

PROJECT REPORT

Of

SPICE GRINDING UNIT

PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding **Spice Grinding 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 : xxxxxxxxxx
- 2 Constitution (legal Status) : xxxxxxxxxx
- 3 Father / Spouse Name : xxxxxxxxxxxxxx
- 4 Unit Address : xxxxxxxxxxxxxxxxxxxxxxxxx
- District : xxxxxxxx
Pin: xxxxxxxx State: xxxxxxxxxx
Mobile xxxxxxxx
- 5 Product and By Product : **Spices (Turmeric,Chilli, Coriander etc)**
- 6 Name of the project / business activity proposed : **Spice Grinding Unit**
- 7 Cost of Project : Rs.15.55 Lakhs
- 8 Means of Finance
Term Loan Rs.10 Lakhs
Own Capital Rs.1.56 Lakhs
- 9 Debt Service Coverage Ratio : 2.57
- 10 Pay Back Period : 5 Years
- 11 Project Implementation Period : 5-6 Months
- 12 Break Even Point : 41%
- 13 Employment : 10 Persons
- 14 Power Requirement : 10 HP
- 15 Major Raw materials : Spices (Turmeric,Chilli, Coriander etc)
- 16 Estimated Annual Sales Turnover (Max Utilized Capacity) : 71.23 Lakhs
- 17 Detailed Cost of Project & Means of Finance

COST OF PROJECT

(Rs. In Lakhs)

Particulars	Amount
Land	Own/Rented
Building /Shed 1000 Sq ft	Own/Rented
Plant & Machinery	9.86
Furniture & Fixtures	1.25
Working Capital	4.44
Total	15.55

MEANS OF FINANCE

Particulars	Amount
Own Contribution	1.56
Term Loan	10.00
Working Capital	4.00
Total	15.55

SPICE GRINDING UNIT

Introduction

A spice is a seed, fruit, root, bark, or other plant substance primarily used for flavouring, colouring or preserving food. Spices are distinguished from herbs, which are the leaves, flowers, or stems of plants used for flavouring or as a garnish.

Spices are very important and essential for adding and enhancing flavour, taste and scent in preparation of food. They are also useful in preparation of certain medicine. India is the largest producer, consumer and exporter of spices Andhra Pradesh, Gujarat, Orissa, Rajasthan are major states producing varieties of spices.

Products & Its Appliance

Spices are heavily used in Indian household for preparing food. They give aroma, taste and flavour to food. Curry powder, extensively used in Indian recipes, contains some time more than 20 different spices. Even in foreign countries, Indian spices are extensively used in preparation of food. Some of spices have medicinal properties and can be used in preparation of medicines and Ayurveda & cosmetic products.

Health Benefits of Spices

- Lowers Blood Sugar Levels and has a Powerful Anti-Diabetic Effect.
- Can Improve Brain Function and Memory.
- Relieves IBS Pain and May Reduce Nausea.
- Turmeric Contains Curcumin, a Substance with Powerful Anti-Inflammatory Effects.
- Helps Fight Infections and Boosts Immunity.
- Helps Reduce Appetite and May Have Anti-Cancer Properties.
- Ginger Can Treat Nausea and Has Anti-Inflammatory Properties.

- Improves Blood Sugar Control.
- Black pepper has the ability to increase the production of hydrochloric acid that the stomach needs to help in digestion.
- It has the ability to treat depression, prevents loss of vision, and improves memory.
- Black cardamom eases out digestive problems and reduces flatulence.

Ingredients

some of the important ingredients of spice grinding machines are-turmeric, masala, Red chilli, Dhania etc.

Description of Spice Grinding Machine

Two types of machineries are available for spice grinding:

1. **Double stage blower pulveriser with sieve:** It has double grinding stages which saves the power as it grind in single raw input.
2. **Impact pulveriser without sieve:** For finest product. It is made of stainless steel. The Quality of the spices through this machinery is very high. This machine is basically for those who want to Export spices in other countries & wants to produce high Quality product.

Spices Market Analysis & Potential:

India, known as the home of spices, boasts a long history of trading with the ancient civilisations of Rome and China. Today, Indian spices are the most sought-after globally, given their exquisite aroma, texture, taste and medicinal value. India has the largest domestic market for spices in the world. Traditionally, spices in India have been grown in small land holdings, with organic farming gaining prominence in recent times. India is the world's largest producer, consumer and exporter of spices; the country produces about 75 of the 109 varieties listed by the International Organization for Standardization (ISO) and accounts for half of the global trading in spices.

The Spices Board of India works towards the development and worldwide promotion of Indian spices. It provides quality control and certification, registers exporters, documents trade information and provides inputs to the central government on policy matters. The board participates in major international fairs and food exhibitions to promote Indian spices, apart from organizing various domestic events.

