

PROJECT REPORT

Of

ANOLA(AMLA) JUICE

PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding Anola (amla) Manufacturing unit.

The objective of the pre-feasibility report is primarily to facilitate potential entrepreneurs in project identification for investment and in order to serve his objective; the document covers various aspects of the project concept development, start-up, marketing, finance and management.

[We can modify the project capacity and project cost as per your requirement. We can also prepare project report on any subject as per your requirement.]



**Lucknow Office: Sidhivinayak Building ,
27/1/B, Gokhley Marg, Lucknow-226001**

**Delhi Office : Multi Disciplinary Training
Centre, Gandhi Darshan Rajghat,
New Delhi 110002**

**Email : info@udyami.org.in
Contact : +91 7526000333, 444, 555**

PROJECT AT GLANCE

1 Name of Proprietor/Director	XXXXXXXXXX
2 Firm Name	XXXXXXXXXX
3 Registered Address	XXXXXXXXXX
4 Nature of Activity	XXXXXXXXXX
5 Category of Applicant	XXXXXXXXXX
6 Location of Unit	XXXXXXXXXX
7 Cost of Project	23.94 Rs. In Lakhs
8 Means of Finance	
i) Own Contribution	2.39 Rs. In Lakhs
ii) Term Loan	14.79 Rs. In Lakhs
iii) Working Capital	6.76 Rs. In Lakhs
9 Debt Service Coverage Ratio	2.97
10 Break Even Point	38%
11 Power Requirement	10 KW
12 Employment	12 Persons
13 Major Raw Materials	Fresh Anola(Amla),water and packaging material

14 Details of Cost of Project & Means of Finance

Cost of Project	Amount in Lacs
Particulars	Amount
Land and building	Owned/Leased
Plant & Machinery	15.93
Furniture & Fixture	0.25
Other Misc Assets	0.25
Working Capital Requirement	7.51
Total	23.94

Means of Finance	Amount
Particulars	Amount
Own Contribution	2.39
Term Loan	14.79
Working capital Loan	6.76
Total	23.94

ANOLA(AMLA) JUICE

1. INTRODUCTION

Anola (*Emblica Officinalis* Geartn) is one of India's oldest fruits, and its unique properties have earned it the title of "wonder fruit for health." It is native to India, Sri Lanka, Malaysia, and China and belongs to the Euphorbiaceae family.

It is one of the most important fruits of the Indian subcontinent's tropics and subtropics. The native fruit is extremely adaptable, allowing it to thrive in a wide range of climatic and soil conditions. It goes by a variety of names, including 'Aonla,' 'Amalakki,' 'Nelli,' and 'Indian gooseberry,' among others.

The fruit is a potent antioxidant, hypolipidemic, and antibacterial, with antiviral and antacid properties, high content of vitamin C (699 mg ascorbic acid/100 g) in the pulp, as well as other nutrients like polyphenols, pectin, iron, calcium, and phosphorus. It is not popular as a table fruit due to its highly acidic and astringent taste, low total soluble solids (TSS), and poor flavour and colour.

The fruit is highly perishable, and it is only available in India for a limited time between October and January. After harvesting, its storage life in atmospheric conditions is only 5–6 days. Appropriate storage and processing methods can reduce post-harvest losses by 30% and extend the shelf life of the fruit.

The few postharvest technologies that are available are complex and out of reach for small farmers on a farm level. Consumers are hesitant to eat it raw due to its astringent nature. Efforts are being made to develop value-added products that are both nutritious and popular with consumers. As a result, various value addition technologies are available to reduce aonla fruit postharvest losses. Banarasi, Chakaiya, Francis, NA-4 (Krishna), NA 5 (Kanchan), NA-6, NA-7, NA-10, and BSR-1 are common high yielding cultivated aonla varieties (Bhavanisagar).

IMPORTANCE OF ANOLA

Anola fruit contains three times more protein and 160 times more vitamin C (699 mg/100 g) than an apple. Except for the Barbados cherry, it has the richest source of vitamin C of any

fruit. Because of its astringent taste, anola is not popular as a table fruit, but it has a lot of potential for processing and medicinal uses in a variety of products, and there is a lot of demand for anola products on the market.

2. PRODUCT DESCRIPTION

2.1 PRODUCT USES

Amla juice is the natural remedy for several diseases and also boosts the immune as it is a rich source of ascorbic acid. This fruit can help control blood sugar levels, improve digestion, and weight loss. It can also be used as a heartburn treatment. Amla juice is also used to treat a variety of ailments. This nutrient-dense beverage will aid in the



elimination of toxins while also supporting liver function. Drinking amla juice daily is equally beneficial in stimulating hair growth.

