



Model Detailed Project Report

ROSE WATER

Prepared by

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1. INTRODUCTION

ROSE WATER



Rose water is a flavored water made by steeping rose petals in water. Additionally, it is the hydrosol portion of the distillate of rose petals, a by-product of the production of rose oil for use in perfume.

Rose water is prepared by steeping rose petals in water. Sometimes, a by-product of the process of extracting rose oil is also used in the place of rose water. There are a number of rose water benefits which make it a popular ingredient in cuisines and religious rituals. Rose water for skin and rose water for face are two of rose water's most well-known uses.

2. MARKET POTENTIAL:

The Global Rose Water Market is expected to grow from USD 319.13 Million in 2018 to USD 510.13 Million by the end of 2025 at a Compound Annual Growth Rate (CAGR) of 6.93%.

Rosewater helps maintain the skin's pH balance, and also controls excess oil. Rose water has anti-inflammatory properties that can help reduce the redness of irritated skin, get rid of acne, dermatitis and eczema. It is a great cleanser and aids in removing oil and dirt accumulated in clogged pores",

Rose water market can be segmented into Food and beverages, cosmetics and personal care, medicinal use, and others. Cosmetics & personal care and medicinal use is expected to have major share in terms of both value and volume during the forecast period. Use of rose water in cosmetics and perfumes has rapidly increased the demand of rose water market. Its medicinal uses bolstered the demand for the product. Rose water flavored drinks and edibles like sweets, ice creams, and bakery products are anticipated to grow the demand of rose water market of this segment in the forecast period.

3. PRODUCT DESCRIPTION

3.1 Raw Material sources

Following raw material is required as the major raw material for the manufacturing of rose water.

S.N.	Description	Amount
1	Rose Water	Rs. 200-250 Per KG
2	DM Water	Rs. 8 Per Liter

Average raw material (cost per Liter): Rs. 150-180.

3.2 MANUFACTURING PROCESS

- Procurement of raw material i.e. Rose petals.
- Cleaning of rose petals.
- Next step is distillation process, in this process with the help of distillation essential oil is extracted from rose petals and condensed with the help of water.
- In distillation process furnace or heater, heating vessels or heating tank, cooling tank or condenser is used. Usually separator is used in distillation process but in this project rose water is manufactured so, one storage tank is enough.
- Distillation process is executed in heating vessel by putting rose petals and water together and this process is repeated many times with same water and flowers for essential oil extraction.
- Filling of rose water in bottles and labelling on bottles.

4. PROJECT COMPONENTS

4.1 Land

Land required 1200-1500 square feet approx.

Approximate rent for the same is Rs.24,000 – 30,000 per month.

4.2 Plant & Machinery

S.N.	Item Description	Image
1	Electric Distillation Unit	 An electric distillation unit consisting of a large stainless steel boiler on a stand, connected to a condenser and a collection vessel. A control panel with a digital display and buttons is visible on the right side.
2	Automatic filling machine	 A stainless steel automatic filling machine with a control panel on top. It is shown filling several bottles of different shapes and sizes. The machine has a hopper at the top and a dispensing nozzle.
3	Automatic Labelling machine	 A stainless steel automatic labelling machine with a control panel on the front. It is shown labelling bottles. The machine has a hopper for labels and a dispensing mechanism.

Note: cost of the Automatic Rose Water machinery is approx. Rs. 15,00,000 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

4.4 Power Requirement

The borrower shall require power load of 10 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 Rose Water 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	15.00
miscellaneous Assets	1.00
Working capital	3.89
Total	19.89

5.2 Means of Finance

MEANS OF FINANCE	
PARTICULARS	AMOUNT
Own Contribution (min 10%)	1.99
Subsidy @35%(Max. Rs 10 Lac)	5.60
Term Loan @ 55%	8.80
Working Capital (bank Finance)	3.50
Total	19.89

