

PROJECT REPORT

Of

NUTMEG

PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding Nutmeg Processing 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.]



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PROJECT AT A GLANCE

- 1 Name of the Entrepreneur : xxxxxxxxxxxx
- 2 Constitution (legal Status) : xxxxxxxxxxxx
- 3 Father / Spouse Name : xxxxxxxxxxxxxx
- 4 Unit Address : xxxxxxxxxxxxxxxxxxxxxxxxx
- District : xxxxxxxx
- Pin: xxxxxxxx State: xxxxx
- Mobile xxxxxxxx
- 5 Product and By Product : **NUTMEG**
- 6 Name of the project / business activity proposed : **NUTMEG PROCESSING UNIT**
- 7 Cost of Project : Rs.22.65 Lakhs
- 8 Means of Finance
- Term Loan Rs.12.42 Lakhs
- Own Capital Rs.2.27 Lakhs
- Working Capital Rs.7.97 Lakhs
- 9 Debt Service Coverage Ratio : 3.30
- 10 Pay Back Period : 5 Years
- 11 Project Implementation Period : 5-6 Months
- 12 Break Even Point : 27%
- 13 Employment : 17 Persons
- 14 Power Requirement : 22.00 HP
- 15 Major Raw materials : Ripe or mature Nutmeg Fruit
- 16 Estimated Annual Sales Turnover (Max Capacity) : 205.97 Lakhs
- 17 Detailed Cost of Project & Means of Finance

COST OF PROJECT

(Rs. In Lakhs)

Particulars	Amount
Land	Own/Rented
Plant & Machinery	13.00
Furniture & Fixtures	0.80
Working Capital	8.85
Total	22.65

MEANS OF FINANCE

Particulars	Amount
Own Contribution	2.27
Working Capital(Finance)	7.97
Term Loan	12.42
Total	22.65

NUTMEG PROCESSING UNIT

Introduction:

Myristica fragrans Houtt., also known in India as Jaiphal and Javitri, is a member of the Myristicaceae family. Nutmeg and mace are two spices that it makes. Mace is the fleshy red, net-like skin covering (aril) on the kernel, and nutmeg is the seed kernel inside the fruit. Nutmeg and mace are two distinct spices made from the fruit of an evergreen tree and It is a spreading aromatic evergreen tree that grows to a height of 5 to 13 meters, with a maximum height of 20 meters. The dried reticulated 'aril' of the fruit is mace, and the dried seed kernel is nutmeg. Fruit is a fleshy drupe with a longitudinal groove in the middle, spherical in shape and light yellow in color. When the fruit ripens, it bursts open along the groove, exposing the brightly colored mace hidden underneath the nutmeg seed's hard, black, gleaming shell. On 1 cm long leaf stems, the pointed dark green leaves are borne alternately along the branches. The tops of the leaves have a gleaming sheen to them. Male and female flowers are rarely found on the same tree, and flowers are usually sexed separately. Male flowers appear in clusters of one to three, while female flowers appear in clusters of one to ten. Flowers are waxy, fleshy, and bell-shaped, and are pale yellow. Fruits with a longitudinal ridge are fleshy, drooping, yellow, smooth, and 6 to 9 cm long. The succulent yellow fruit coat splits into two valves when fully mature, exposing a purplish-brown, shiny seed (nutmeg) surrounded by a red aril (mace). Nutmeg seeds are broadly ovoid (2 to 3 cm long), hard, fleshy, whitish, and have red-brown veins running through them. The aril (mace) is bright scarlet when young, but when dry, it becomes horny, brittle, and a yellowish-brown color. The trees do not bloom until they are about 9 years old, but once they do, they continue to flower for another 75 years. The

trees produce two to three crops per year. The seeds (nutmegs) must dry for 3 to 6 weeks before they can be used.