2.2 RAW MATERIAL REQUIREMENT

- The fresh Anola sound mature fruit are required for this entire product. Fresh Anola which is available only for 3 months in a year.
- Kms and water are required for juice making.
- Good Packaging material required for the packaging the final product.

2.3 MANUFACTURING PROCESS

➤ Harvesting:

The change in seed colour from creamy white to brown is indicative of fruit maturity. Fully developed fruits, which show signs of maturity, are harvested. This helps in the size gain of the remaining fruit.

➤ Storage

Aonla fruits are highly perishable in nature as it's storage in atmospheric conditions after harvesting is very limited. Due to its perishable nature, it is difficult to store or transport aonla fruits over long distances. The fruits may be kept in cold storage for 7-8 days at 0-2°C and 85-90% relative humidity.

➤ Washing

Select mature, firm, and fibreless aonla fruits and washed in cold water to remove the impurity dirt and other foreign particles from the fruits, the fruits and vegetable washer machine are used for efficient washing of fruit.

➤ **Deseeding and segmentation**

Properly washed fruits are then taken to seed separation machine for deseeding and segmentation of fruit. It helps to separate the seed material from the fruit segment.

➤ **Pulping**

Extraction of aonla pulp from aonla fruits is necessary for the processing of aonla juice. The pulp is extracted by the addition of water equal to the weight of segments and passing through the pulping machine. The pulp of aonla is filtered after for further processing.

➤ **Pasteurization**

Now the Fruit Pulp is first pasteurized at 78⁰ C for 15-20 minutes. After pasteurization the fruit juice are taken to cooling section where addition of potassium Meta bi sulphide are added as preservatives.

➤ **Filling and storage**

The juice is then filled in sterilized bottles and after capping the bottle is sterilize for 20 minutes and stored in a cool and dry place

3. PROJECT COMPONENTS

3.1 Land /Civil Work

The land require for this manufacturing unit will be approx. around 1500-2000 square feet.

3.2Plant & Machinery

This manufacturing unit will be semi-automatic type and the plant capacity is set to be 1000 Liter per day.

➤ **Fruits and vegetable washing machine**

Fruit washing machines are used to thoroughly clean fruits and vegetables. It's important of equipment for pre-treating fruits and ensuring the cleanliness of raw materials and finished goods. It can be applied to a variety of fruits, including Aonla, Lime, Lemon, Apples, Oranges, Bananas, Mangoes, Pineapples, Lychees, and Kiwi fruits, among others.



➤ **Aonla juice extractor machine:** Machine is widely used for extracting the juice from Aonla in an efficient and hygienic manner.



- **Heating Vessel with stirrer:** These vessels are used for heating the juice and reduce the viscosity of high viscous fluids.



- **Juice filtration machine:** The juice filter machine is equipment used in liquid/solid separation. Specifically, the filter press separates the liquids and solids using pressure filtration.



- **Chiller machine:** Chiller is a refrigeration system used to lower the temperature of fluids by removing heat from them.



- **Mixer vessels:** Mixer vessels with agitator. It is widely used in the Food Processing industry to mixing the ingredients in fluids homogeneously.



- **Bottle filling machine:** This machine are used to fill products that require to be packaged in bottles



- **Stainless Steel Bottle Shrink Wrapping Machine:** It is used to shrink pack goods, such as cans, glass bottles, fruit juices etc.



Equipment and machines:

- **Boiler:** Boiler is used for producing steam which is used by juices making machines.



- **Food Grade Conveyor:** It's a type of material handling equipment that is designed to transport given load over considerable horizontal distance, utilizing a food grade belt.



- **Other Material Handling Equipment:** They are simply used to hold and transfer given material efficiently.



Semi Automatic Machine

S.N.	Description	Amount
1	Plant cost	12,99,987
2	Other equipments	50,000
Sub Total		13,49,987
GST @ 18%		2,42,998
Total		15,92,985

4. LICENSE & APPROVALS

- FSSAI registration certificate.
- Trade License from the local authority.
- MSME Udyam online registration.
- GST Registration

PROJECTED BALANCE SHEET		(in Lacs)				
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year	
<u>Liabilities</u>						
Capital						
Opening Balance		3.28	5.10	7.71	10.30	
<i>Add:- Own Capital</i>	2.39					
Add:- Retained Profit	4.14	6.32	8.61	10.59	12.93	
Less:- Drawings	3.25	4.50	6.00	8.00	10.00	
Closing Balance	3.28	5.10	7.71	10.30	13.22	
Term Loan	13.14	9.86	6.57	3.29	-	
Working Capital Limit	6.76	6.76	6.76	6.76	6.76	
Sundry Creditors	2.80	3.23	3.70	4.21	4.77	
Provisions & Other Liabilities	0.05	0.10	0.12	0.14	0.50	
TOTAL :	26.03	25.04	24.86	24.70	25.24	
<u>Assets</u>						
Fixed Assets (Gross)	16.43	16.43	16.43	16.43	16.43	
Gross Depreciation	2.45	4.54	6.31	7.82	9.10	
Net Fixed Assets	13.98	11.89	10.12	8.61	7.33	
Current Assets						
Sundry Debtors	4.50	5.35	6.13	6.98	7.89	
Stock in Hand	5.81	6.70	7.67	8.70	9.80	
Cash and Bank	1.75	1.09	0.93	0.41	0.22	
TOTAL :	26.03	25.04	24.86	24.70	25.24	

