



MODEL PROJECT REPORT



PROJECT REPORT ON AMLA PROCESSING

SWAVALAMBI BHARAT ABHIYAN

AMLA PROCESSING

1) INTRODUCTION

Phyllanthusemblica, also known as emblic or emblic myrobalan or myrobalan, Indian gooseberry is well known over the world for its delicious fruits having rich medicinal properties and values. Amla fruits are a very rich source of vitamin C having an ascorbic acid content varying from 0.9% to 1.3%, the second highest among all the fruits cultivated.

2) PRODUCTS AND ITS APPLICATION:

Amla consumed as such in large quantities. The major quantity of Amala is used making chayavanprash, ayurvedic medicines, cosmetic products and other value added products like preserve, juice, ready-to-serve drink, sherbet, jam, fruit bar, dehydrated amla whole or powder, mouth freshners, etc. Chayavanprash is generally considered as health tonic in all respects whereas ayurvedic products like TRIFALA is used for constipation and cosmetic products like hair oils or creams are useful for keeping hair and skin healthy respectively. The food products as enlisted are considered healthy and source of vitamin C.

Plant Capacity & Product Mix:

The proposed project is of processing amla at the rate of 2.5 tons/hr to produce 1 ton/hr pulp in its season, say 130 days (4 months) which can be sale directly those who are making amla pulp based products and the promoter can also store and then processed the same pulp in other value added amla products like amla drink in remaining 170 days of the year.

3) DESIRED QUALIFICATION FOR PROMOTER:

The promoter must be well versed with processes for value added amla products, amla growing regions, seasons, etc. as well able to markets the same in India and abroad. Also, able to produce the end products of desired end use application.

4) INDUSTRY OUTLOOK/TREND

The market for herbal products and natural sources for vitamins and minerals are increasingly in demand due to health benefits. This trend is likely to continue on domestic and export front. Amla is having very high content of naturally available ascorbic acid (vitamin C) and therefore products of amla such as powder, juice;pulp, sugar coated products etc. are growing very fast in the market.

5) MARKET POTENTIAL AND MARKETING ISSUES, IF ANY:

Amla extract (ingredients) are useful in various food and beverage applications such as nutritional bars, cereals, jams, powder drink mixes, yogurts and dietary supplements. The potential for amla extract as a food ingredient is increasing substantially, owing to the growing global nutraceuticals and functional food market. Amla extract also provides broad spectrum skin protection against heavy metals due to its anti-oxidant properties. Thus, the market for amla extract is expected to grow at a healthy CAGR throughout the next decade.

India exports a significant amount of amla and amla extracts to countries like the U.S., Japan, Nepal, Bangladesh, Malaysia, Germany and the Netherlands. Various herbal medicine manufacturing companies are using amla extracts to provide novel dietary supplements in herbal tea and powders forms. Effective production, processing and marketing of amla extracts is expected to boost the market size during the next decade. The major players are: Biomax, Taiyo international (Sun Amla), Arjuna Natural Extracts Ltd., Nutra Genesis and Archer chem.; etc.

At present amla processing activity is mainly concentrated in the state of U.P, Gujarat, Maharashtra and southern states. Most of the facilities are in the unorganized sector. Hence there is good scope for medium scale well organized processing facilities to maintain quality parameters required by large companies and importers.

6) RAW MATERIAL REQUIREMENTS:

India produces about 15 Lakh tons of Amla in 1 Lakh hectre. The leading amla producing states are: Uttar Pradesh, Madhya Pradesh, Tamil Nadu and Gujarat, other states also growing amla are: Andhra Pradesh, Chhattisgarh, Jharkhand and Haryana. The key Amla growing belts in leading states are as under:

States	Districts
Uttar Pradesh	Pratapgarh, Rai Bareilly, Varanasi, Jaunpur, Sultanpur, Fatehpur, Kanpur, Agra and Mathura
Madhya Pradesh	Dewas, Hoshangabad, Shivani, Rewa, Satna, Tikamgarh, Betul, Chindwara, Shivaparkala, Panna, etc.
Tamil Nadu:	Tirunelveli, Thoothukudi, Sivagangai, Coimbatore, Salem & Dindigul
Gujarat:	Kheda, Anand, Sabarkantha, Banaskantha, Mehsana, Ahmedabad, etc.

There are three main varieties of amla viz., Banarasi, Francis (Hathijhool) and Chakaiya. Other varieties identified and released for commercial cultivation during the recent years are: Kanchan (NA4), NA6 and NA7. Besides above varieties, Anand 1, Anand 2 and Anand 3 have been selected as promising strains at the Gujarat Agricultural University

Amla yields approx. 40% juice having 10° brix for making any further value added product. One has to calculate the requirements of raw materials accordingly depending on quantity of end product to be manufactured. The peak season for amla is from October to January. Here, it is proposed to produce 2.5 tons/hr fresh amla to produce 1 ton/hr pulp at every hour as peak season is just four months. One can keep in cold storage after January for other 2-3 months.

