



Model Detailed Project Report

CUMIN POWDER

Prepared by

National Institute of Food Technology

Entrepreneurship and Management(NIFTEM)

Plot No. 97, Sector 56, HSIIDC, Industrial Estate, Kundli,

Sonapat, Haryana 131028

Ministry of Food Processing Industries, Government of India

1. INTRODUCTION

CUMIN POWDER



Cumin is one of the earliest known minor spices used by mankind. Cumin Powder or ground cumin (also known as Jeera Powder) is made by powdering dry roasted cumin seeds in a grinder. This homemade powder might appear ordinary but it has the magical powers to completely change the taste of a drink or a dish. Known as *Cuminum Cyminum*, cumin is obtained from a flowering plant that is majorly grown in India, North Africa, and the Middle East. These cumin seeds are then dried and powdered just like chilli powder is made from dried red chillies and then used in various cuisines. Prepared from dry roasted cumin seeds, Cumin Powder, Ground Cumin or Jeera powder has all the quintessential components of cumin and a roasted flavor that makes any cuisine in which it is used more palatable. Cumin is rich in Vitamin E and hence it has anti-aging properties. Research shows that Homemade Cumin Powder just like cumin essential oil is very digestive, antiseptic, and diuretic. Not only is it good for your taste buds but it also helps you when you want to lose weight. Moreover, it also prevents diabetes, blood sugar cancer, treats insomnia, and is also good for the skin.

2. MARKET POTENTIAL:

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.

In India Cumin powder, cumin powder has very high market demand after garam masala and red chilli powder due to its various uses.

In FY20, spices worth US\$ 3.65 billion were exported. During FY19, a total of 1.10 million tonnes of spices and spice products valued US\$ 2.80 billion was exported from the country as against 1.02 million tonnes valued US\$ 2.78 billion in FY18, registering an increase of 7% in volume.

3. PRODUCT DESCRIPTION

3.1 Raw Material sources

Following raw material is required as the major raw material for the manufacturing of Cumin powder.

S.N.	Description
1	Cumin Seeds (Jeera)
2	Packaging material for pouch packaging
3	Cartoons

Average raw material price at wholesale rate of Cumin seeds is (cost per KG):
Rs. 150-180

3.2 MANUFACTURING PROCESS

- Procurement of raw material.
- Cleaning of impurities from Cumin seeds through cleaning process.
- Drying of moisture from Cumin seeds with the help of dryer.
- Grinding of Cumin & preparation of Cumin powder.
- Sieving of powder with the help of sieving machine
- Packaging of goods
- Transportation.

4. PROJECT COMPONENTS

4.1 Land

Land required 1000-1200 square feet approx.

Approximate rent for the same is Rs.20000-25000 per month.

4.2 Plant & Machinery

Recycling section

S.N.	Item Description	Image
1	Seed Cleaning machine	

2	Dryer	
3	Spice grinder	
4	Sieving machine	
5	Packaging machine	

Note: cost of the machinery is approx. Rs. 7,00,000 excluding GST and other transportation cost.

4.3 Misc. Assets

S.N.	Item Description	Rate
1	Electricity connection	50,000
2	Furniture and equipment's	50,000
3	Storage tank etc.	20,000

4.4 Power Requirement

The borrower shall require power load of 18-20 HP which shall be applied with Power Corporation. However, for standby power arrangement the borrower shall also purchase DG Set.

4.5 Manpower Requirement

6-7 Manpower are required for the Cumin powder Manufacturing unit.

Includes:

2 Skilled Labour

2 Unskilled Labour

1-2 Helper

1 Accountant

5. FINANCIALS

5.1 Cost of Project

COST OF PROJECT	
(in Lacs)	
PARTICULARS	Amount
Land & Building	Owned/rented
Plant & Machinery	7.00
miscellaneous Assets	1.20
Working capital	3.89
Total	12.09

5.2 Means of Finance

MEANS OF FINANCE	
PARTICULARS	AMOUNT
Own Contribution (min 10%)	1.21
Subsidy @35%(Max. Rs 10 Lac)	2.87
Term Loan @ 55%	4.51
Working Capital (bank Finance)	3.50
Total	12.09