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		8.04	8.97	10.55	11.71
Add:- Own Capital	1.99				
Add:- Retained Profit	1.95	4.43	6.58	8.16	10.17
Less:- Drawings	1.50	3.50	5.00	7.00	9.00
Subsidy/grant	5.60				
Closing Balance	8.04	8.97	10.55	11.71	12.88
Term Loan	7.82	5.87	3.91	1.96	-
Working Capital Limit	3.50	3.50	3.50	3.50	3.50
Sundry Creditors	0.30	0.35	0.40	0.45	0.51
Provisions & Other Liab	0.20	0.25	0.30	0.36	0.43
TOTAL :	19.86	18.93	18.66	17.98	17.32
<u>Assets</u>					
Fixed Assets (Gross)	16.00	16.00	16.00	16.00	16.00
Gross Dep.	2.35	4.35	6.06	7.51	8.75
Net Fixed Assets	13.65	11.65	9.94	8.49	7.25
Current Assets					
Sundry Debtors	2.00	2.43	2.80	3.19	3.60
Stock in Hand	2.35	2.68	3.03	3.42	3.84
Cash and Bank	1.87	2.17	2.89	2.88	2.64
TOTAL :	19.86	18.93	18.66	17.98	17.32

5.4 Projected Cash Flow

PROJECTED CASH FLOW STATEMENT					(in Lacs)
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
<u>SOURCES OF FUND</u>					
Own Margin	1.99				
Net Profit	1.95	4.43	6.77	8.66	11.00
Depreciation & Exp. W/off	2.35	2.00	1.71	1.45	1.24
Increase in Cash Credit	3.50	-	-	-	-
Increase In Term Loan	8.80	-	-	-	-
Increase in Creditors	0.30	0.05	0.05	0.06	0.06
Increase in Provisions & Oth lib	0.20	0.05	0.05	0.06	0.07
Sunsidy/grant	5.60				
TOTAL :	24.69	6.52	8.58	10.23	12.37
<u>APPLICATION OF FUND</u>					
Increase in Fixed Assets	16.00				
Increase in Stock	2.35	0.33	0.35	0.39	0.41
Increase in Debtors	2.00	0.44	0.37	0.39	0.41
Repayment of Term Loan	0.98	1.96	1.96	1.96	1.96
Drawings	1.50	3.50	5.00	7.00	9.00
Taxation	-	-	0.18	0.50	0.84
TOTAL :	22.82	6.22	7.86	10.24	12.62
Opening Cash & Bank Balance	-	1.87	2.17	2.89	2.88
Add : Surplus	1.87	0.31	0.72	(0.01)	(0.25)
Closing Cash & Bank Balance	1.87	2.17	2.89	2.88	2.64

5.5 Projected Profitability

(in Lacs)					
<u>PROJECTED PROFITABILITY STATEMENT</u>					
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
Capacity Utilisation %	50%	55%	60%	65%	70%
<u>SALES</u>					
Gross Sale					
ROSE WATER	49.88	60.77	69.91	79.64	89.98
Total	49.88	60.77	69.91	79.64	89.98
<u>COST OF SALES</u>					
Raw Material Consumed	18.00	20.79	23.76	27.11	30.66
Electricity Expenses	2.40	2.76	3.17	3.65	4.02
Depreciation	2.35	2.00	1.71	1.45	1.24
Wages & labour	5.04	5.54	6.10	6.71	7.38
Repair & maintenance	1.25	1.52	1.75	1.99	2.25
Packaging	12.00	14.03	16.20	18.53	21.00
Cost of Production	41.04	46.64	52.69	59.43	66.54
Add: Opening Stock /WIP	-	2.05	2.33	2.63	2.97
Less: Closing Stock /WIP	2.05	2.33	2.63	2.97	3.33
Cost of Sales	38.99	46.36	52.38	59.10	66.19
GROSS PROFIT	10.89	14.41	17.52	20.55	23.79
	21.83%	23.71%	25.07%	25.80%	26.44%
Salary to Staff	3.24	3.56	3.92	4.31	4.74

Interest on Term Loan	0.86	0.76	0.55	0.33	0.12
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	1.45	1.98	2.27	2.87	3.15
TOTAL	8.94	9.99	10.75	11.89	12.79
NET PROFIT	1.95	4.43	6.77	8.66	11.00
	3.92%	7.28%	9.68%	10.87%	12.23%
Taxation			0.18	0.50	0.84
PROFIT (After Tax)	1.95	4.43	6.58	8.16	10.17