7) MANUFACTURING PROCESS:

Sound mature amla fruits are wash thoroughly under turbulent washing to remove dirt, dust and adhered unwanted material. Thus cleaned and washed amla are subject to cutting in a specialized machine, followed by pulping with filtration, standardizing and pasteurizing for storage or otherwise can be used for making other value added food products either by boiling the pulp or sometime direct cooking of amla fruits (no pulping) for making products like amla preserve, candy, pickle or mouth freshener. The pulp or extract can be used in making chayavanprash, juices, ready-to-serve beverages, fruit bar, amla sauce, cosmetic products, etc.

8) MANPOWER REQUIREMENT:

S.No.	Designation	No.	Salary(Rs.)		Total (In. Rs.)
1	Manager	1	Self		-
2	Administrative staff	2	12,000.00		24,000.00
4	Skilled	7	10,000.00		70,000.00
5	Unskilled/labor	25	7,000.00		175000.00
					2,69,000.00
	Total				2,69,000.00
	Total Annual Salary	35	4 months		10,76,000.00
					10.76

9) COST OF PROJECT:

S.NO.	PARTICULARS	TOTAL COST	MARGIN 25%	LOAN
1	Land & Building	0.00	0.00	0.00
2	Plant and Machinery	44.95	11.24	33.71
3	Furniture & Fixture	0.75	0.19	0.56
4	Contingencies	0.90	0.90	-
6	Margin for Working Capital	5.56	5.56	-
	Total	52.16	17.89	34.27

10) MEANS OF FINANCE:

S.NO.	PARTICULARS		AMOUNT
1	Own Capital		17.89
2	Term Loan		34.27
	Total		52.16

11) WORKING CAPITAL CALCULATION:**Rs in lac**

1	Salary and Wages		10.76
2	Raw Material		510.00
3	Utilities		1.43
4	Other selling and administrative Expenses		17.78
	Total		539.97
	Working Capital for 3 months	Rs in Lakhs	134.99

12) LIST OF MACHINERY REQUIRED:

S.no.	Description	Qty. nos.	Price/unit	Amount (In Rs.)
1	Fruit & Vegetable Washer: 5 ton/hr	1	7,50,000.00	7,50,000.00
2	Amla Shredding Machine	2	2,00,000.00	4,00,000.00
3	Amla Juicer	2	8,00,000.00	16,00,000.00
4	Standardization Tanks 500 lit each	2	15,000.00	30,000.00
5	Pasteurizer	1	12,50,000.00	12,50,000.00
6	Holding Tank	2	15,000.00	30,000.00
7	Steam Jacketed Kettles: 500 lit	2	1,35,000.00	2,70,000.00
8	Canning Machinery	1	1,65,000.00	1,65,000.00
				44,95,000.00

13) PROFITABILITY CALCULATIONS:

TOTAL COST OF PRODUCTION

S.No.	Particulars	In. Rs.
1	Total Recurring Expenditure	539.97
2	Depreciation on Plant and Machinery @ 15%	6.74
3	Depreciation of Furniture/Fixture & Office Equipment @ 10 %	0.08
4	Finance Cost 12%	16.34
		563.13

TOTAL TURNOVER

S.No.	Particulars	Qty (Tonne)	Rate per tonne (in Rs)	In. Rs.
1	Amla Pulp	1000	62,000.00	6,20,00,000.00
	TOTAL TURNOVER			6,20,00,000.00
			(In Lacs)	620.00

(In Lacs)

PROFIT (Turn over -Cost of Production)	(620.00-563.13)	56.87
At 100% capacity utilisation		
Percentage profit on sales		9.17%

The proposed unit will have the production capacity of 1000 MT of Amla pulp per year. The unit cost of power is taken at Rs. 8. The depreciation on building is taken at the rate of 15% on Plant and machinery and 10% on Furniture and Fixture.

The sales price of Amla pulp is taken at the rate of Rs.62000/- per MT on an average for proposed project.

14) STATUTORY/ GOVERNMENT APPROVALS

There is statutory requirement of FSSAI license for setting up of amla processing industry. Moreover, MSME& GST registration, IEC Code for Export of end products and local authority clearance may be required for Shops and Establishment, for Fire and Safety requirement and registration for ESI, PF and Labour laws may be required if applicable. Entrepreneur may contact State Pollution Control Board where ever it is applicable.