MODEL PROJECT REPORT

PROJECT REPORT
ON
CITRONELLA OIL

SWAVALAMBI BHARAT ABHIYAN

Website : www.mysba.co.in Contact : 8003198250 Email : info@mysba.co.in

PROJECT AT A GLANCE

1	Name of the Entreprenuer		XXXXXXX	
2	Constitution (legal Status)	:	XXXXXXX	
3	Father's/Spouce's Name		XXXXXXXX	
4	Unit Address	:	XXXXXXXX	
			Taluk/Block:	
			District : XXXXX	
			Pin: XXXXX	State:
			E-Mail : XXXXX	
			Mobile XXXXX	
5	Product and By Product	:	**Manufacturing of Citrolenna Oil (bottled 30ml 60 ml 100ml etc)**	
6	Name of the project / business activity proposed :			
7	Cost of Project	:	Rs25.00lac	
8	Means of Finance			
	Term Loan		Rs.14.26 Lacs	
	KVIC Margin Money	-	As per Project Eligibility	
	Own Capital		Rs.2.5 Lacs	
	Working Capital		Rs.8.25 Lacs	
9	Debt Service Coverage Ratio	:	3.58	
10	Pay Back Period	:	5	Years
11	Project Implementation Period	:	6	Months
12	Break Even Point	:	33%	
13	Employment	:	13	Persons
14	Power Requirement	:	5.00	HP
15	Major Raw materials	:	**Java Citrolenna Grass**	
16	Estimated Annual Sales Turnover	:	40.50	Lacs

16 Detailed Cost of Project & Means of Finance

COST OF PROJECT

(Rs. In Lacs)

Particulars	Amount
Land	Rented/Owned
Building & Civil Work (2000Sq Ft)	4.00
Plant & Machinery	10.60
Furniture & Fixtures	0.74
Pre-operative Expenses	0.50
Working Capital Requirement	9.16
Total	**25.00**

MEANS OF FINANCE

Particulars	Amount
Own Contribution @10%	2.50
Term Loan	14.26
Workign Capital Finance	8.25
Total	**25.00**

	General	**Special**
Beneficiary's Margin Monery (% of Project Cost)	10%	5%

PROJECT REPORT
ON
CITRONELLA OIL

INTRODUCTION

Citronella oil is one of the major essential oils. It has a rose like odour and bitter taste. It is mainly used in the perfumery and cosmetic industry. Citronella oil is a raw material for production of geranial, citronellal, hydroxy-citronellal and other similar high value perfumery bases. It is also widely used as a starting material for various aromatic chemicals used in scented soaps, sprays, deodorants, detergents, polishes, mosquito repellants etc.Citronella oil is an oil derived majorly from citronella grass, also called as Cymbopogon nardus. The cultivation of the grass requires rich moisture content and sunshine. The oil can also be derived from different cymbopogon species. The citronella oil is considered as one of the industrially important essential oil. This is owing to the key advantages of citronella oil such as flavour additive, fragrances in cosmetic and perfume industries.The citronella oil contains more than 80 components some of which are at high concentration in oil and functions as repellent property of oil. Some of the important components such as geranial, limonene and citronellal are considered to have desirable repellent characteristics.Citronella oil is a prominent essential oil made from the extracts of a distinct species Cymbopogon plant. Stems and leaves of this species, commonly known as lemongrass, are used for making citronella oil extracts. The oil is primarily used as a source in production of perfumery chemicals such as citronellal and citronellol.Citronella Oil is one of the important component in perfume manufacturing. Personal care products like soaps, household cleaners, and

detergents use Citronella Oil due to its antiseptic characteristics. Flavouring capacity of Citronella oil is use in Alcoholic and non- alcoholic beverages, Baked products, Soft and hard candies, Gelatin and puddings, Frozen dairy. On medical grounds Citronella Oil is potent antifungal helps to reduce Aspergillus, Penicillium, and Eurotium fungi species that causes fungal infection in humans and animals.

MARKET OUTLOOK

Citronella oil constitutes over 90% of the production of essential oils in the country. The major customers are the manufacturers of cosmetics and perfumes who are the manufacturers of cosmetics and perfumes who are mainly located in Mumbai, Bangalore, Madras. Procurement of citronella oil is in the hands of four major buyers, namely, Hindustan Lever Limited, Industrial Perfumes, K.V. Aromatics and Gupta & Co Growth of Citronella Oil Market primarily driven by extensive use in perfume and insect repellent industry. Germany, Spain and France are largest importer of Citronella Oil for perfume manufacturing. Mosquito repellent industry is growing tremendously attributed to rise in mosquito-borne diseases like malaria, dengue and global warming, which favors breeding of mosquitoes. Increse in health awareness is propelling fuel to use of mosquito repellent spray and lotions which automatically increasing demand for Citronella Oil.