5.6 Production and Yield

COMPUTATION OF PRODUCTION OF ROSE WATER

Items to be Manufactured

ROSE WATER

Machine capacity Per Day	100	Liter
Total working Hours	10	
working days in a month	25	Days
working days per annum	300	
machine capacity per annum	30000	Liter

Final Output

1 bottle size	100	ML
Rose water Bottles in a Day	1000	Bottles
Rose water Bottles Per Annum	300,000	Bottles

Production of ROSE WATER			
Production	Capacity	Bottles	
1st year	50%	150,000	
2nd year	55%	165,000	
3rd year	60%	180,000	
4th year	65%	195,000	
5th year	70%	210,000	

Raw Material Cost				
Year	Capacity	Rate	Amount	
	Utilization	(per Liter)	(Rs. in lacs)	
1st year	50%	120.00	18.00	
2nd year	55%	126.00	20.79	
3rd year	60%	132.00	23.76	
4th year	65%	139.00	27.11	
5th year	70%	146.00	30.66	

Bottle & Labelling cost				
Year	Bottles	Rate	Amount	
	(100 MI)	(per Bottle)	(Rs. in lacs)	
1st year	150,000	8.00	12.00	
2nd year	165,000	8.50	14.03	
3rd year	180,000	9.00	16.20	
4th year	195,000	9.50	18.53	
5th year	210,000	10.00	21.00	

5.7 Sales Revenue

<u>COMPUTATION OF SALE</u>					
Particulars	1st year	2nd year	3rd year	4th year	5th year
Op Stock	-	7,500	8,250	9,000	9,750
Production	150,000	165,000	180,000	195,000	210,000
Less : Closing Stock	7,500	8,250	9,000	9,750	10,500
Net Sale	142,500	164,250	179,250	194,250	209,250
sale price per 100 ML Bottles	35.00	37.00	39.00	41.00	43.00
Sales (in Lacs)	49.88	60.77	69.91	79.64	89.98

5.8 Working Capital Assessment

<u>COMPUTATION OF CLOSING STOCK & WORKING CAPITAL</u>					
(in Lacs)					
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
<u>Finished Goods</u>					
	2.05	2.33	2.63	2.97	3.33
<u>Raw Material</u>					
	0.30	0.35	0.40	0.45	0.51
Closing Stock	2.35	2.68	3.03	3.42	3.84

COMPUTATION OF WORKING CAPITAL REQUIREMENT					
TRADITIONAL METHOD					(in Lacs)
Particulars	Amount	Own Margin		Bank Finance	
Finished Goods & Raw Material	2.35				
Less : Creditors	0.30				
Paid stock	2.05	10%	0.21	90%	1.85
Sundry Debtors	2.00	10%	0.20	90%	1.80
	4.05		0.40		3.64
MPBF					3.64
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	8	KWH
consumption per day	80	units
Consumption per month	2,000	units
Rate per Unit	10	Rs.
power Bill per month	20,000	Rs.

BREAK UP OF LABOUR CHARGES

Particulars	Wages	No of	Total
	Rs. per Month	Employees	Salary
Skilled (in thousand rupees)	13,000	2	26,000
Unskilled (in thousand rupees)	8,000	2	16,000
Total salary per month			42,000
Total annual labour charges	(in lacs)		5.04

BREAK UP OF Staff Salary CHARGES

Particulars	Salary	No of	Total
	Rs. per Month	Employees	Salary
helper	6,000	2	12,000
Accountant	15,000	1	15,000
Total salary per month			27,000
Total annual Staff charges	(in lacs)		3.24

