

UP MSME 1-Connect

PROJECT REPORT

PROJECT: JAMUN JUICE PROCESSING UNIT

**PROJECT REPORT
OF
JAMUN JUICE
PROCESSING UNIT**

PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding Jamun Juice Processing Business.

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.]

1-CONNECT
UTTAR PRADESH MSME

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	22.31	Rs. In Lakhs	
8 Means of Finance			
i) Own Contribution	2.23	Rs. In Lakhs	
ii) Term Loan	15.08	Rs. In Lakhs	
iii) Working Capital	5.00	Rs. In Lakhs	
9 Debt Service Coverage Ratio	3.25		
10 Break Even Point	30%		
11 Power Requirement	10	KW	
12 Employment	5	Persons	
13 Major Raw Materials			
14 Details of Cost of Project & Means of Finance			

COST OF PROJECT	
(in Lacs)	
PARTICULARS	Amount
Land & Building	Owned/Rented
Plant & Machinery	16.00
Furniture & Fixture	0.25
Miscellaneous Assets	0.50
Working capital Required	5.56
Total	22.31

MEANS OF FINANCE	
(in Lacs)	
PARTICULARS	Amount
Own Contribution @ 10%	2.23
Term Loan @ 90%	15.08
Working Capital (Bank Finance)	5.00
Total	22.31

JAMUN JUICE

1. INTRODUCTION

Jamun is the tropical fruit, member of Myrtaceae family, grown in South America, Asia Subcontinent, eastern Africa and Madagascar. India is in second position in the production of jamun in world. The botanical name of jamun is *Syzygium cumini* known as wonder fruit because of its medicinal properties. Jamun is dark purple colour fruit, single seed and ovoid. The harvesting span is in monsoon months and requires dry weather for flowering and fruit setting. The fruit is used for making jams, jellies, health drinks, squashes, vinegar and wine. Jamun is commonly known as Indian blackberry, java plum, black plum, jambul, jambolana and doowet.

The fruit is known for its medicinal as well as therapeutic properties. The colour of jamun is due to the presence of high number of anthocyanins which contributes to high antioxidant properties and free radical scavenging activities. The pigment of the fruit can be source of natural food colorant for other products also. The fruit is rich source of various minerals such as potassium, calcium, iron and sodium. Fruit is used for the treatment of diabetes, digestive problems, cancer, liver problems, diarrhoea, pimples and stomach ache. Fruit also has a soothing and cooling effect ideal for use in beverages. Not just fruit, leaves, seeds and bark also have medicinal uses. The seed contributes to antidiabetic properties, hypolipidemic properties, and cardioprotective properties. Seed is source of jambosin (alkaloid) and antilemellin (glycoside) which reduces the sugar level. The seeds are rich in protein and calcium. Stem is source of phytochemicals such as sitosterol, gallic acid, gallotannin and myricetin.



TABLE: NUTRITIONAL COMPOSITION OF JAMUN FRUIT; SOURCE Roy et al., 1999

PROPERTIES OF JAMUN						
Anti allergic	Anti diabetic	Anti inflammatory	Cardioprotective	Anti Microbial	Anti Cancer	Gastro Protective

<i>Edible portion</i>	75%
<i>Moisture</i>	81.2 %
<i>Protein</i>	0.7%
<i>Fat</i>	0.1%
<i>Mineral matter</i>	0.4%
<i>Fiber</i>	0.9%
<i>Total tannins</i>	386- 428mg/100g
<i>Carbohydrates</i>	14-19%
<i>Calcium</i>	0.02%
<i>Iron</i>	0.1%
<i>Ascorbic acid</i>	18mg/100g
<i>Nicotinic acid</i>	0.20mg/100g

2. MARKET POTENTIAL

Fruit juice is unfermented but fermentable product intended for direct consumption obtained from mechanical process from ripe fruit and processed by heat. Rise in urbanization and increase in income increases the scope of marketing fruit juice. During pandemic, more and more people are looking for the food and beverages with functional properties such as jamun which has immunity boosting properties however, disturbance in the supply chain is hampering the growth of the market.

Increase in the options of flavor and addition of functional ingredients in juice like probiotics, prebiotics, fibers etc. attract health-conscious consumers. Jamun juice is rich in anthocyanins and other phytochemicals, has various medicinal properties such used in diabetes, increases haemoglobin, regulate blood pressure. As more and more people are opting for foods and drinks which help them to prevent or cure one or more diseases, these factors increase the market growth of jamun juice.