The global market for citronella oil is mainly due to the growing demand of the perfumery and cosmetics industries. Lemongrass oil offers many remedies, including the control of anxiety and stress, the ability to eliminate insects and leeches from the body, etc. These are some of the factors that stimulate the global consumption of lemon grass oil. In addition, citronella oil has unique properties, such as olfactory and stable technical properties. These properties are extremely essential for industries such as perfumes, since they must incorporate essences of composition and suitable mixture, which in turn stimulate the world citronella oil market. However, the citronella oil substitute, such as citrus and turpentine synthetic eucalyptus isolates, could restrict the world market for lemongrass oil.

The global citronella oil market is primarily driven by the increasing demand from perfume and cosmetic industries. Citronella oil offers wide remedies some of which are anxiety and stress control, ability to eject bugs and leeches from body etc. Citronella oil prevents the spread of internal and external infections. These are some of the factors which is boosting the global citronella oil consumption. Furthermore, citronella oil has some unique properties such as distinctive olfactory and steady technical properties. These properties are highly essential for industries such as perfume to incorporate appropriate blending and compounding essences which in turn actually drives the global citronella oil market.

ESSENTIAL OIL MARKET:

The global essential oils market demand was 226.9 kilotons in 2018. It is projected to expand at a CAGR of 8.6% from 2019 to 2025. Robust growth of end-use industries such as food & beverage, personal care & cosmetics, and aromatherapy has translated into an upswing in the demand for the product.

The essential oil market is segmented on the basis of product type, application, and geography. The product segment is further classified as orange, eucalyptus, corn mint, peppermint, citronella, lime, lemon, clover leaf, spearmint, and others. Orange oil segment accounted for the maximum revenue share in 2015 and is likely to consolidate its position during the forecast period, owing to its anti-inflammatory, antidepressant, and antispasmodic product characteristics. In addition, the food and flavor industry majorly uses orange oil due to its fresh smell and juicy flavor.

Based on application, the essential oil market is classified as food & beverages, medical, cleaning & home, spa & relaxation, and others. Spa & relaxation is estimated be the fastest growing application segment, closely followed by applications Food & beverages. Other applications, such as health & wellness, cleaning products where essential oil serves as sweet-smelling mixes, and healthy substitutes for synthetic drugs are anticipated to witness sustainable development in future. Based on geography, the market is categorized into North America, Europe, Asia- Pacific, and LAMEA.

The overall essential oils industry has seen significant growth in recent years. Changing consumer lifestyles, as well as rising disposable income of the consumers in the developing countries is stimulating the growth of this market. The rising consumer awareness about the ill-health effects of synthetic chemicals used for adding texture & fragrances and for increasing the aesthetic appeal of the food products and increased awareness about health benefits associated with the consumption of essential oils has contributed towards the growth of global essential oils market.

PLANT CAPACITY

The capacity of a citronella oil plant depends mainly on the size of the distillation stills which is the main production unit. Plants are available in varying sizes with processing capacities ranging from 500 Kg to 1000 Kg per batch. Annual production envisaged is 6 tpa on the following basis.

Throughput capacity	1000 Kg of citronella grass

Process time per batch	3 ½ to 4 hours
No. of shifts per day	2
No. of batches/day	3
Yield of citronella oil	0.8%
Daily output	24 Kg.
Working days per year	250
Annual output	6 tonne

RAW MATERIALS

The chief raw material is Java citronella grass which grows on sandy loamy soil. It has high affinity for moisture but cannot withstand waterlogging conditions. The most favorable planting period is during the rainy season from April to September though planting during other seasons is also possible with irrigation. Application of fertilizers is necessary for good growth and yield.

About six cuttings are possible in a year. After the harvest, citronella grass is withered in the shade for 24 hours before distillation. The average life of a citronella plantation is about 5 years.

The annual requirement of citronella grass for a 6 tpa plant is 750 tonne.