5.10 Depreciation

COMPUTATION OF DEPRECIATION			(in Lacs)
Description	Plant & Machinery	Miss. Assets	TOTAL
Rate of Depreciation	15.00%	10.00%	
Opening Balance	-	-	-
Addition	15.00	1.00	16.00
Total	15.00	1.00	16.00
Less : Depreciation	2.25	0.10	2.35
WDV at end of Year	12.75	0.90	13.65
Additions During The Year	-	-	-
Total	12.75	0.90	13.65
Less : Depreciation	1.91	0.09	2.00
WDV at end of Year	10.84	0.81	11.65
Additions During The Year	-	-	-
Total	10.84	0.81	11.65
Less : Depreciation	1.63	0.08	1.71
WDV at end of Year	9.21	0.73	9.94
Additions During The Year	-	-	-
Total	9.21	0.73	9.94
Less : Depreciation	1.38	0.07	1.45
WDV at end of Year	7.83	0.66	8.49
Additions During The Year	-	-	-
Total	7.83	0.66	8.49
Less : Depreciation	1.17	0.07	1.24
WDV at end of Year	6.66	0.59	7.25

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	-	8.80	8.80	-	-	8.80
	2nd month	8.80	-	8.80	0.08	-	8.80
	3rd month	8.80	-	8.80	0.08	-	8.80
	4th month	8.80	-	8.80	0.08		8.80
	5th month	8.80	-	8.80	0.08		8.80
	6th month	8.80	-	8.80	0.08		8.80
	7th month	8.80	-	8.80	0.08	0.16	8.64
	8th month	8.64	-	8.64	0.08	0.16	8.47
	9th month	8.47	-	8.47	0.08	0.16	8.31
	10th month	8.31	-	8.31	0.08	0.16	8.15
	11th month	8.15	-	8.15	0.07	0.16	7.99
	12th month	7.99	-	7.99	0.07	0.16	7.82
					0.86	0.98	
2nd	Opening Balance						
	1st month	7.82	-	7.82	0.07	0.16	7.66
	2nd month	7.66	-	7.66	0.07	0.16	7.50
	3rd month	7.50	-	7.50	0.07	0.16	7.33
	4th month	7.33	-	7.33	0.07	0.16	7.17
	5th month	7.17	-	7.17	0.07	0.16	7.01
	6th month	7.01	-	7.01	0.06	0.16	6.84
	7th month	6.84	-	6.84	0.06	0.16	6.68
	8th month	6.68	-	6.68	0.06	0.16	6.52
	9th month	6.52	-	6.52	0.06	0.16	6.36
	10th month	6.36	-	6.36	0.06	0.16	6.19
	11th month	6.19	-	6.19	0.06	0.16	6.03
	12th month	6.03	-	6.03	0.06	0.16	5.87
					0.76	1.96	
3rd	Opening Balance						
	1st month	5.87	-	5.87	0.05	0.16	5.70
	2nd month	5.70	-	5.70	0.05	0.16	5.54
	3rd month	5.54	-	5.54	0.05	0.16	5.38
	4th month	5.38	-	5.38	0.05	0.16	5.21
	5th month	5.21	-	5.21	0.05	0.16	5.05
	6th month	5.05	-	5.05	0.05	0.16	4.89
	7th month	4.89	-	4.89	0.04	0.16	4.73
	8th month	4.73	-	4.73	0.04	0.16	4.56
	9th month	4.56	-	4.56	0.04	0.16	4.40
	10th month	4.40	-	4.40	0.04	0.16	4.24

	11th month	4.24	-	4.24	0.04	0.16	4.07
	12th month	4.07	-	4.07	0.04	0.16	3.91
					0.55	1.96	
4th	Opening Balance						
	1st month	3.91	-	3.91	0.04	0.16	3.75
	2nd month	3.75	-	3.75	0.03	0.16	3.59
	3rd month	3.59	-	3.59	0.03	0.16	3.42
	4th month	3.42	-	3.42	0.03	0.16	3.26
	5th month	3.26	-	3.26	0.03	0.16	3.10
	6th month	3.10	-	3.10	0.03	0.16	2.93
	7th month	2.93	-	2.93	0.03	0.16	2.77
	8th month	2.77	-	2.77	0.03	0.16	2.61
	9th month	2.61	-	2.61	0.02	0.16	2.44
	10th month	2.44	-	2.44	0.02	0.16	2.28
	11th month	2.28	-	2.28	0.02	0.16	2.12
	12th month	2.12	-	2.12	0.02	0.16	1.96
					0.33	1.96	
5th	Opening Balance						
	1st month	1.96	-	1.96	0.02	0.16	1.79
	2nd month	1.79	-	1.79	0.02	0.16	1.63
	3rd month	1.63	-	1.63	0.01	0.16	1.47
	4th month	1.47	-	1.47	0.01	0.16	1.30
	5th month	1.30	-	1.30	0.01	0.16	1.14
	6th month	1.14	-	1.14	0.01	0.16	0.98
	7th month	0.98	-	0.98	0.01	0.16	0.81
	8th month	0.81	-	0.81	0.01	0.16	0.65
	9th month	0.65	-	0.65	0.01	0.16	0.49
	10th month	0.49	-	0.49	0.00	0.16	0.33
	11th month	0.33	-	0.33	0.00	0.16	0.16
	12th month	0.16	-	0.16	0.00	0.16	-
					0.12	1.96	
	DOOR TO DOOR	60	MONTHS				
	MORATORIUM PERIOD	6	MONTHS				
	REPAYMENT PERIOD	54	MONTHS				