There is decrease in consumption of soft drinks, carbonated drink which are made up of sugar only globally because of presence of preservatives, phosphoric acid, caffeine, they contribute to very high number of calories and presence of artificial color causing negative effect on human health. Due to these reasons, people are increasingly looking towards drink and juices which is more natural, contribute less calories and filled with nutrients such as juice of jamuns and other natural fruits.



GLOBAL FRUIT JUICE MARKET DRIVERS

Production of juices from fruit such as jamun which are seasonal and not available throughout the year provide opportunity to the consumers to have these products whenever they want rather than waiting for the availability of fruit only in the season.

In recent times, there has been increase in number of nuclear families, working members and high disposable income which increases the affordability of various juices and replacing the home-made juices with packed juice as a quick source of nutrition, which further fuel the demand of the juices.

3. PRODUCT DESCRIPTION

3.1 USES OF JAMUN JUICE

1. Jamun juice can be used for preparation of RTS beverages, Squashes and cordials
2. Jamun juice is also used for preparation of jams, jellies, marmalades and candies.
3. Jamun juice is also used for preparation of jamun fruit leather.
4. Fortification of Jamun juice in dairy products for e.g. yoghurts, flavored milk, *dahi*, ice creams and *lassis*.
5. Incorporation of juice for preparation of sherbet, sports drink, herbal and health drinks.
6. Jamun juice is also used for preparation of juice concentrate and spray dried juice powder.
7. It can also be used as an ingredient in prebiotic, probiotic and fermented beverages.

3.2 RAW MATERIAL REQUIREMENT OF JAMUN JUICE

The major raw material for producing Jamun juice is jamun fruit and Water. The minor ingredients that are usually used are natural fruit flavour, citric acid and sodium benzoate accounting for less than 1%.

S.NO	COMPONENT	AMOUNT
1	Jamun pulp	10- 99%
2	Water	As required
3	Citric acid	0.1%
5	Sodium benzoate	0.3%

3.3 PRODUCTION OF JAMUN JUICE

- SELECTION OF JAMUN FRUITS
- GRADING AND WASHING
- PULPING OF THE FRUIT
- HOMOGENIZATION
- HEATING OF THE PULP
- JUICE EXTRACTION
- ENZYMATIC TREATMENT OF EXTRACTED JUICE
- DEAERATION AND FILTRATION
- ADDITION OF PRESERVATIVE
- PASTEURIZATION AND COOLING
- ASEPTIC PACKAGING OF JUICE

4. PROJECT COMPONENTS

PLANT AND MACHINERY

- FRUIT WASHING UNIT
- RUIT PULPING MACHINE
- HOMOGENIZOR
- HYDRAULIC JUICE PRESS MACHINE
- FILTRATION UNIT
- PASTEURIZATION AND COOLING UNIT
- ASEPTIC FILLING MACHINE

PROJECTED PROFITABILITY STATEMENT

(in Lacs)

PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
Capacity Utilisation %	50%	55%	60%	65%	70%
SALES					
Gross Sale					
Jamun Juice	89.09	106.12	121.59	138.34	156.46
Total	89.09	106.12	121.59	138.34	156.46
COST OF SALES					
Raw Material Consumed	69.12	79.83	91.45	104.02	117.62
Electricity Expenses	1.05	1.39	1.51	1.64	1.76
Depreciation	2.50	2.13	1.81	1.54	1.31
Wages & labour	3.12	3.43	3.78	4.15	4.57
Repair & maintenance	1.34	1.59	1.82	2.08	2.35
Consumables & Packaging	1.78	2.12	2.43	2.77	3.13
Cost of Production	78.91	90.49	102.80	116.19	130.74
Add: Opening Stock	-	2.63	3.02	3.43	3.87
Less: Closing Stock	2.63	3.02	3.43	3.87	4.36
Cost of Sales	76.28	90.11	102.39	115.74	130.25
GROSS PROFIT	12.81	16.02	19.20	22.59	26.20
Gross Profit Ratio	14.38%	15.09%	15.79%	16.33%	16.75%
Salary to Staff	2.64	3.04	3.49	4.02	4.42
Interest on Term Loan	1.48	1.31	0.94	0.57	0.20
Interest on working Capital	0.55	0.55	0.55	0.55	0.55
Rent	1.80	1.98	2.18	2.40	2.64
Selling & Administrative Exp.	0.45	1.06	1.22	1.38	1.56
TOTAL	6.92	7.93	8.37	8.91	9.37
NET PROFIT	5.89	8.08	10.83	13.68	16.84
Taxation	0.21	0.46	0.92	1.55	2.43
PROFIT (After Tax)	5.68	7.62	9.91	12.14	14.41
Net Profit Ratio	6.37%	7.18%	8.15%	8.77%	9.21%

