

PROJECT REPORT

Of

PALM OIL PROCESSING UNIT

PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding Palm Oil 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 : xxxxxxxxxx
- 2 Constitution (legal Status) : xxxxxxxxxx
- 3 Father / Spouse Name : xxxxxxxxxxxxxx
- 4 Unit Address : xxxxxxxxxxxxxxxxxxxxxxxx
- District : xxxxxxxx
- Pin: xxxxxxxx State: xxxxx
- Mobile xxxxxxxx
- 5 Product and By Product : **PALM OIL**
- 6 Name of the project / business activity proposed : **PALM OIL PROCESSING UNIT**
- 7 Cost of Project : Rs.20.65 Lakhs
- 8 Means of Finance
- Term Loan Rs.15.53 Lakhs
- Own Capital Rs.2.06 Lakhs
- Working Capital Rs.3.06 Lakhs
- 9 Debt Service Coverage Ratio : 2.14
- 10 Pay Back Period : 5 Years
- 11 Project Implementation Period : 5-6 Months
- 12 Break Even Point : 33%
- 13 Employment : 10 Persons
- 14 Power Requirement : 18.00 KWH
- 15 Major Raw materials : Oil Palm Bunch
- 16 Estimated Annual Sales Turnover (Max Capacity) : 86.16 Lakhs
- 17 Detailed Cost of Project & Means of Finance

COST OF PROJECT

(Rs. In Lakhs)

Particulars	Amount
Land	Own/Rented
Plant & Machinery	16.25
Furniture & Fixtures	1.00
Working Capital	3.40
Total	20.65

MEANS OF FINANCE

Particulars	Amount
Own Contribution	2.06
Working Capital(Finance)	3.06
Term Loan	15.53
Total	20.65

PALM OIL PROCESSING UNIT

Introduction:

The most widely used vegetable oil in the world is palm oil. Palm oil is made from the pulp of the oil palm tree's fruit (*Elaeis Guineensis*). Because of its high beta-carotene content, this tropical fruit has a reddish color. It's the size of a large olive. Palm kernel oil is made from the fruit's single seed or kernel. The oil content of each palm fruit is approximately 30-35 percent. The fatty acid composition of palm fruit oil and palm kernel oil differs significantly, but they share the same botanical origin. Palm oil and palm kernel oil represent 32 per cent of the global vegetable oil production. Palm oil can be used as crude oil or as refined oil. Only one-quarter of the palm oil and palm kernel oil worldwide is used as crude oil. Crude palm oil is commonly used for domestic cooking in Southeast Asia, Africa, and parts of Brazil. Many food products, such as margarine, confectionery, chocolate, ice cream, and bakery products, use refined palm oil as an inexpensive ingredient. It is also present in non-food products like soap, candles, and cosmetics.



Uses & Market Potential:

Palm Oil vegetable edible oil extracted from the mesocarp of an oil palm fruit. In 2019, the size of the Palm Oil market is projected at \$81.9 billion and in the 2020-2025 forecast periods at the CAGR by 6.0%. Two types of oil can be produced, crude palm oil comes from squeezing the fleshy fruit, and palm kernel oil which comes from crushing the kernel, or the stone in the middle of the fruit. It is free of cholesterol and easy to digest and high in carotenoids and vitamin A. Palm oil offers various health

benefits that improve energy levels, prevent early aging, improve eye vision, boost the immune system, and reduce the risk of cancer and heart diseases. Palm oil offers several benefits for your health. Consumer awareness of these health benefits is one of the key factors contributing to market growth.

Product:

PALM OIL

Raw Material:

Oil palm bunch: Fresh fruit arrives from the field as bunches or loose fruit.

Manufacturing Process:



Fig. 1 – Process Flowchart

Area:

The approximate total area required for construction of shed is 3000-4000 Sq. ft. for smooth production including storage area.

Cost of Machines:

S No.	Machine	Price (INR)
1.	Pressurized vessel sterilizer	1,90,000/-
2.	Rotating Drum Thresher	4,00,000/-
3.	Mechanical Digester machine	2,80,000/-
4.	Screw press	2,00,000/-
5.	Filter press machine	1,00,000/-
6.	Jacketed heating vessels	1,00,000/-
7.	Oil clarification and storage Tank	1,55,000/-
8.	Material handling and other equipment's (Trolley, weighing machine, boiler, industrial pumps, etc.)	2,00,000/-
	Total	16,25,000/-

Power Requirement- The estimated Power requirement is taken at 18 KWH.