5.12 DSCR

<u>CALCULATION OF D.S.C.R</u>					
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
CASH ACCRUALS	4.30	6.43	8.29	9.61	11.41
Interest on Term Loan	0.86	0.76	0.55	0.33	0.12
Total	5.17	7.19	8.84	9.94	11.52
<u>REPAYMENT</u>					
Instalment of Term Loan	0.98	1.96	1.96	1.96	1.96
Interest on Term Loan	0.86	0.76	0.55	0.33	0.12
Total	1.84	2.72	2.50	2.29	2.07
DEBT SERVICE COVERAGE RATIO	2.80	2.65	3.53	4.35	5.56
AVERAGE D.S.C.R.	3.78				

5.13 Break Even Point Analysis

BREAK EVEN POINT ANALYSIS					
Year	I	II	III	IV	V
Net Sales & Other Income	49.88	60.77	69.91	79.64	89.98
Less : Op. WIP Goods	-	2.05	2.33	2.63	2.97
Add : Cl. WIP Goods	2.05	2.33	2.63	2.97	3.33
Total Sales	51.93	61.05	70.21	79.98	90.33
Variable & Semi Variable Exp.					
Raw Material Consumed	18.00	20.79	23.76	27.11	30.66
Electricity Exp/Coal Consumption at 85%	2.04	2.35	2.70	3.10	3.41

Wages & Salary at 60%	4.97	5.46	6.01	6.61	7.27
Selling & administrative Expenses 80%	1.16	1.58	1.82	2.29	2.52
Interest on working Capital	0.385	0.385	0.385	0.385	0.385
Repair & maintenance	1.25	1.52	1.75	1.99	2.25
Packaging	12.00	14.03	16.20	18.53	21.00
Total Variable & Semi Variable Exp	39.80	46.11	52.62	60.01	67.50
Contribution	12.13	14.94	17.59	19.97	22.83
Fixed & Semi Fixed Expenses					
Electricity Exp/Coal Consumption at 15%	0.36	0.41	0.48	0.55	0.60
Wages & Salary at 40%	3.31	3.64	4.01	4.41	4.85
Interest on Term Loan	0.86	0.76	0.55	0.33	0.12
Depreciation	2.35	2.00	1.71	1.45	1.24
Selling & administrative Expenses 20%	0.29	0.40	0.45	0.57	0.63
Rent	3.00	3.30	3.63	3.99	4.39
Total Fixed Expenses	10.18	10.52	10.82	11.31	11.83
Capacity Utilization					
	50%	55%	60%	65%	70%
OPERATING PROFIT	1.95	4.43	6.77	8.66	11.00
BREAK EVEN POINT	42%	39%	37%	37%	36%
BREAK EVEN SALES	43.56	42.97	43.19	45.30	46.80

6. LICENSE & APPROVALS

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

7. ASSUMPTIONS

1. Production Capacity of Rose Water is 100 Liters per day. First year, Capacity has been taken @ 50%.
2. Working shift of 10 hours per day has been considered.
3. Raw Material stock is for 5 days and finished goods Closing Stock has been taken for 15 days.
4. Credit period to Sundry Debtors has been given for 12 days.
5. Credit period by the Sundry Creditors has been provided for 5 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 8 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.