Total spices export from India stood at 1.13 billion kg, valued at US \$ 3.32 billion in the year 2018-19. In FY20 (till December 2019), 857,400 tonnes of spices worth US\$ 2.25 billion have been exported.

Source: Spices Board of India, APEDA

Spice Grinding Manufacturing Process

- Raw spices are first cleaned and dried.
- This dried material then is grinded in pulveriser.
- Powdered spices are then packed immediately in food grade packaging and then these packets are packed in cardboard boxes for further transportation.

Implementation Schedule

S.N.	Activity	Time Required (in Months)
1	Acquisition Of premises	1
2	Construction (if Applicable)	1- 2 Months
3	Procurement & installation of Plant & Machinery	1
4	Arrangement of Finance	1
5	Requirement of required Manpower	1
	Total time Required (some activities shall run concurrently)	2-3 Months

Conclusion:

After completion of manufacturing process, product is ready to sell in the market. This machine can be installed with low investment & one can earn a good Margin of profit by doing this business.

PROJECTED BALANCE SHEET

PARTICULARS	I	II	III	IV	V
<u>SOURCES OF FUND</u>					
<u>Capital Account</u>					
Opening Balance	-	2.10	2.85	4.53	7.33
Add: Additions	1.56	-	-	-	-
Add: Net Profit	1.54	2.75	4.68	6.80	8.85
Less: Drawings	1.00	2.00	3.00	4.00	6.00
Closing Balance	2.10	2.85	4.53	7.33	10.18
CC Limit	4.00	4.00	4.00	4.00	4.00
Term Loan	8.89	6.67	4.44	2.22	-
Sundry Creditors	0.30	0.35	0.40	0.45	0.51
TOTAL :	15.28	13.86	13.37	14.00	14.69
<u>APPLICATION OF FUND</u>					
Fixed Assets (Gross)	11.11	11.11	11.11	11.11	11.11
Gross Dep.	1.60	2.97	4.14	5.14	6.00
Net Fixed Assets	9.51	8.14	6.97	5.97	5.11
Current Assets					
Sundry Debtors	2.71	3.22	3.69	4.20	4.75
Stock in Hand	2.09	2.36	2.68	3.03	3.40
Cash and Bank	0.98	0.14	0.03	0.80	1.42
TOTAL :	15.28	13.86	13.37	14.00	14.69
	-	-	-	-	-

PROJECTED PROFITABILITY STATEMENT

PARTICULARS	I	II	III	IV	V
<u>A) SALES</u>					
Gross Sale	40.60	48.36	55.29	63.02	71.23
Total (A)	40.60	48.36	55.29	63.02	71.23
<u>B) COST OF SALES</u>					
Raw Mateiral Consumed	18.00	20.79	23.83	27.11	30.66
Electricity Expenses	1.12	1.23	1.34	1.46	1.57
Repair & Maintenance	0.20	0.24	0.28	0.32	0.36
Labour & Wages	5.87	6.46	7.11	7.82	8.60
Depreciation	1.60	1.37	1.17	1.00	0.85
Cost of Production	26.80	30.09	33.73	37.69	42.04
Add: Opening Stock /WIP	-	0.89	0.97	1.09	1.22
Less: Closing Stock /WIP	0.89	0.97	1.09	1.22	1.36
Cost of Sales (B)	25.91	30.01	33.61	37.57	41.90
C) GROSS PROFIT (A-B)	14.69	18.35	21.67	25.45	29.33
	36.19%	37.94%	39.20%	40.39%	41.18%
D) Bank Interest (Term Loan)	1.08	0.89	0.64	0.40	0.15
ii) Interest On Working Capital	0.44	0.44	0.44	0.44	0.44
E) Salary to Staff	8.58	9.44	10.38	11.42	12.56
F) Selling & Adm Expenses Exp.	3.05	4.84	5.53	6.30	7.12
TOTAL (D+E)	13.15	15.60	16.99	18.56	20.28
H) NET PROFIT	1.54	2.75	4.68	6.89	9.05
	3.8%	5.7%	8.5%	10.9%	12.7%
I) Taxation	-	-	-	0.09	0.20
J) PROFIT (After Tax)	1.54	2.75	4.68	6.80	8.85