PROCESS

Technology for manufacture of citronella oil is readily available with the Regional Research Laboratory, Jorhat. Extraction of citronella oil is a distillation process. The process of distillation consists of the release of oil in the form of vapour from the leaves in conrtact with steam and condensing the mixture of oil vapour and steam to oil and water. The distillation unit consists of two parts – mild steel still in which the grass is placed and exposed to steam and a condenser which condenses the vapour/ steam mixture to water and oil.

Before the process starts, the distillation still is filled with water and a grid is put on top. The citronella grass leaves are lightly packed on the grid. On top of this Hessian or other packing materials are placed and covered with timber. A thick layer of mud is put along flanges before the cover is fastened.The oil and water condensate flow into a receptacle where the oil floats on the water surface.

MACHINERY

The major equipment required for a citronella oil plant are as follows:

Distillation plant with steam generator	: 1 Set
Lid lifting gear	: 1 No.
Furnace and accessories	: 1 Set
Separator	: 1 No.

Centrifugal pump	: 2 Nos.
Chimney	: 1 No.
Water storage tank	: 1 No.

INFRASTRUCTURE

The major infrastructure requirements are :

Land and Building shed	…	1000 Sq.ft.
Power	…	5 Kw
Water	…	8750 Cu.m.

LOCATION

If adequate land is available and the soil is sandy with pH content of 6.7 to 7.7, citronella can be grown anywhere The oil distillation plants should logically be located close to the source of citronella grass.

PROJECTED CASH FLOW STATEMENT

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
SOURCES OF FUND					
Share Capital	2.50	-			
Reserve & Surplus	7.01	9.76	12.94	15.96	18.80
Depriciation & Exp. W/off	2.03	1.78	1.54	1.33	1.14
Increase in Cash Credit	8.25	-	-	-	-
Increase In Term Loan	14.26	-	-	-	-
Increase in Creditors	1.32	0.22	0.22	0.22	0.22
Increase in Provisions	0.36	0.04	0.04	0.04	0.05
TOTAL :	**35.73**	**11.80**	**14.73**	**17.55**	**20.21**
APPLICATION OF FUND					
Increase in Fixed Assets	15.34	-	-	-	-
Increase in Stock	6.44	1.07	1.07	1.07	1.07
Increase in Debtors	4.05	1.13	0.75	0.75	0.75
Increase in Deposits & Adv	2.50	0.25	0.28	0.30	0.33
Repayment of Term Loan	-	3.56	3.56	3.56	2.88
Taxation	0.70	0.98	1.29	1.60	1.88
TOTAL :	**29.03**	**6.99**	**6.96**	**7.28**	**6.92**
Opening Cash & Bank Balance	-	6.70	11.51	19.29	29.55
Add : Surplus	6.70	4.81	7.78	10.26	13.30
Closing Cash & Bank Balance	**6.70**	**11.51**	**19.29**	**29.55**	**42.84**

PROJECTED BALANCE SHEET

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
SOURCES OF FUND					
Capital Account	2.50	2.50	2.50	2.50	2.50
Retained Profit	6.31	15.10	26.74	41.10	58.02
Term Loan	14.26	10.69	7.13	3.56	0.68
Cash Credit	8.25	8.25	8.25	8.25	8.25
Sundry Creditors	1.32	1.54	1.76	1.98	2.21
Provisions & Other Liab	0.36	0.40	0.44	0.48	0.53
TOTAL :	**33.00**	**38.47**	**46.81**	**57.87**	**72.18**
APPLICATION OF FUND					
Fixed Assets (Gross)	15.34	15.34	15.34	15.34	15.34
Gross Dep.	2.03	3.81	5.34	6.67	7.81
Net Fixed Assets	13.31	11.53	10.00	8.67	7.53
Current Assets					
Sundry Debtors	4.05	5.18	5.93	6.68	7.43
Stock in Hand	6.44	7.51	8.58	9.65	10.73
Cash and Bank	6.70	11.51	19.29	29.55	42.84
Deposits & Advances	2.50	2.75	3.03	3.33	3.66
TOTAL :	**33.00**	**38.47**	**46.81**	**57.87**	**72.18**
	-	-	-	-	-