PROJECTED PROFITABILITY STATEMENT					
(in Lacs)					
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
Capacity Utilisation %	50%	55%	60%	65%	70%
<u>SALES</u>					
Gross Sale					
AMLA JUICE	134.85	160.63	184.05	209.39	236.82
Total	134.85	160.63	184.05	209.39	236.82
<u>COST OF SALES</u>					
Raw Material Consumed	105.00	121.28	138.92	158.03	178.69
Electricity Expenses	1.92	2.11	2.32	2.56	2.81
Depreciation	2.45	2.09	1.77	1.51	1.28
Wages & labour	8.16	8.98	9.87	10.86	11.95
Repair & maintenance	1.35	2.41	3.22	3.66	4.14
Consumables	1.62	2.01	2.76	3.14	3.55
Packaging	1.35	1.61	1.84	2.09	2.37
Cost of Production	121.85	140.47	160.72	181.85	204.80
Add: Opening Stock	-	4.06	4.68	5.36	6.06
Less: Closing Stock	4.06	4.68	5.36	6.06	6.83
Cost of Sales	117.79	139.85	160.04	181.15	204.03
GROSS PROFIT	17.06	20.78	24.01	28.25	32.79
Salary to Staff	6.12	6.73	7.41	8.15	8.96
Interest on Term Loan	1.45	1.28	0.92	0.56	0.20
Interest on working Capital	0.74	0.74	0.74	0.74	0.74
Rent	3.60	3.96	4.36	4.79	5.27
Selling & Administration Expenses	1.01	1.61	1.38	2.09	2.37
TOTAL	12.93	14.32	14.80	16.33	17.54
NET PROFIT	4.14	6.46	9.20	11.92	15.25
Taxation		0.15	0.59	1.32	2.33
PROFIT (After Tax)	4.14	6.32	8.61	10.59	12.93

PROJECTED CASH FLOW STATEMENT					(in Lacs)
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
<u>SOURCES OF FUND</u>					
Own Margin	2.39				
Net Profit	4.14	6.46	9.20	11.92	15.25
Depriciation & Exp. W/off	2.45	2.09	1.77	1.51	1.28
Increase in Cash Credit	6.76	-	-	-	-
Increase In Term Loan	14.79	-	-	-	-
Increase in Creditors	2.80	0.43	0.47	0.51	0.55
Increase in Provisions & Other liabilities	0.05	0.05	0.02	0.02	0.36
TOTAL :	33.38	9.03	11.47	13.96	17.44
<u>APPLICATION OF FUND</u>					
Increase in Fixed Assets	16.43				
Increase in Stock	5.81	0.89	0.97	1.02	1.11
Increase in Debtors	4.50	0.86	0.78	0.84	0.91
Repayment of Term Loan	1.64	3.29	3.29	3.29	3.29
Drawings	3.25	4.50	6.00	8.00	10.00
Taxation	-	0.15	0.59	1.32	2.33
TOTAL :	31.63	9.68	11.63	14.48	17.63
Opening Cash & Bank Balance	-	1.75	1.09	0.93	0.41
Add : Surplus	1.75	-0.65	-0.16	-0.52	-0.19
Closing Cash & Bank Balance	1.75	1.09	0.93	0.41	0.22

CALCULATION OF D.S.C.R

PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
CASH ACCRUALS	6.59	8.40	10.39	12.10	14.21
Interest on Term Loan	1.45	1.28	0.92	0.56	0.20
Total	8.04	9.68	11.31	12.66	14.40
<u>REPAYMENT</u>					
Instalment of Term Loan	1.64	3.29	3.29	3.29	3.29
Interest on Term Loan	1.45	1.28	0.92	0.56	0.20
Total	3.10	4.57	4.20	3.84	3.48
DEBT SERVICE COVERAGE RATIO	2.60	2.12	2.69	3.29	4.14
AVERAGE D.S.C.R.					2.97

