

## COCONUT/CASHEW FENI

PRODUCT CODE	: N. A.
QUALITY AND STANDARDS	: The unit may produce the products as per the following B.I.S. Specifications:— 1. Country Spirit (Distilled) IS 5287:1978 2. Methods of Sampling for Alcoholic Drinks IS 3753:1967 3. Methods of test for alcoholic drinks IS 3752:1967
PRODUCTION CAPACITY	: Cashew/Coconut Feni 65000 bottles @Rs.130 per bottle Value : Rs. 84.50
MONTH AND YEAR OF PREPARATION	: March, 2003
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### INTRODUCTION

Cashew Feni unlike Indian Made Foreign Liquor (IMFL) viz.; Brandy, Whisky, Rum, Gin etc, is not made by blending of spirits but is distilled exclusively from the pure fermented juice of cashew apples, without addition of any extraneous matter. Similarly, coconut feni is a product distilled from pure coconut taddy.

It is estimated that about 22 lakhs tonnes of cashew apple fruits are available in the country. Most of the fruits are at present wasted and practically not utilised by the industry in any of the cashew growing tracts in India except Goa where it is used in the preparation of alcoholic beverages 'FENI'. In order to utilise the large quantity of cashew apple being produced by the growers, it is felt that units

manufacturing 'Cashew Feni' and 'Cashew Arrack' can be encouraged. Since, this is a seasonal product, coconut taddy can also be distilled in the unit during off season to manufacture coconut feni and coconut arrack.

### MARKET POTENTIAL

Cashew apple is a valuable source of sugar, vitamins and minerals. It is observed that the Vitamin-C content in Cashew apple is five times more than that in citrus fruits. The cashew feni has proved to be a foreign exchange earner in Goa. In view of the above, it is envisaged that there is a good scope for setting up export-oriented liquor making units in cashew and coconut growing areas. This will not only help the farmers to utilise the waste material but also generate more employment

opportunities in rural areas. There is a need to look for more market avenues for the product.

## BASIS AND PRESUMPTIONS

1. The unit proposes to work atleast 300 days per annum on single shift basis.
2. The unit can achieve its full capacity utilisation during the third year of operation.
3. Interest rate for total capital investment is calculated @ 15% per annum.
4. The entrepreneur is expected to raise 20% to 25% of the capital as margin money.
5. The unit proposes to operate in rented building.
6. Costs of Machinery and Equipments are based on price-list received from the reputed machinery manufacturers.

## IMPLEMENTATION SCHEDULE

Complete project implementation may take about 8 to 10 months.

## TECHNICAL ASPECTS

### Process of Manufacture

Cashew apple after washing is fed into juice extractor. The extracted juice is kept for 2 to 3 days to get it fermented. Fermentation is verified on the basis of formation of a film floating over the juice. From 50 litres of fermented juice, 35 litres of arrack is distilled which contains 40% alcohol. The Feni is obtained by distilling arrack, mixed with fermented juice in ratio of 1:2 which is a powerful form of cashew liquor. A

mixture of 30 litres of arrack and 60 litres of juice produces 15 litres of Feni which contains 75% of alcohol. To get a litre of arrack, 12 kg to 15 kg cashew apple and for a litre of Feni, 30 to 35 kg cashew apple are required.

## Quality Control and Standards

Since the unit proposes to produce alcoholic drinks, licences from both Central and State Governments have to be obtained. The unit may also produce products as per the following I.S.I specifications:

1. Brandies	-	IS: 4450:1978
2. Country Spirit (Distilled)	-	IS: 5287:1978
3. Methods of sampling for alcoholic drinks	-	IS: 3753:1967
4. Methods of test for alcoholic drinks	-	IS: 3752:1967

Motive Power 10 KW

## Production Capacity (per annum)

Cashew/coconut feni 65,000 bottles @ Rs. 130 per bottle, Annual sales is of Rs. 84,50,000/-.

## FINANCIAL ASPECTS

### A. Fixed Capital

#### (i) Land and Building

Sl. No.	Description	Amount (In Rs.)
1.	Building (Rented) @ Rs 8000 pm.	
2.	Development charges including fixing up of wire, nets, spring doors, etc.	65,000
	Total	65,000

#### (ii) Machinery and Equipment

Sl. No.	Description	Qty.	Rate (In Rs.)	Amount (In Rs.)
1.	Bottle Washing machine with 1/4 HP Motor with Tanks (Ind.)	3	16,000	48,000

Sl. No.	Description	Qty.	Rate (In Rs.)	Amount (In Rs.)
2.	Counter-scale balance of 5 kg. capacity ordinary	2 Ind.	2,000	4,000
3.	Distillation still of 750 kg capacity with condenser and other accessories	2	150,000	300,000
4.	Fermentation Tanks made of wood (Ind.)	15	2,000	30,000
5.	Fruitmill with 3 HP Motor (Ind.)	1	40,000	40,000
6.	HDPE Barrels of 200 lit cap. (Ind.)	3	8,000	24,000
7.	Hydraulic press with accessories (Ind.)	1	20,000	20,000
8.	Juice Storage tanks made of Stainless Steel 500 lit. cap., (Ind.)	3	30,000	90,000
9.	Pilfer proof cap. sealing machine hand operated (Ind.)	2	12,000	24,000
10.	Platform weighing Balance of 300 kg capacity (Ind.)	1	12,000	12,000
<i>iii) Pre-operative expenses</i>				20,000
11.	Stainless steel Juice Pump with 1 HP Motor	1	24,000	24,000
12.	Steam generator coal or wood fired complete with all accessories	1 Ind.	100,000	100,000
13.	Tubular heat exchanger vertical type	1 Ind.	50,000	50,000
<i>Office Furniture and Equipments</i>				100,000
<i>Installation and Electrification</i>				39,000
Total				9,05,000
Total Fixed Capital (i+ii+iii)				9,90,000