PROJECTED BALANCE SHEET

(in Lacs)

PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
<u>Liabilities</u>					
Capital					
Opening balance		4.91	7.53	10.44	13.58
Add: - Own Capital	2.23				
Add: - Retained Profit	5.68	7.62	9.91	12.14	14.41
Less: - Drawings	3.00	5.00	7.00	9.00	11.00
Closing Balance	4.91	7.53	10.44	13.58	16.99
Term Loan	13.40	10.05	6.70	3.35	-
Working Capital Limit	5.00	5.00	5.00	5.00	5.00
Sundry Creditors	2.30	2.66	3.05	3.47	3.92
Provisions & Other Liability	0.40	0.48	0.58	0.69	0.83
TOTAL:	26.01	25.72	25.77	26.09	26.74
<u>Assets</u>					
Fixed Assets (Gross)					
Gross Dep.	2.50	4.63	6.43	7.97	9.28
Net Fixed Assets	14.25	12.12	10.32	8.78	7.47
Current Assets					
Sundry Debtors	4.45	5.31	6.08	6.92	7.82
Stock in Hand	3.78	4.35	4.95	5.61	6.32
Cash and Bank	3.03	3.34	3.42	3.54	3.63
Loans & Advances	0.50	0.60	1.00	1.25	1.50
TOTAL:	26.01	25.72	25.77	26.09	26.74

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PROJECTED CASH FLOW STATEMENT

(in Lacs)

PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
<u>SOURCES OF FUND</u>					
Own Margin	2.23				
Net Profit	5.89	8.08	10.83	13.68	16.84
Depreciation & Exp. W/off	2.50	2.13	1.81	1.54	1.31
Increase in Cash Credit	5.00	-	-	-	-
Increase In Term Loan	15.08	-	-	-	-
Increase in Creditors	2.30	0.36	0.39	0.42	0.45
Increase in Provisions & Oth liabilities	0.40	0.08	0.10	0.12	0.14
	-				
TOTAL:	33.40	10.65	13.12	15.75	18.74
<u>APPLICATION OF FUND</u>					
Increase in Fixed Assets	16.75				
Increase in Stock	3.78	0.56	0.60	0.66	0.71
Increase in Debtors	4.45	0.85	0.77	0.84	0.91
Repayment of Term Loan	1.68	3.35	3.35	3.35	3.35
Loans & Advances	0.50	0.10	0.40	0.25	0.25
Drawings	3.00	5.00	7.00	9.00	11.00
Taxation	0.21	0.46	0.92	1.55	2.43
TOTAL:	30.38	10.33	13.04	15.64	18.64
Opening Cash & Bank Balance	-	3.03	3.34	3.42	3.54
Add : Surplus	3.03	0.32	0.08	0.11	0.09
Closing Cash & Bank Balance	3.03	3.34	3.42	3.54	3.63

CALCULATION OF D.S.C.R.

PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
CASH ACCRUALS	8.18	9.75	11.72	13.67	15.72
Interest on Term Loan	1.48	1.31	0.94	0.57	0.20
Total	9.66	11.05	12.66	14.24	15.92
<u>REPAYMENT</u>					
Instalment of Term Loan	1.68	3.35	3.35	3.35	3.35
Interest on Term Loan	1.48	1.31	0.94	0.57	0.20
Total	3.16	4.66	4.29	3.92	3.55
DEBT SERVICE COVERAGE RATIO	3.06	2.37	2.95	3.63	4.48
AVERAGE D.S.C.R.					3.25

