cost & Means of finance

(Rs. in lacs)

Item	Amount
Land & Building	7.25
Plant & Machinery	11.90
Miscellaneous Assets	1.60
P & P Expenses	1.40
Contingencies @ 10% on building and plant & machinery	1.79
Working capital margin	0.81
Total	24.75
Means of Finance	
Promoters' contribution	9.90
Term loan from Bank / FI	14.85
Total	24.75
Debt Equity Ratio	1.5:1
Promoters contribution	40%

Financial assistance in the form of grant is available from the Ministry of Food Processing Industries, Govt. of India, towards expenditure on technical civil works and plant and machinery for eligible projects subject to certain terms and conditions.

7) PROJECTED PROFITABILITY

a) Production Capacity

As against the processing capacity of 50 tonnes, the actual utilization in the first will be 60% and second year onwards it will be 75%.

b) Sales Revenue at 100%**(Rs. in lacs)**

Product	Qty (Tons)	Selling Price (Rs. / Ton)	Sales
Processed Cashew	15	4,00,000	60.00
Cashew shells	25	8,000	2.00
		Total	62.00

c) Raw Material Required at 100%**(Rs. in lacs)**

Product	Qty (Tons)	Rate (Rs. / Ton)	Value
Raw Cashew nut	50	50,000	25.00
Packing Material	-	-	1.50
	Total		26.50

d) Projected Profitability**(Rs. in lacs)**

S. No.	Particulars	1 st year	2 nd year
A.	Installed capacity	50 Tons	
	Capacity Utilisation	60%	70%
	Sales Realisation	37.20	43.40
B.	Cost of Production		
	Raw material & packing material	15.90	19.87
	Utilities	1.02	1.27
	Salaries	3.44	3.78
	Stores and Spares	0.72	0.90
	Repairs and Maintenance	0.90	1.12
	Selling Expenses @ 10%	3.27	4.08

	Administrative Expenses	1.20	1.50
	Total	26.45	32.52
C.	Profit before Interest & Depreciation	10.75	10.88
	Interest on Term Loan	1.48	1.18
	Interest on Working Capital	0.28	0.35
	Depreciation.	1.79	1.61
	Net Profit	7.20	7.74
	Profit after tax	2.70	5.21
	Cash Accruals	9.00	9.35
	Repayment of Term Loan	Nil	3.00

e) Break Even Point Analysis

(Rs. in lacs)

S. No.	Particulars	Amount	
(A)	Sales		37.20
(B)	Variable Costs		
	Raw material & Packing Material	15.90	
	Utilities(70%)	0.61	
	Salaries (60%)	2.24	
	Stores and Spares	0.72	
	Selling Exps (70%)	2.29	
	Admn Expenses (50%)	0.60	
	Interest on WC	0.28	22.64
(C)	Contribution (A) - (B)		14.56
(D)	Fixed Costs		5.56
(E)	Break Even Point		38%

f) Debt Service Coverage Ratio (DSCR)

(Rs. in lacs)

Particulars	1 st year	2 nd year	3 rd year
Cash Accruals	9.00	9.35	11.21
Interest on TL	1.48	1.18	0.88
Total (A)	10.48	10.53	12.09
Interest on TL	1.48	1.18	0.88
Repayment of TL	Nil	3.00	3.00
Total (B)	1.48	4.18	3.88
DSCR (A) / (B)	6.87	2.51	3.16
Average DSCR	4.18		

g) Internal Rate of Return (IRR)

Cost of the project is Rs. 24.75 lacs

(Rs. in lacs)

Year	Cash Accruals	20%
1	9.00	7.49
2	9.35	6.48
3	11.21	6.49
4	11.21	5.40
5	Total	25.86

The IRR is around 20%

h) Manpower requirement

Particulars	Nos.	Monthly	Total Monthly Salary (Rs.)
Skilled workers	2	7500	15,000
Helpers	4	5000	20,000
Salesman	1	8000	8,000
		Total	43,000

8. ASSUMPTIONS

- The plant will work for 200 days in a year. :
- The operating capacity is 60% , 75%, 90 % during 1st year , 2nd year and 3rd year respectively.
- The interest on term loan is taken at 10% per annum and on working capital it is 12% per annum.
- Price of raw material and selling price of the finished products is taken at Rs. 50,000 / ton and Rs. 4,00,000 / ton respectively.

9. SOURCES OF TECHNOLOGY

CFTRI, Mysore, has successfully developed the technical know-how for the product. BIS has laid down the quality standard. The compliance under FSSAI act is a must.

10. PLANT & MACHINERY SUPPLIERS

1. Sun Industries
296,Vikas Nagar Industrial Area,
Meerut Road - Ghaziabad – 201003
Ph. : 0120-6667845
www.sunindustries1973@gmail.com
2. Best Engineering Technologies,
Plot No. 69-A, No. 5-9-285/13,
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