PROJECTED PROFITABILITY STATEMENT

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
A) SALES					
Gross Sale	40.50	51.75	59.25	66.75	74.25
Total (A)	**40.50**	**51.75**	**59.25**	**66.75**	**74.25**
B) COST OF SALES					
Raw Mateiral Consumed	18.90	22.05	25.20	28.35	31.50
Elecricity Expenses	0.86	1.00	1.15	1.29	1.43
Repair & Maintenance	-	0.52	0.59	0.67	0.74
Labour & Wages	5.54	6.10	6.71	7.38	8.12
Depreciation	2.03	1.78	1.54	1.33	1.14
Consumables and Other Expenses	1.22	1.55	1.78	2.00	2.23
Cost of Production	28.55	33.00	36.96	41.01	45.16
Add: Opening Stock /WIP	-	3.60	4.20	4.80	5.40
Less: Closing Stock /WIP	3.60	4.20	4.80	5.40	6.00
Cost of Sales (B)	24.95	32.40	36.36	40.41	44.56
C) GROSS PROFIT (A-B)	15.55	19.35	22.89	26.34	29.69
	38%	**37%**	**39%**	**39%**	**40%**
D) Bank Interest (Term Loan)	1.23	1.49	1.08	0.67	0.27
Bank Interest (C.C. Limit)	0.82	0.82	0.82	0.82	0.82
E) Salary to Staff	5.68	6.24	6.87	7.55	8.31
F) Selling & Adm Expenses Exp.	0.81	1.04	1.19	1.34	1.49
TOTAL (D+E)	**8.54**	**9.59**	**9.95**	**10.38**	**10.89**
H) NET PROFIT	7.01	9.76	12.94	15.96	18.80
I) Taxation	0.70	0.98	1.29	1.60	1.88
J) PROFIT (After Tax)	6.31	8.78	11.64	14.36	16.92

COMPUTATION OF MANUFACTURING OF CITROLENNA OIL

Items to be Manufactured Citrolenna Oil

Manufacturing Capacity per day	-	24.00	Kg
	-		
No. of Working Hour		8	
No of Working Days per month		25	
No. of Working Day per annum		250	
Total Production per Annum		6,000.00	Kg
Year		Capacity	oil
		Utilisation	
			Kg
IST YEAR		60%	3,600
IIND YEAR		70%	4,200
IIIRD YEAR		80%	4,800
IVTH YEAR		90%	5,400
VTH YEAR		100%	6,000

Capacity of raw material processing - 1000 kg/day
Finished product /day - 24Kg
Working days - 250 days

COMPUTATION OF RAW MATERIAL

Item Name		Quantity of Raw Material MT	Recovery	Unit Rate of /MT	Total Cost Per Annum
Java Citrollena Grass	100%	750.00	100%	4,200.00	31.50
Throughput capacity 1000 Kg of citronella grass					
Process time per batch 3 ½ to 4 hours					
No. of shifts per day 2					
No. of batches/day 3					
Yield of citronella oil 0.8%					
Daily output 24 Kg.					
Working days per year 250					
Annual output 6 tonne					
			Total		31.50
Annual Consumption cost	(In Lacs)				31.50

Raw Material Consumed	Capacity Utilisation	Amount (Rs.)
IST YEAR	60%	18.90
IIND YEAR	70%	22.05
IIIRD YEAR	80%	25.20
IVTH YEAR	90%	28.35
VTH YEAR	100%	31.50

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
Finished Goods					
(30 Days requirement)	3.60	4.20	4.80	5.40	6.00
Raw Material					
(45Days requirement)	2.84	3.31	3.78	4.25	4.73
Closing Stock	**6.44**	**7.51**	**8.58**	**9.65**	**10.73**

COMPUTATION OF WORKING CAPITAL REQUIREMENT

Particulars			Total
			Amount
Stock in Hand			6.44
Sundry Debtors			4.05
		Total	10.49
Sundry Creditors			1.32
Working Capital Requirement			**9.16**
Margin			0.92
Working Capital Finance			**8.25**

BREAK UP OF LABOUR

Particulars		Wages Per Month	No of Employees	Total Salary
Chemist		15,000.00	1	15,000.00
Skilled Worker		9,000.00	2	18,000.00
Unskilled Worker		6,000.00	4	24,000.00
				42,000.00
Add: 10% Fringe Benefit				4,200.00
Total Labour Cost Per Month				46,200.00
Total Labour Cost for the year (In Rs. Lakhs)			9.00	5.54

BREAK UP OF SALARY

Particulars		Salary Per Month	No of Employees	Total Salary
Manager cum supervisor		15,000.00	1	15,000.00
Accountant		8,000.00	1	8,000.00
Sales		10,000.00	2	20,000.00
Total Salary Per Month				43,000.00
Add: 10% Fringe Benefit				4,300.00
Total Salary for the month				47,300.00
Total Salary for the year (In Rs. Lakhs)			4.00	5.68