REPAYMENT SCHEDULE OF TERM LOAN

Interest 11.00%

Year	Particulars	Amount	Addition	Total	Interest	Repayment	Closing Balance
1st	Opening Balance						
	1st month	-	15.08	15.08	-	-	15.08
	2nd month	15.08	-	15.08	0.14	-	15.08
	3rd month	15.08	-	15.08	0.14	-	15.08
	4th month	15.08	-	15.08	0.14		15.08
	5th month	15.08	-	15.08	0.14		15.08
	6th month	15.08	-	15.08	0.14		15.08
	7th month	15.08	-	15.08	0.14	0.28	14.80
	8th month	14.80	-	14.80	0.14	0.28	14.52
	9th month	14.52	-	14.52	0.13	0.28	14.24
	10th month	14.24	-	14.24	0.13	0.28	13.96
	11th month	13.96	-	13.96	0.13	0.28	13.68
	12th month	13.68	-	13.68	0.13	0.28	13.40
					1.48	1.68	
2nd	Opening Balance						
	1st month	13.40	-	13.40	0.12	0.28	13.12
	2nd month	13.12	-	13.12	0.12	0.28	12.84
	3rd month	12.84	-	12.84	0.12	0.28	12.56
	4th month	12.56	-	12.56	0.12	0.28	12.28
	5th month	12.28	-	12.28	0.11	0.28	12.00
	6th month	12.00	-	12.00	0.11	0.28	11.73
	7th month	11.73	-	11.73	0.11	0.28	11.45
	8th month	11.45	-	11.45	0.10	0.28	11.17
	9th month	11.17	-	11.17	0.10	0.28	10.89
	10th month	10.89	-	10.89	0.10	0.28	10.61
	11th month	10.61	-	10.61	0.10	0.28	10.33
	12th month	10.33	-	10.33	0.09	0.28	10.05
					1.31	3.35	
3rd	Opening Balance						
	1st month	10.05	-	10.05	0.09	0.28	9.77
	2nd month	9.77	-	9.77	0.09	0.28	9.49
	3rd month	9.49	-	9.49	0.09	0.28	9.21
	4th month	9.21	-	9.21	0.08	0.28	8.93
	5th month	8.93	-	8.93	0.08	0.28	8.65
	6th month	8.65	-	8.65	0.08	0.28	8.38
	7th month	8.38	-	8.38	0.08	0.28	8.10
	8th month	8.10	-	8.10	0.07	0.28	7.82
	9th month	7.82	-	7.82	0.07	0.28	7.54
	10th month	7.54	-	7.54	0.07	0.28	7.26
	11th month	7.26	-	7.26	0.07	0.28	6.98

	12th month	6.98	-	6.98	0.06	0.28	6.70
					0.94	3.35	
4th	Opening Balance						
	1st month	6.70	-	6.70	0.06	0.28	6.42
	2nd month	6.42	-	6.42	0.06	0.28	6.14
	3rd month	6.14	-	6.14	0.06	0.28	5.86
	4th month	5.86	-	5.86	0.05	0.28	5.58
	5th month	5.58	-	5.58	0.05	0.28	5.30
	6th month	5.30	-	5.30	0.05	0.28	5.03
	7th month	5.03	-	5.03	0.05	0.28	4.75
	8th month	4.75	-	4.75	0.04	0.28	4.47
	9th month	4.47	-	4.47	0.04	0.28	4.19
	10th month	4.19	-	4.19	0.04	0.28	3.91
	11th month	3.91	-	3.91	0.04	0.28	3.63
	12th month	3.63	-	3.63	0.03	0.28	3.35
					0.57	3.35	
5th	Opening Balance						
	1st month	3.35	-	3.35	0.03	0.28	3.07
	2nd month	3.07	-	3.07	0.03	0.28	2.79
	3rd month	2.79	-	2.79	0.03	0.28	2.51
	4th month	2.51	-	2.51	0.02	0.28	2.23
	5th month	2.23	-	2.23	0.02	0.28	1.95
	6th month	1.95	-	1.95	0.02	0.28	1.68
	7th month	1.68	-	1.68	0.02	0.28	1.40
	8th month	1.40	-	1.40	0.01	0.28	1.12
	9th month	1.12	-	1.12	0.01	0.28	0.84
	10th month	0.84	-	0.84	0.01	0.28	0.56
	11th month	0.56	-	0.56	0.01	0.28	0.28
	12th month	0.28	-	0.28	0.00	0.28	-
					0.20	3.35	
	DOOR TO DOOR	60		MONTHS			
	MORATORIUM PERIOD	6		MONTHS			
	REPAYMENT PERIOD	54		MONTHS			

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