5.3 Projected Balance Sheet

(in Lacs)					
PROJECTED BALANCE SHEET					
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
<u>Liabilities</u>					
Capital					
opening balance		4.90	5.07	5.76	6.73
<i>Add:- Own Capital</i>	1.21				
Add:- Retained Profit	0.82	2.17	3.69	5.48	7.08
Less:- Drawings	-	2.00	3.00	4.50	6.00
Subsidy/grant	2.87				
Closing Balance	4.90	5.07	5.76	6.73	7.82
Term Loan	4.01	3.01	2.00	1.00	-
Working Capital Limit	3.50	3.50	3.50	3.50	3.50
Sundry Creditors	1.20	1.56	1.79	2.04	2.31
Provisions & Other Liab	0.40	0.50	0.60	0.72	0.86
TOTAL :	14.01	13.64	13.66	13.99	14.49
<u>Assets</u>					
Fixed Assets (Gross)	8.20	8.20	8.20	8.20	8.20
Gross Dep.	1.17	2.17	3.03	3.76	4.39
Net Fixed Assets	7.03	6.03	5.17	4.44	3.81
Current Assets					
Sundry Debtors	1.84	2.19	2.51	2.86	3.24
Stock in Hand	3.55	4.09	4.67	5.29	5.97
Cash and Bank	1.60	1.33	1.30	1.40	1.46
TOTAL :	14.01	13.64	13.66	13.99	14.49

5.4 Projected Cash Flow

(in Lacs)					
PROJECTED CASH FLOW STATEMENT					
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
<u>SOURCES OF FUND</u>					
Own Margin	1.21				
Net Profit	0.82	2.17	3.69	5.53	7.32
Depriciation & Exp. W/off	1.17	1.00	0.86	0.73	0.63
Increase in Cash Credit	3.50	-	-	-	-
Increase In Term Loan	4.51	-	-	-	-
Increase in Creditors	1.20	0.36	0.23	0.24	0.27
Increase in Provisions & Oth lib	0.40	0.10	0.10	0.12	0.14
Sunsidy/grant	2.87				
TOTAL :	15.68	3.64	4.87	6.63	8.36
<u>APPLICATION OF FUND</u>					
Increase in Fixed Assets	8.20				
Increase in Stock	3.55	0.55	0.58	0.62	0.68
Increase in Debtors	1.84	0.36	0.32	0.35	0.38
Repayment of Term Loan	0.50	1.00	1.00	1.00	1.00
Drawings	-	2.00	3.00	4.50	6.00
Taxation	-	-	-	0.06	0.23
TOTAL :	14.08	3.90	4.90	6.53	8.29
Opening Cash & Bank Balance	-	1.60	1.33	1.30	1.40
Add : Surplus	1.60	(0.27)	(0.03)	0.10	0.06
Closing Cash & Bank Balance	1.60	1.33	1.30	1.40	1.46

5.5 Projected Profitability

(in Lacs)					
PROJECTED PROFITABILITY STATEMENT					
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
Capacity Utilisation %	50%	55%	60%	65%	70%
<u>SALES</u>					
Gross Sale					
CUMIN POWDER	68.88	82.20	94.13	107.17	121.41
Total	68.88	82.20	94.13	107.17	121.41
COST OF SALES					
Raw Material Consumed	45.00	52.14	59.76	67.86	76.86
Electricity Expenses	3.60	4.14	4.76	5.48	6.02
Depreciation	1.17	1.00	0.86	0.73	0.63
Wages & labour	5.40	5.94	6.53	7.19	7.91
Repair & maintenance	2.76	3.29	3.77	4.29	4.86
consumables	3.44	4.11	4.71	5.36	6.07
Cost of Production	61.37	70.62	80.38	90.90	102.34
Add: Opening Stock /WIP	-	2.05	2.35	2.68	3.03
Less: Closing Stock /WIP	2.05	2.35	2.68	3.03	3.41
Cost of Sales	59.32	70.31	80.06	90.55	101.96
GROSS PROFIT	9.55	11.89	14.07	16.62	19.44
Salary to Staff	2.70	2.97	3.27	3.59	3.95
Interest on Term Loan	0.44	0.39	0.28	0.17	0.06
Interest on working Capital	0.39	0.39	0.39	0.39	0.39

Rent	3.00	3.30	3.63	3.99	4.39
selling & adm exp	2.20	2.67	2.82	2.95	3.34
TOTAL	8.73	9.72	10.39	11.09	12.13
NET PROFIT	0.82	2.17	3.69	5.53	7.32
Taxation				0.06	0.23
PROFIT (After Tax)	0.82	2.17	3.69	5.48	7.08

5.6 Production and Yield

COMPUTATION OF PRODUCTION OF CUMIN POWDER

Items to be Manufactured

CUMIN POWDER

Machine capacity Per day	200	KG
Total working Hours	8	
working days in a month	25	Days
working days per annum	300	
machine capacity per annum	60000	KG