## B. Working Capital (per month)

### (i) Raw Material

Sl. No.	Description	Qty.	Rate (In Rs.)	Total (In Rs.)
1.	750 ml. bottles (second hand) (Nos)	13000	2	26,000
2.	Bottle caps (Nos) @ Rs 400/1000 bottles)	13000		5,200

Sl. No.	Description	Qty.	Rate (In Rs.)	Total (In Rs.)
3.	Cartons (Nos)	1100	10	11,000
4.	Cashew Apple (Tonnes)	100	2,000	2,00,000
5.	Coconut taddy/ Coconut water (Tonnes)	100	2,000	2,00,000
6.	Jaggery (Tonnes)	5	12,000	60,000
7.	Labels (Nos)	13000	@Rs. 400/1000 bottles	5,200
8.	Other Miscellaneous items such as grease lubricating oil, etc.		LS	2,000
9.	Yeast, chemicals, etc.		LS	10,000
Total				5,19,400

### (ii) Salaries and Wages

Sl. No.	Designation	No.	Salary (In Rs.)	Total (In Rs.)
1.	Accountant-cum-clerk	1	2,000	2,000
2.	Factory Manager-cum-Technologist	1	8,000	8,000
3.	Peon	1	1,000	1,000
4.	Skilled Workers	4	1,500	6,000
5.	Supervisor	2	2,000	4,000
6.	Typist	1	1,500	1,500
Total				22,500
<i>Perquisites 15%</i>				3,375
Total				25,875

### (iii) Utilities

Sl. No.	Description	Total (In Rs.)
1.	Fuel and water charges	4,000
2.	Power 10 KW	8,000
Total		12,000

### (iv) Other Contingent Expenses

Sl. No.	Description	Amount (In Rs.)
1.	Advertisement and publicity	6,000
2.	Other miscellaneous expenses such as tax, insurance etc.	4,000

Sl. Description No.	Amount (In Rs.)
3. Postage and Stationery	2,000
4. Rent	8,000
5. Repair and maintenance	2,000
6. Transportation charges	3,000
<b>Total</b>	<b>25,000</b>

v) Working Capital (per month) Rs. 519,400 + 25,875 + 12,000 + 25,000 = Rs 5,82,275

(vi) Working Capital for 3 months

Rs. 582,275 × 3 = Rs 17,46,825

Total Capital Investment	Amount (In Rs.)
Fixed Capital	9,90,000
Working Capital (For 3 Months)	17,46,825
<b>Total</b>	<b>27,36,825</b>

## FINANCIAL ANALYSIS

(1) Cost of Production (per annum)

Sl. Description No.	Amount (In Rs.)
1. Depreciation on Machinery and Equipment @ 10%	78,600
2. Depreciation on Office Furniture @ 20%	20,000
3. Depreciation on Tools @ 25%	—
4. Recurring Expenditure	69,87,300
5. Interest on capital investment @ 15%	4,10,500
<b>Total</b>	<b>74,96,400</b>

(2) Sales (per annum)

Cashew/coconut feni 65,000 bottles @Rs. 130 bottle,  
Annual Sales Rs. 84,50,000

(3) Profit (per annum)	Amount (In Rs.)
Sales	84,50,000
Cost of Production	74,96,400
<b>Profit</b>	<b>9,53,600</b>

(4) Net Profit Ratio

$$\begin{aligned}
 &= \frac{\text{Profit/annum} \times 100}{\text{Sales/annum}} \\
 &= \frac{9,53,600 \times 100}{84,50,000} \\
 &= 11.29\%
 \end{aligned}$$

(5) Rate of Return

$$\begin{aligned}
 &= \frac{\text{Profit/annum} \times 100}{\text{Total Capital Investment}} \\
 &= \frac{9,53,600 \times 100}{27,36,825} \\
 &= 34.85\%
 \end{aligned}$$

(6) Break-even Point

(1) Fixed Cost (per annum)	Amount (In Rs.)
1. Depreciation	98,600
2. Rent	96,000
3. Interest on investment	4,10,500
4. 40% of salary and wages	1,24,200
5. 40% of other expenses and Utilities excluding rent	139,200
<b>Total</b>	<b>8,68,500</b>

(2) Profit (per annum) Rs. 9,53,600

Break-even Point

$$\begin{aligned}
 &= \frac{\text{Fixed Cost/annum} \times 100}{\text{Fixed cost/annum} + \text{profit/annum}} \\
 &= \frac{8,68,500 \times 100}{8,68,500 + 9,33,471} \\
 &= 47.67\%
 \end{aligned}$$

## Addresses of Machinery and Equipment Suppliers

1. M/s. Gladwyn and Co.  
251, D-Naurji Road, Fort, Mumbai
2. M/s. H and P Industries  
Near Mundipalam, Thrissur-6
3. M/s. Jyothi Industries  
31, Pampamahakavi Road, Bangalore-560004
4. M/s. Motwane Manufacturing Co. Pvt. Ltd.  
127, M.G. Road, Mumbai
5. M/s. Hilden Packaging Machine Pvt. Ltd.  
Plot No. 101, Road No. 16, MIDC Chakala, Andheri, Mumbai-400 093