Uses & Market Potential:

Nutmeg is a spice that is commonly used in Asian cuisine and is gaining popularity in other parts of the world. Nutmeg is one of the most common spices in Europe. The growing popularity of ethnic cuisines such as Indian and Thai has boosted demand for spices like nutmeg among food producers. Nutmeg is used in the garam masala used to make seasonal curry dishes by the huge Asian population, which includes India and Indonesia, who live in various parts of the world. The Indonesian group in the Netherlands, for example, is a relatively large consumer of Nutmeg in the European Union. In 2017, the Netherlands was a big nutmeg importer, accounting for nearly a quarter of all European nutmeg imports. Because of the Western community's interest in Asian cuisines, the demand for nutmeg spice is expected to grow during the forecast period. Nutmeg spice is mostly consumed in Asian and Middle Eastern countries. The

wide variety of regional dishes that use it as the main spice ingredient, as well as the long-standing, practice of using it in medicine, explain the spice's popularity. Nutmeg's main producers and export markets are Guatemala, India, and Indonesia. The nutmeg market in the area has been boosted by the development of the oleoresins industry. Spices such as nutmeg contain oleoresins, which are interesting ingredients to use in ethnic dishes for food producers. Nutmeg oleoresin is extracted in countries such as India and Sri Lanka, allowing for regional export. In both European and American communities, the demand for these extractions is high. Because of increased demand from the international community, the nutmeg market is expected to grow during the forecast period. During the forecast period, the global nutmeg market is expected to expand at a CAGR of 3.6 percent (2020-2025).

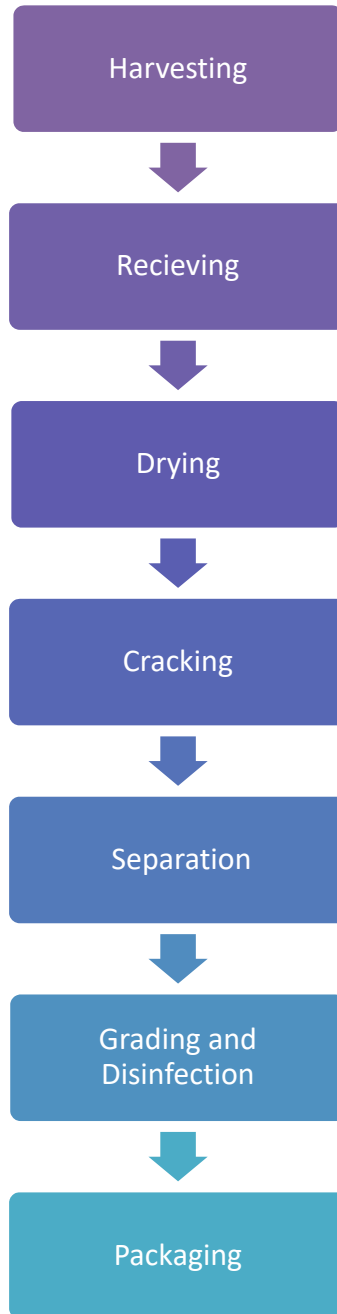
Product:

Nutmeg

Raw Material:

Ripe or mature fruit splits fruit of nutmeg which are required the husk is easily removed from the seed, while the thin and fragile mace is carefully removed. Farmers market their seeds as is or dried, with moisture content of 30-35 percent (wet basis) when harvested. Packaging material required for appropriate packaging.

Manufacturing Process:



Area:

The industrial setup requires space for Inventory, workshop or manufacturing area, space for power supply utilities and polishing area. Also, some of the area of building is required for office staff facilities, office furniture, etc. Thus, the approximate total area required for complete industrial setup is 1500-2000Sqft.

Cost of Machines:

Machine	Unit	Rate	Price
Hot Air Dryer	1	125000	125000
Nut Cracking Machine	1	180000	180000
Vibro Separator	1	150000	150000
Grader Machine	1	165000	165000
Metal Detector	1	150000	150000
Filling & Packaging Machine	1	380000	380000
Material handling and other equipment's	-	150000	150000
Total Amount			1300000

Power Requirement- The estimated Power requirement is taken at 22 HP

Manpower Requirement— Following manpower is required:

- Machine operator-5
- Skilled/unskilled worker-4
- Helper-6
- Manager cum Accountant-1
- Sales Personnel-1