Final Product

wastage	5%	of Input
Final product per Day	190	KG
Final product per Annum	57,000	KG

Production of CUMIN POWDER		
Production	Capacity	KG
1st year	50%	28,500
2nd year	55%	31,350
3rd year	60%	34,200
4th year	65%	37,050
5th year	70%	39,900

Raw Material Cost			
Year	Capacity Utilisation	Rate (per KG)	Amount (Rs. in lacs)
1st year	50%	150.00	45.00
2nd year	55%	158.00	52.14
3rd year	60%	166.00	59.76
4th year	65%	174.00	67.86
5th year	70%	183.00	76.86

5.7 Sales Revenue

<u>COMPUTATION OF SALE</u>					
Particulars	1st year	2nd year	3rd year	4th year	5th year
Op Stock	-	950	1,045	1,140	1,235
Production	28,500	31,350	34,200	37,050	39,900
Less : Closing Stock	950	1,045	1,140	1,235	1,330
Net Sale	27,550	31,255	34,105	36,955	39,805
sale price per KG	250.00	263.00	276.00	290.00	305.00
Sales (in Lacs)	68.88	82.20	94.13	107.17	121.41

5.8 Working Capital Assessment

(in Lacs)					
COMPUTATION OF CLOSING STOCK & WORKING CAPITAL					
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
<u>Finished Goods</u>					
	2.05	2.35	2.68	3.03	3.41
<u>Raw Material</u>					
	1.50	1.74	1.99	2.26	2.56
Closing Stock	3.55	4.09	4.67	5.29	5.97

<u>COMPUTATION OF WORKING CAPITAL REQUIREMENT</u>					
TRADITIONAL METHOD					
(in Lacs)					
Particulars	Amount	Own Margin		Bank Finance	
Finished Goods & Raw Material	3.55				
Less : Creditors	1.20				
Paid stock	2.35	10%	0.23	90%	2.11
Sundry Debtors	1.84	10%	0.18	90%	1.65
	4.18		0.42		3.76
MPBF					3.76
WORKING CAPITAL LIMIT DEMAND (from Bank)					3.50
Working Capital Margin					0.39

5.9 Power, Salary & Wages Calculation

Utility Charges (per month)		
Particulars	value	Description
Power connection required	15	KWH
consumption per day	120	units
Consumption per month	3,000	units
Rate per Unit	10	Rs.
power Bill per month	30,000	Rs.

<u>BREAK UP OF LABOUR CHARGES</u>			
Particulars	Wages	No of	Total
	Rs. per Month	Employees	Salary
Skilled (in thousand rupees)	14,000	2	28,000
Unskilled (in thousand rupees)	8,500	2	17,000
Total salary per month			45,000
Total annual labour charges	(in lacs)		5.40

<u>BREAK UP OF Staff Salary CHARGES</u>			
Particulars	Salary	No of	Total
	Rs. per Month	Employees	Salary
helper	7,500	1	7,500
Accountant	15,000	1	15,000
Total salary per month			22,500
Total annual Staff charges	(in lacs)		2.70

5.10 Depreciation

COMPUTATION OF DEPRECIATION			(in Lacs)
Description	Plant & Machinery	Miss. Assets	TOTAL
Rate of Depreciation	15.00%	10.00%	
Opening Balance	-	-	-
Addition	7.00	1.20	8.20
Total	7.00	1.20	8.20
Less : Depreciation	1.05	0.12	1.17
WDV at end of Year	5.95	1.08	7.03
Additions During The Year	-	-	-
Total	5.95	1.08	7.03
Less : Depreciation	0.89	0.11	1.00
WDV at end of Year	5.06	0.97	6.03
Additions During The Year	-	-	-
Total	5.06	0.97	6.03
Less : Depreciation	0.76	0.10	0.86
WDV at end of Year	4.30	0.87	5.17
Additions During The Year	-	-	-
Total	4.30	0.87	5.17
Less : Depreciation	0.64	0.09	0.73
WDV at end of Year	3.65	0.79	4.44
Additions During The Year	-	-	-
Total	3.65	0.79	4.44
Less : Depreciation	0.55	0.08	0.63
WDV at end of Year	3.11	0.71	3.81