COMPUTATION OF DEPRECIATION

Description	Land	Building/shed	Plant & Machinery	Furniture	**TOTAL**
Rate of Depreciation		**10.00%**	**15.00%**	**10.00%**	
Opening Balance	Leased	-	-	-	-
Addition	-	4.00	10.60	0.74	15.34
	-	4.00	10.60	0.74	15.34
Less : Depreciation	-	0.40	1.59	0.04	2.03
WDV at end of Ist year	-	3.60	9.01	0.70	13.31
Additions During The Year	-	-	-	-	-
	-	3.60	9.01	0.70	13.31
Less : Depreciation	-	0.36	1.35	0.07	1.78
WDV at end of IInd Year	-	3.24	7.66	0.63	11.53
Additions During The Year	-	-	-	-	-
	-	3.24	7.66	0.63	11.53
Less : Depreciation	-	0.32	1.15	0.06	1.54
WDV at end of IIIrd year	-	2.92	6.51	0.57	10.00
Additions During The Year	-	-	-	-	-
	-	2.92	6.51	0.57	10.00
Less : Depreciation	-	0.29	0.98	0.06	1.33
WDV at end of IV year	-	2.62	5.53	0.51	8.67
Additions During The Year	-	-	-	-	-
	-	2.62	5.53	0.51	8.67
Less : Depreciation	-	0.26	0.83	0.05	1.14
WDV at end of Vth year	-	2.36	4.70	0.46	7.53

REPAYMENT SCHEDULE OF TERM LOAN 11.5%

Year	Particulars	Amount	Addition	Total	Interest	Repayment	Cl Balance
IST YEAR	Opening Balance						
	Ist Quarter	-	14.26	14.26	-	-	14.26
	Iind Quarter	14.26	-	14.26	0.41	-	14.26
	IIIrd Quarter	14.26	-	14.26	0.41	-	14.26
	Ivth Quarter	14.26	-	14.26	0.41	-	14.26
					1.23	-	
IIND YEAR	Opening Balance						
	Ist Quarter	14.26	-	14.26	0.41	0.89	13.37
	Iind Quarter	13.37	-	13.37	0.38	0.89	12.47
	IIIrd Quarter	12.47	-	12.47	0.36	0.89	11.58
	Ivth Quarter	11.58		11.58	0.33	0.89	10.69
					1.49	3.56	
IIIRD YEAR	Opening Balance						
	Ist Quarter	10.69	-	10.69	0.31	0.89	9.80
	Iind Quarter	9.80	-	9.80	0.28	0.89	8.91
	IIIrd Quarter	8.91	-	8.91	0.26	0.89	8.02
	Ivth Quarter	8.02		8.02	0.23	0.89	7.13
					1.08	3.56	
IVTH YEAR	Opening Balance						
	Ist Quarter	7.13	-	7.13	0.20	0.89	6.24
	Iind Quarter	6.24	-	6.24	0.18	0.89	5.35
	IIIrd Quarter	5.35	-	5.35	0.15	0.89	4.46
	Ivth Quarter	4.46		4.46	0.13	0.89	3.56
					0.67	3.56	
VTH YEAR	Opening Balance						
	Ist Quarter	3.56	-	3.56	0.10	0.89	2.67
	Iind Quarter	2.67	-	2.67	0.08	0.89	1.78
	IIIrd Quarter	1.78	-	1.78	0.05	0.55	1.23
	Ivth Quarter	1.23		1.23	0.04	0.55	0.68
					0.27	2.88	

CALCULATION OF D.S.C.R

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
CASH ACCRUALS	8.34	10.56	13.18	15.69	18.06
Interest on Term Loan	1.23	1.49	1.08	0.67	0.27
Total	9.57	12.05	14.25	16.35	18.33
REPAYMENT					
Instalment of Term Loan	3.56	3.56	3.56	2.88	2.88
Interest on Term Loan	1.23	1.49	1.08	0.67	0.27
Total	4.79	5.05	4.64	3.55	3.15
DEBT SERVICE COVERAGE RAT	**2.00**	**2.39**	**3.07**	**4.61**	**5.82**
AVERAGE D.S.C.R.			**3.58**		