FINANCIALS

PROJECTED BALANCE SHEET

PARTICULARS	I	II	III	IV	V
<u>SOURCES OF FUND</u>					
<u>Capital Account</u>					
Opening Balance	-	3.19	5.43	8.84	13.10
Add: Additions	2.27	-	-	-	-
Add: Net Profit	4.93	6.73	8.41	10.26	12.16
Less: Drawings	4.00	4.50	5.00	6.00	8.00
Closing Balance	3.19	5.43	8.84	13.10	17.25
CC Limit	7.97	7.97	7.97	7.97	7.97
Term Loan	11.04	8.28	5.52	2.76	-
Sundry Creditors	3.38	4.02	4.68	5.37	6.08
TOTAL :	25.57	25.69	27.01	29.19	31.29
<u>APPLICATION OF FUND</u>					
Fixed Assets (Gross)	13.80	13.80	13.80	13.80	13.80
Gross Dep.	2.03	3.76	5.23	6.49	7.56
Net Fixed Assets	11.77	10.04	8.57	7.31	6.24
Current Assets					
Sundry Debtors	5.24	6.58	7.75	8.99	10.30
Stock in Hand	6.99	8.32	9.72	11.17	12.68
Cash and Bank	1.58	0.75	0.97	1.71	2.07
TOTAL :	25.57	25.69	27.01	29.19	31.29

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PROJECTED PROFITABILITY STATEMENT

PARTICULARS	I	II	III	IV	V
<u>A) SALES</u>					
Gross Sale	104.74	131.62	155.03	179.90	205.97
Total (A)	104.74	131.62	155.03	179.90	205.97
<u>B) COST OF SALES</u>					
Raw Material Consumed	67.50	80.33	93.60	107.33	121.50
Electricity Expenses	1.48	1.72	1.97	2.22	2.46
Repair & Maintenance	2.62	3.29	3.88	4.50	5.15
Labour & Wages	21.17	25.82	30.99	36.57	42.42
Depreciation	2.03	1.73	1.47	1.26	1.07
Cost of Production	94.79	112.89	131.91	151.86	172.60
Add: Opening Stock /WIP	-	4.74	5.64	6.60	7.59
Less: Closing Stock /WIP	4.74	5.64	6.60	7.59	8.63
Cost of Sales (B)	90.05	111.99	130.96	150.86	171.56
C) GROSS PROFIT (A-B)	14.68	19.63	24.07	29.03	34.40
	14.02%	14.91%	15.52%	16.14%	16.70%
D) Bank Interest i) (Term Loan)	1.35	1.10	0.80	0.49	0.19
ii) Interest On Working Capital	0.88	0.88	0.88	0.88	0.88
E) Salary to Staff	5.29	6.35	7.49	8.39	9.23
F) Selling & Adm Expenses Exp.	2.09	3.95	5.43	7.20	9.27
G) TOTAL (D+E+F)	9.61	12.28	14.59	16.96	19.57
H) NET PROFIT	5.07	7.35	9.47	12.07	14.84
	4.8%	5.6%	6.1%	6.7%	7.2%
I) Taxation	0.15	0.62	1.06	1.82	2.68
J) PROFIT (After Tax)	4.93	6.73	8.41	10.26	12.16

PROJECTED CASH FLOW STATEMENT

PARTICULARS	I	II	III	IV	V
<u>SOURCES OF FUND</u>					
Own Contribution	2.27	-	-	-	-
Reserve & Surplus	5.07	7.35	9.47	12.07	14.84
Depreciation & Exp. W/off	2.03	1.73	1.47	1.26	1.07
Increase In Cash Credit	7.97	-	-	-	-
Increase In Term Loan	12.42	-	-	-	-
Increase in Creditors	3.38	0.64	0.66	0.69	0.71
TOTAL :	33.13	9.72	11.61	14.01	16.61
<u>APPLICATION OF FUND</u>					
Increase in Fixed Assets	13.80	-	-	-	-
Increase in Stock	6.99	1.33	1.39	1.46	1.51
Increase in Debtors	5.24	1.34	1.17	1.24	1.30
Repayment of Term Loan	1.38	2.76	2.76	2.76	2.76
Taxation	0.15	0.62	1.06	1.82	2.68
Drawings	4.00	4.50	5.00	6.00	8.00
TOTAL :	31.55	10.56	11.38	13.28	16.25
Opening Cash & Bank Balance	-	1.58	0.75	0.97	1.71
Add : Surplus	1.58	0.83	0.23	0.74	0.36
Closing Cash & Bank Balance	1.58	0.75	0.97	1.71	2.07