5.11 Repayment schedule

REPAYMENT SCHEDULE OF TERM LOAN								
							Interest	11.00%
Year	Particulars	Amount	Addition	Total	Interest	Repayment	Closing Balance	
1st	Opening Balance							
	1st month	-	4.51	4.51	-	-	4.51	
	2nd month	4.51	-	4.51	0.04	-	4.51	
	3rd month	4.51	-	4.51	0.04	-	4.51	
	4th month	4.51	-	4.51	0.04	-	4.51	
	5th month	4.51	-	4.51	0.04	-	4.51	
	6th month	4.51	-	4.51	0.04	-	4.51	
	7th month	4.51	-	4.51	0.04	0.08	4.43	
	8th month	4.43	-	4.43	0.04	0.08	4.34	
	9th month	4.34	-	4.34	0.04	0.08	4.26	
	10th month	4.26	-	4.26	0.04	0.08	4.18	
	11th month	4.18	-	4.18	0.04	0.08	4.09	
	12th month	4.09	-	4.09	0.04	0.08	4.01	
					0.44	0.50		
2nd	Opening Balance							
	1st month	4.01	-	4.01	0.04	0.08	3.93	
	2nd month	3.93	-	3.93	0.04	0.08	3.84	
	3rd month	3.84	-	3.84	0.04	0.08	3.76	
	4th month	3.76	-	3.76	0.03	0.08	3.67	
	5th month	3.67	-	3.67	0.03	0.08	3.59	
	6th month	3.59	-	3.59	0.03	0.08	3.51	
	7th month	3.51	-	3.51	0.03	0.08	3.42	
	8th month	3.42	-	3.42	0.03	0.08	3.34	
	9th month	3.34	-	3.34	0.03	0.08	3.26	
	10th month	3.26	-	3.26	0.03	0.08	3.17	
	11th month	3.17	-	3.17	0.03	0.08	3.09	
	12th month	3.09	-	3.09	0.03	0.08	3.01	
					0.39	1.00		
3rd	Opening Balance							
	1st month	3.01	-	3.01	0.03	0.08	2.92	
	2nd month	2.92	-	2.92	0.03	0.08	2.84	
	3rd month	2.84	-	2.84	0.03	0.08	2.76	
	4th month	2.76	-	2.76	0.03	0.08	2.67	
	5th month	2.67	-	2.67	0.02	0.08	2.59	
	6th month	2.59	-	2.59	0.02	0.08	2.51	
	7th month	2.51	-	2.51	0.02	0.08	2.42	

	8th month	2.42	-	2.42	0.02	0.08	2.34
	9th month	2.34	-	2.34	0.02	0.08	2.26
	10th month	2.26	-	2.26	0.02	0.08	2.17
	11th month	2.17	-	2.17	0.02	0.08	2.09
	12th month	2.09	-	2.09	0.02	0.08	2.00
					0.28	1.00	
4th	Opening Balance						
	1st month	2.00	-	2.00	0.02	0.08	1.92
	2nd month	1.92	-	1.92	0.02	0.08	1.84
	3rd month	1.84	-	1.84	0.02	0.08	1.75
	4th month	1.75	-	1.75	0.02	0.08	1.67
	5th month	1.67	-	1.67	0.02	0.08	1.59
	6th month	1.59	-	1.59	0.01	0.08	1.50
	7th month	1.50	-	1.50	0.01	0.08	1.42
	8th month	1.42	-	1.42	0.01	0.08	1.34
	9th month	1.34	-	1.34	0.01	0.08	1.25
	10th month	1.25	-	1.25	0.01	0.08	1.17
	11th month	1.17	-	1.17	0.01	0.08	1.09
	12th month	1.09	-	1.09	0.01	0.08	1.00
					0.17	1.00	
5th	Opening Balance						
	1st month	1.00	-	1.00	0.01	0.08	0.92
	2nd month	0.92	-	0.92	0.01	0.08	0.84
	3rd month	0.84	-	0.84	0.01	0.08	0.75
	4th month	0.75	-	0.75	0.01	0.08	0.67
	5th month	0.67	-	0.67	0.01	0.08	0.58
	6th month	0.58	-	0.58	0.01	0.08	0.50
	7th month	0.50	-	0.50	0.00	0.08	0.42
	8th month	0.42	-	0.42	0.00	0.08	0.33
	9th month	0.33	-	0.33	0.00	0.08	0.25
	10th month	0.25	-	0.25	0.00	0.08	0.17
	11th month	0.17	-	0.17	0.00	0.08	0.08
	12th month	0.08	-	0.08	0.00	0.08	-
					0.06	1.00	
	DOOR TO DOOR	60	MONTHS				
	MORATORIUM PERIOD	6	MONTHS				
	REPAYMENT PERIOD	54	MONTHS				