REPAYMENT SCHEDULE OF TERM LOAN						
					Interest	11.00%
Year	Particulars	Amount	Addition	Total	Interest Repayment	Closing Balance
1st	Opening Balance	-				
	1st month		14.79	14.79	-	14.79
	2nd month	14.79	-	14.79	0.14	14.79
	3rd month	14.79	-	14.79	0.14	14.79
	4th month	14.79	-	14.79	0.14	14.79
	5th month	14.79	-	14.79	0.14	14.79
	6th month	14.79	-	14.79	0.14	14.79
	7th month	14.79	-	14.79	0.14	14.51
	8th month	14.51	-	14.51	0.13	14.24
	9th month	14.24	-	14.24	0.13	13.97
	10th month	13.97	-	13.97	0.13	13.69
	11th month	13.69	-	13.69	0.13	13.42
	12th month	13.42	-	13.42	0.12	13.14
					1.45	1.64
2nd	Opening Balance					
	1st month	13.14	-	13.14	0.12	12.87
	2nd month	12.87	-	12.87	0.12	12.60
	3rd month	12.60	-	12.60	0.12	12.32
	4th month	12.32	-	12.32	0.11	12.05
	5th month	12.05	-	12.05	0.11	11.77
	6th month	11.77	-	11.77	0.11	11.50
	7th month	11.50	-	11.50	0.11	11.23
	8th month	11.23	-	11.23	0.10	10.95
	9th month	10.95	-	10.95	0.10	10.68
	10th month	10.68	-	10.68	0.10	10.41
	11th month	10.41	-	10.41	0.10	10.13
	12th month	10.13	-	10.13	0.09	9.86
					1.28	3.29
3rd	Opening Balance					
	1st month	9.86	-	9.86	0.09	9.58
	2nd month	9.58	-	9.58	0.09	9.31
	3rd month	9.31	-	9.31	0.09	9.04
	4th month	9.04	-	9.04	0.08	8.76
	5th month	8.76	-	8.76	0.08	8.49
	6th month	8.49	-	8.49	0.08	8.21
	7th month	8.21	-	8.21	0.08	7.94
	8th month	7.94	-	7.94	0.07	7.67
	9th month	7.67	-	7.67	0.07	7.39
	10th month	7.39	-	7.39	0.07	7.12
	11th month	7.12	-	7.12	0.07	6.85

12th month	6.85	-	6.85	0.06	0.27	6.57
				0.92	3.29	
4th Opening Balance						
1st month	6.57	-	6.57	0.06	0.27	6.30
2nd month	6.30	-	6.30	0.06	0.27	6.02
3rd month	6.02	-	6.02	0.06	0.27	5.75
4th month	5.75	-	5.75	0.05	0.27	5.48
5th month	5.48	-	5.48	0.05	0.27	5.20
6th month	5.20	-	5.20	0.05	0.27	4.93
7th month	4.93	-	4.93	0.05	0.27	4.66
8th month	4.66	-	4.66	0.04	0.27	4.38
9th month	4.38	-	4.38	0.04	0.27	4.11
10th month	4.11	-	4.11	0.04	0.27	3.83
11th month	3.83	-	3.83	0.04	0.27	3.56
12th month	3.56	-	3.56	0.03	0.27	3.29
				0.56	3.29	
5th Opening Balance						
1st month	3.29	-	3.29	0.03	0.27	3.01
2nd month	3.01	-	3.01	0.03	0.27	2.74
3rd month	2.74	-	2.74	0.03	0.27	2.46
4th month	2.46	-	2.46	0.02	0.27	2.19
5th month	2.19	-	2.19	0.02	0.27	1.92
6th month	1.92	-	1.92	0.02	0.27	1.64
7th month	1.64	-	1.64	0.02	0.27	1.37
8th month	1.37	-	1.37	0.01	0.27	1.10
9th month	1.10	-	1.10	0.01	0.27	0.82
10th month	0.82	-	0.82	0.01	0.27	0.55
11th month	0.55	-	0.55	0.01	0.27	0.27
12th month	0.27	-	0.27	0.00	0.27	-
				0.20	3.29	
DOOR TO DOOR	60	MONTHS				
MORATORIUM PERIOD	6	MONTHS				
REPAYMENT PERIOD	54	MONTHS				

DISCLAIMER

The views expressed in this Project Report are advisory in nature. SAMADHAN assume no financial liability to anyone using the content for any purpose. All the materials and content contained in Project report is for educational purpose and reflect the views of the industry which are drawn from various research material sources from internet, experts, suppliers and various other sources. The actual cost of the project or industry will have to be taken on case to case basis considering specific requirement of the project, capacity and type of plant and other specific factors/cost directly related to the implementation of project. It is intended for general guidance only and must not be considered a substitute for a competent legal advice provided by a licensed industry professional. SAMADHAN hereby disclaims any and all liability to any party for any direct, indirect, implied, punitive, special, incidental or other consequential damages arising directly or indirectly from any use of the Project Report Content, which is provided as is, and without warranties.