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL

PARTICULARS	I	II	III	IV	V
Finished Goods					
(15 Days requirement)	4.74	5.64	6.60	7.59	8.63
Raw Material					
(10 Days requirement)	2.25	2.68	3.12	3.58	4.05
Closing Stock	6.99	8.32	9.72	11.17	12.68

COMPUTATION OF WORKING CAPITAL REQUIREMENT

Particulars	Amount	Margin(10%)	Net Amount
Stock in Hand	6.99		
Less:			
Sundry Creditors	3.38		
Paid Stock	3.61	0.36	3.25
Sundry Debtors	5.24	0.52	4.71
Working Capital Requirement			7.97
Margin			0.89
MPBF			7.97
Working Capital Demand			7.97

REPAYMENT SCHEDULE OF TERM LOAN

11.0%

Year	Particulars	Amount	Addition	Total	Interest	Repayment	CI Balance
I	Opening Balance						
	Ist Quarter	-	12.42	12.42	0.34	-	12.42
	Iind Quarter	12.42	-	12.42	0.34	-	12.42
	IIIrd Quarter	12.42	-	12.42	0.34	0.69	11.73
	Ivth Quarter	11.73	-	11.73	0.32	0.69	11.04
					1.35	1.38	
II	Opening Balance						
	Ist Quarter	11.04	-	11.04	0.30	0.69	10.35
	Iind Quarter	10.35	-	10.35	0.28	0.69	9.66
	IIIrd Quarter	9.66	-	9.66	0.27	0.69	8.97
	Ivth Quarter	8.97		8.97	0.25	0.69	8.28
					1.10	2.76	
III	Opening Balance						
	Ist Quarter	8.28	-	8.28	0.23	0.69	7.59
	Iind Quarter	7.59	-	7.59	0.21	0.69	6.90
	IIIrd Quarter	6.90	-	6.90	0.19	0.69	6.21
	Ivth Quarter	6.21		6.21	0.17	0.69	5.52
					0.80	2.76	
IV	Opening Balance						
	Ist Quarter	5.52	-	5.52	0.15	0.69	4.83
	Iind Quarter	4.83	-	4.83	0.13	0.69	4.14
	IIIrd Quarter	4.14	-	4.14	0.11	0.69	3.45
	Ivth Quarter	3.45		3.45	0.09	0.69	2.76
					0.49	2.76	
V	Opening Balance						
	Ist Quarter	2.76	-	2.76	0.08	0.69	2.07
	Iind Quarter	2.07	-	2.07	0.06	0.69	1.38
	IIIrd Quarter	1.38	-	1.38	0.04	0.69	0.69
	Ivth Quarter	0.69		0.69	0.02	0.69	0.00
					0.19	2.76	

Door to Door Period 60 Months
Moratorium Period 6 Months
Repayment Period 54 Months

CALCULATION OF D.S.C.R

PARTICULARS	I	II	III	IV	V
<u>CASH ACCRUALS</u>	6.96	8.46	9.89	11.51	13.23
Interest on Term Loan	1.35	1.10	0.80	0.49	0.19
Total	8.31	9.56	10.68	12.01	13.42
<u>REPAYMENT</u>					
Repayment of Term Loan	1.38	2.76	2.76	2.76	2.76
Interest on Term Loan	1.35	1.10	0.80	0.49	0.19
Total	2.73	3.86	3.56	3.25	2.95
DEBT SERVICE COVERAGE RATIO	3.05	2.48	3.00	3.69	4.55
AVERAGE D.S.C.R.			3.30		

Assumptions:

1. Production Capacity of Nutmeg Processing unit is taken at 250 KG per day. First year, Capacity has been taken @ 30%.
2. Working shift of 10 hours per day has been considered.
3. Raw Material stock and Finished goods closing stock has been taken for 10 days and 15 days respectively.
4. Credit period to Sundry Debtors has been given for 15 days.
5. Credit period by the Sundry Creditors has been provided for 15 days.
6. Depreciation and Income tax has been taken as per the Income tax Act,1961.
7. Interest on working Capital Loan and Term loan has been taken at 11%.
8. Salary and wages rates are taken as per the Current Market Scenario.
9. Power Consumption has been taken at 22 HP.
10. Selling Prices & Raw material costing has been increased by 3% & 2% respectively in the subsequent years.

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