5.13 DSCR

<u>CALCULATION OF D.S.C.R</u>					
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
CASH ACCRUALS	1.99	3.17	4.54	6.21	7.71
Interest on Term Loan	0.44	0.39	0.28	0.17	0.06
Total	2.43	3.56	4.82	6.38	7.77
<u>REPAYMENT</u>					
Instalment of Term Loan	0.50	1.00	1.00	1.00	1.00
Interest on Term Loan	0.44	0.39	0.28	0.17	0.06
Total	0.94	1.39	1.28	1.17	1.06
DEBT SERVICE COVERAGE RATIO	2.58	2.56	3.76	5.44	7.32
AVERAGE D.S.C.R.	4.33				

5.14 Break Even Point Analysis

BREAK EVEN POINT ANALYSIS					
Year	I	II	III	IV	V
Net Sales & Other Income	68.88	82.20	94.13	107.17	121.41
Less : Op. WIP Goods	-	2.05	2.35	2.68	3.03
Add : Cl. WIP Goods	2.05	2.35	2.68	3.03	3.41

Total Sales	70.92	82.51	94.46	107.52	121.79
Variable & Semi Variable Exp.					
Raw Material Consumed	45.00	52.14	59.76	67.86	76.86
Electricity Exp/Coal Consumption at 85%	3.06	3.52	4.05	4.65	5.12
Wages & Salary at 60%	4.86	5.35	5.88	6.47	7.12
Selling & administrative Expenses 80%	1.76	2.14	2.26	2.36	2.67
Interest on working Capital	0.385	0.385	0.385	0.385	0.385
Repair & maintenance	2.76	3.29	3.77	4.29	4.86
Packaging	3.44	4.11	4.71	5.36	6.07
Total Variable & Semi Variable Exp	61.27	70.93	80.80	91.37	103.08
Contribution	9.65	11.58	13.65	16.15	18.71
Fixed & Semi Fixed Expenses					
Electricity Exp/Coal Consumption at 15%	0.54	0.62	0.71	0.82	0.90
Wages & Salary at 40%	3.24	3.56	3.92	4.31	4.74
Interest on Term Loan	0.44	0.39	0.28	0.17	0.06
Depreciation	1.17	1.00	0.86	0.73	0.63
Selling & administrative Expenses 20%	0.44	0.53	0.56	0.59	0.67
Rent	3.00	3.30	3.63	3.99	4.39
Total Fixed Expenses	8.83	9.41	9.97	10.62	11.39
Capacity Utilization	50%	55%	60%	65%	70%
OPERATING PROFIT	0.82	2.17	3.69	5.53	7.32
BREAK EVEN POINT	46%	45%	44%	43%	43%
BREAK EVEN SALES	64.90	67.03	68.95	70.69	74.17

6. LICENSE & APPROVALS

- Obtain the GST registration.
- Additionally, obtain the Udyog Aadhar registration Number.
- Fire/pollution license as required.
- FSSAI License
- Choice of a Brand Name of the product and secure the name with Trademark if required.

Implementation Schedule

S.N.	Activity	Time Required (in Months)
1	Acquisition Of premises	1-2
2	Procurement & installation of Plant & Machinery	1-2
3	Arrangement of Finance	1-2
4	Requirement of required Manpower	1
	Total time Required (some activities shall run concurrently)	5-6 Months

7. ASSUMPTIONS

1. Production Capacity of Cumin powder is 200 Kgs per day. First year, Capacity has been taken @ 50%.
2. Working shift of 8 hours per day has been considered.
3. Raw Material stock is for 10 days and Finished goods Closing Stock has been taken for 10 days.
4. Credit period to Sundry Debtors has been given for 9 days.
5. Credit period by the Sundry Creditors has been provided for 8 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 15 KW.
10. Selling Prices & Raw material costing has been increased by 5% & 5% respectively in the subsequent years.

Limitations of the Model DPR and Guidelines for Entrepreneurs

Limitations of the Model DPR

- i. This model DPR has provided only the basic standard components and methodology to be adopted by an entrepreneur while submitting a proposal under the Formalization of Micro Food Processing Enterprises Scheme of MoFPI.
- ii. This is a model DPR made to provide general methodological structure not for specific entrepreneur/crops/location. Therefore, information on the entrepreneur, forms and structure (proprietorship/partnership/cooperative/ FPC/joint stock company) of his business, details of proposed DPR, project location, raw material base/contract sourcing, entrepreneurs own SWOT analysis, detailed market research, rationale of the project for specific location, community advantage/benefit from the project, employment generation and many more detailed aspects not included.
- iii. The present DPR is based on certain assumptions on cost, prices, interest, capacity utilization, output recovery rate and so on. However, these assumptions in reality may vary across places, markets and situations; thus the resultant calculations will also change accordingly.