COMPUTATION OF SALE

Particulars	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
Op Stock	-	360.00	420.00	480.00	540.00
Production	3,600.00	4,200.00	4,800.00	5,400.00	6,000.00
	3,600.00	4,560.00	5,220.00	5,880.00	6,540.00
Less : Closing Stock	360.00	420.00	480.00	540.00	600.00
Net Sale	3,240.00	4,140.00	4,740.00	5,340.00	5,940.00
Sale Price per Kg	1,250.00	1,250.00	1,250.00	1,250.00	1,250.00
Sale (in Lacs)	**40.50**	**51.75**	**59.25**	**66.75**	**74.25**

COMPUTATION OF ELECTRICITY

(A) POWER CONNECTION				
Total Working Hour per day		Hours	16	
Electric Load Required		HP	5	
Load Factor			0.7460	
Electricity Charges		per unit	8.00	
Total Working Days			300	
Electricity Charges (8 Hrs Per day)				1,43,232.00
Add : Minimim Charges (@ 10%)				
(B) D.G. SET				
No. of Working Days			300	days
No of Working Hours			-	Hour per day
Total no of Hour			-	
Diesel Consumption per Hour			8	
Total Consumption of Diesel			-	
Cost of Diesel			65.00	Rs. /Ltr
Total cost of Diesel			-	
Add : Lube Cost @15%			-	
Total			-	
Total cost of Power & Fuel at 100%				1.43
Year		**Capacity**		**Amount**
				(in Lacs)
IST YEAR		60%		0.86
IIND YEAR		70%		1.00
IIIRD YEAR		80%		1.15
IVTH YEAR		90%		1.29
VTH YEAR		100%		1.43

BREAK EVEN POINT ANALYSIS

Year	I	II	III	IV	V
Net Sales & Other Income	40.50	51.75	59.25	66.75	74.25
Less : Op. WIP Goods	-	3.60	4.20	4.80	5.40
Add : Cl. WIP Goods	3.60	4.20	4.80	5.40	6.00
Total Sales	**44.10**	**52.35**	**59.85**	**67.35**	**74.85**
Variable & Semi Variable Exp.					
Raw Material & Tax	18.90	22.05	25.20	28.35	31.50
Electricity Exp/Coal Consumption at 85%	0.73	0.85	0.97	1.10	1.22
Manufacturing Expenses 80%	0.97	1.66	1.90	2.14	2.38
Wages & Salary at 60%	6.73	7.41	8.15	8.96	9.86
Selling & adminstrative Expenses 80%	0.65	0.83	0.95	1.07	1.19
Intt. On Working Capital Loan	0.82	0.82	0.82	0.82	0.82
Total Variable & Semi Variable Exp	**28.81**	**33.62**	**37.99**	**42.43**	**46.96**
Contribution	**15.29**	**18.73**	**21.86**	**24.92**	**27.89**
Fixed & Semi Fixed Expenses					
Manufacturing Expenses 20%	0.24	0.41	0.47	0.53	0.59
Electricity Exp/Coal Consumption at 15%	0.13	0.15	0.17	0.19	0.21
Wages & Salary at 40%	4.49	4.94	5.43	5.97	6.57
Interest on Term Loan	1.23	1.49	1.08	0.67	0.27
Depreciation	2.03	1.78	1.54	1.33	1.14
Selling & adminstrative Expenses 20%	0.16	0.21	0.24	0.27	0.30
Total Fixed Expenses	**8.28**	**8.98**	**8.93**	**8.96**	**9.09**
Capacity Utilization	**60%**	**70%**	**80%**	**90%**	**100%**
OPERATING PROFIT	**7.01**	**9.76**	**12.94**	**15.96**	**18.80**
BREAK EVEN POINT	**32%**	**34%**	**33%**	**32%**	**33%**
BREAK EVEN SALES	**23.87**	**25.08**	**24.43**	**24.22**	**24.39**

PLANT & MACHINERY

	PARTICULARS	QTY.	RATE	AMOUNT IN RS.
1	Distillation plant with steam generator	1	6,50,000.00	6,50,000.00
2	Lid lifting gear	1	50,000.00	50,000.00
3	Furnace and accessories	1	2,50,000.00	2,50,000.00
4	Separator	1	25,000.00	25,000.00
5	Centrifugal pump	2	25,000.00	50,000.00
6	Chimney	1	25,000.00	25,000.00
7	Water storage tank	1	10,000.00	10,000.00
	Total			10,60,000.00