PROJECTED CASH FLOW STATEMENT

PARTICULARS	I	II	III	IV	V
<u>SOURCES OF FUND</u>					
Own Contribution	1.56	-			
Net Profit	1.54	2.75	4.68	6.89	9.05
Depreciation & Exp. W/off	1.60	1.37	1.17	1.00	0.85
Increase In Cash Credit	4.00				
Increase In Term Loan	10.00	-	-	-	-
Increase in Creditors	0.30	0.05	0.05	0.05	0.06
TOTAL :	19.00	4.16	5.90	7.95	9.97
<u>APPLICATION OF FUND</u>					
Increase in Fixed Assets	11.11	-	-	-	-
Increase in Stock	2.09	0.27	0.32	0.35	0.38
Increase in Debtors	2.71	0.52	0.46	0.52	0.55
Repayment of Term Loan	1.11	2.22	2.22	2.22	2.22
Taxation	-	-	-	0.09	0.20
Drawings	1.00	2.00	3.00	4.00	6.00
TOTAL :	18.02	5.01	6.00	7.18	9.35
Opening Cash & Bank Balance	-	0.98	0.14	0.03	0.80
Add : Surplus	0.98	- 0.84	- 0.10	0.77	0.62
Closing Cash & Bank Balance	0.98	0.14	0.03	0.80	1.42

COMPUTATION OF MANUFACTURING OF SPICE GRINDING UNIT

Items to be Manufactured Spices (Turmeric,Chilli, Coriander etc)

Manufacturing Capacity per Hour		25.00	kg
No. of Working Hour		8	
No of Working Days per month		25	
No. of Working Day per annum		300	
Total Production per Annum		60,000	kg
Year		Capacity	Spices (Turmeric,Chilli, Coriander etc)
		Utilisation	
I		50%	30,000
II		55%	33,000
III		60%	36,000
IV		65%	39,000
V		70%	42,000

COMPUTATION OF RAW MATERIAL

Item Name	Quantity of Raw Material	Unit	Unit Rate of	Total CostPer Annum (100%)
Raw Material Consumed	60,000.00	kg	60.00	3,600,000.00
Total	60,000.00			3,600,000.00

Total Raw material in Rs lacs at 100% Capacity 36.00
 Cost per kg (In Rs) **60.00**

Raw Material Consumed	Capacity Utilisation	Rate	Amount (Rs.)
I	50%	60.00	18.00
II	55%	63.00	20.79
III	60%	66.20	23.83
IV	65%	69.50	27.11
V	70%	73.00	30.66

COMPUTATION OF SALE

Particulars	I	II	III	IV	V
Op Stock	-	1,000.00	1,100.00	1,200.00	1,300.00
Production	30,000.00	33,000.00	36,000.00	39,000.00	42,000.00
	30,000.00	34,000.00	37,100.00	40,200.00	43,300.00
Less : Closing Stock(10 Days)	1,000.00	1,100.00	1,200.00	1,300.00	1,400.00
Net Sale	29,000.00	32,900.00	35,900.00	38,900.00	41,900.00
Sale Price per kg	140.00	147.00	154.00	162.00	170.00
Sale (in Lacs)	40.60	48.36	55.29	63.02	71.23

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL

PARTICULARS	I	II	III	IV	V
Finished Goods					
(10 Days requirement)	0.89	0.97	1.09	1.22	1.36
Raw Material					
(20 Days requirement)	1.20	1.39	1.59	1.81	2.04
Closing Stock	2.09	2.36	2.68	3.03	3.40

COMPUTATION OF WORKING CAPITAL REQUIREMENT

Particulars	Amount	Margin(10%)	Net Amount
Stock in Hand	2.09		
Less:			
Sundry Creditors	0.30		
Paid Stock	1.79	0.18	1.61
Sundry Debtors	2.71	0.27	2.44
Working Capital Requirement			4.05
Margin			0.45
MPBF			4.05
Working Capital Demand			4.00

BREAK UP OF LABOUR

Particulars		Wages	No of	Total
		Per Month	Employees	Salary
Plant Operator		15,000.00	1	15,000.00
Unskilled Worker		8,500.00	2	17,000.00
Helper		5,000.00	1	5,000.00
Security Guard		7,500.00	1	7,500.00
				44,500.00
Add: 10% Fringe Benefit				4,450.00
Total Labour Cost Per Month				48,950.00
Total Labour Cost for the year (In Rs. Lakhs)			5	5.87

BREAK UP OF SALARY

Particulars		Salary	No of	Total
		Per Month	Employees	Salary
Accountant cum store keeper		15,000.00	1	15,000.00
Administrative Staffs		12,500.00	4	50,000.00
Total Salary Per Month				65,000.00
Add: 10% Fringe Benefit				6,500.00
Total Salary for the month				71,500.00
Total Salary for the year (In Rs. Lakhs)			5	8.58

COMPUTATION OF DEPRECIATION

Description	Land	Building/shed	Plant & Machinery	Furniture	TOTAL
Rate of Depreciation			15.00%	10.00%	
Opening Balance	Own/Rented		-	-	-
Addition	-		9.86	1.25	11.11
	-		9.86	1.25	11.11
TOTAL		-	9.86	1.25	11.11
Less : Depreciation	-	-	1.48	0.13	1.60
WDV at end of Ist year	-	-	8.38	1.13	9.51
Additions During The Year	-	-	-	-	-
	-	-	8.38	1.13	9.51
Less : Depreciation	-	-	1.26	0.11	1.37
WDV at end of IIInd Year	-	-	7.12	1.01	8.14
Additions During The Year	-	-	-	-	-
	-	-	7.12	1.01	8.14
Less : Depreciation	-	-	1.07	0.10	1.17
WDV at end of IIIrd year	-	-	6.06	0.91	6.97
Additions During The Year	-	-	-	-	-
	-	-	6.06	0.91	6.97
Less : Depreciation	-	-	0.91	0.09	1.00
WDV at end of IV year	-	-	5.15	0.82	5.97
Additions During The Year	-	-	-	-	-
	-	-	5.15	0.82	5.97
Less : Depreciation	-	-	0.77	0.08	0.85
WDV at end of Vth year	-	-	4.37	0.74	5.11

REPAYMENT SCHEDULE OF TERM LOAN

11.0%

Year	Particulars	Amount	Addition	Total	Interest	Repayment	CI Balance
I	Opening Balance						
	Ist Quarter	-	10.00	10.00	0.27	-	10.00
	IInd Quarter	10.00	-	10.00	0.27	-	10.00
	IIIRD Quarter	10.00	-	10.00	0.27	0.56	9.44
	Ivth Quarter	9.44	-	9.44	0.26	0.56	8.89
					1.08	1.11	
II	Opening Balance						
	Ist Quarter	8.89	-	8.89	0.24	0.56	8.33
	IInd Quarter	8.33	-	8.33	0.23	0.56	7.78
	IIIRD Quarter	7.78	-	7.78	0.21	0.56	7.22
	Ivth Quarter	7.22		7.22	0.20	0.56	6.67
					0.89	2.22	
III	Opening Balance						
	Ist Quarter	6.67	-	6.67	0.18	0.56	6.11
	IInd Quarter	6.11	-	6.11	0.17	0.56	5.56
	IIIRD Quarter	5.56	-	5.56	0.15	0.56	5.00
	Ivth Quarter	5.00		5.00	0.14	0.56	4.44
					0.64	2.22	
IV	Opening Balance						
	Ist Quarter	4.44	-	4.44	0.12	0.56	3.89
	IInd Quarter	3.89	-	3.89	0.11	0.56	3.33
	IIIRD Quarter	3.33	-	3.33	0.09	0.56	2.78
	Ivth Quarter	2.78		2.78	0.08	0.56	2.22
					0.40	2.22	
V	Opening Balance						
	Ist Quarter	2.22	-	2.22	0.06	0.56	1.67
	IInd Quarter	1.67	-	1.67	0.05	0.56	1.11
	IIIRD Quarter	1.11	-	1.11	0.03	0.56	0.56
	Ivth Quarter	0.56		0.56	0.02	0.56	0.00
					0.15	2.22	

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>	3.15	4.12	5.85	7.80	9.71
Interest on Term Loan	1.08	0.89	0.64	0.40	0.15
Total	4.23	5.00	6.49	8.20	9.86
<u>REPAYMENT</u>					
Repayment of Term Loan	1.11	2.22	2.22	2.22	2.22
Interest on Term Loan	1.08	0.89	0.64	0.40	0.15
Total	2.20	3.11	2.86	2.62	2.37
DEBT SERVICE COVERAGE RATIO	1.93	1.61	2.27	3.13	4.15
AVERAGE D.S.C.R.			2.57		

COMPUTATION OF ELECTRICITY

(A) POWER CONNECTION				
Total Working Hour per day	Hours		8	
Electric Load Required	HP		10	
Load Factor			0.7460	
Electricity Charges	per unit		7.50	
Total Working Days			300	
Electricity Charges				1.34
Add : Minimim Charges (@ 10%)				
(B) DG set				
No. of Working Days			300	days
No of Working Hours			0.5	Hour per day
Total no of Hour			150	
Diesel Consumption per Hour			8	
Total Consumption of Diesel			1,200	
Cost of Diesel			65.00	Rs. /Ltr
Total cost of Diesel			0.78	
Add : Lube Cost @15%			0.12	
Total			0.90	
Total cost of Power & Fuel at 100%				2.24
Year		Capacity		Amount (in Lacs)
I		50%		1.12
II		55%		1.23
III		60%		1.34
IV		65%		1.46
V		70%		1.57

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