Manpower Requirement- Following manpower is required:

- Skilled/unskilled worker-4
- Helper- 2
- Machine Operator- 2
- Sales Personal and Accountant- 2

FINANCIALS

<u>PROJECTED BALANCE SHEET</u>					
PARTICULARS	I	II	III	IV	V
<u>SOURCES OF FUND</u>					
<u>Capital Account</u>					
Opening Balance	-	2.24	3.42	5.46	7.89
Add: Additions	2.06	-	-	-	-
Add: Net Profit	2.37	4.18	6.14	7.43	9.28
Less: Drawings	2.20	3.00	4.10	5.00	6.50
Closing Balance	2.24	3.42	5.46	7.89	10.68
CC Limit	3.06	3.06	3.06	3.06	3.06
Term Loan	13.80	10.35	6.90	3.45	-
Sundry Creditors	0.77	0.89	1.02	1.16	1.30
TOTAL :	19.86	17.72	16.44	15.56	15.03
<u>APPLICATION OF FUND</u>					
Fixed Assets (Gross)	17.25	17.25	17.25	17.25	17.25
Gross Dep.	2.54	4.70	6.54	8.11	9.45
Net Fixed Assets	14.71	12.55	10.71	9.14	7.80
Current Assets					
Sundry Debtors	1.67	1.99	2.27	2.57	2.87
Stock in Hand	2.50	2.89	3.30	3.73	4.18
Cash and Bank	0.98	0.29	0.16	0.12	0.18
TOTAL :	19.86	17.72	16.44	15.56	15.03
	-	-	-	-	-

PROJECTED PROFITABILITY STATEMENT

PARTICULARS	I	II	III	IV	V
<u>A) SALES</u>					
Gross Sale	50.11	59.72	68.17	76.99	86.16
Total (A)	50.11	59.72	68.17	76.99	86.16
<u>B) COST OF SALES</u>					
Raw Material Consumed	23.04	26.73	30.60	34.65	38.88
Electricity Expenses	1.61	1.81	2.01	2.22	2.42
Repair & Maintenance	1.50	1.79	2.05	2.31	2.58
Labour & Wages	10.08	11.49	13.21	15.20	17.02
Depreciation	2.54	2.16	1.84	1.57	1.34
Cost of Production	38.77	43.99	49.72	55.94	62.24
Add: Opening Stock /WIP	-	1.73	2.00	2.28	2.57
Less: Closing Stock /WIP	1.73	2.00	2.28	2.57	2.88
Cost of Sales (B)	37.04	43.72	49.43	55.65	61.93
C) GROSS PROFIT (A-B)	13.07	16.00	18.74	21.34	24.23
	26.08%	26.79%	27.49%	27.72%	28.12%
D) Bank Interest i) (Term Loan)	1.68	1.38	1.00	0.62	0.24
ii) Interest On Working Capital	0.34	0.34	0.34	0.34	0.34
E) Salary to Staff	5.67	6.52	7.17	7.53	7.91
F) Selling & Adm Expenses Exp.	3.01	3.58	4.09	4.62	5.17
G) TOTAL (D+E+F)	10.70	11.82	12.60	13.10	13.65
H) NET PROFIT	2.37	4.18	6.14	8.23	10.57
	4.7%	7.0%	9.0%	10.7%	12.3%
I) Taxation	-	-	-	0.80	1.29
J) PROFIT (After Tax)	2.37	4.18	6.14	7.43	9.28

PROJECTED CASH FLOW STATEMENT

PARTICULARS	I	II	III	IV	V
<u>SOURCES OF FUND</u>					
Own Contribution	2.06	-			
Reserve & Surplus	2.37	4.18	6.14	8.23	10.57
Depreciation & Exp. W/off	2.54	2.16	1.84	1.57	1.34
Increase In Cash Credit	3.06				
Increase In Term Loan	15.53	-	-	-	-
Increase in Creditors	0.77	0.12	0.13	0.14	0.14
TOTAL :	26.32	6.47	8.11	9.94	12.05
<u>APPLICATION OF FUND</u>					
Increase in Fixed Assets	17.25	-	-	-	-
Increase in Stock	2.50	0.39	0.41	0.43	0.45
Increase in Debtors	1.67	0.32	0.28	0.29	0.31
Repayment of Term Loan	1.73	3.45	3.45	3.45	3.45
Taxation	-	-	-	0.80	1.29
Drawings	2.20	3.00	4.10	5.00	6.50
TOTAL :	25.34	7.16	8.24	9.98	11.99
Opening Cash & Bank Balance	-	0.98	0.29	0.16	0.12
Add : Surplus	0.98	- 0.69	- 0.13	- 0.04	0.06
Closing Cash & Bank Balance	0.98	0.29	0.16	0.12	0.18

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL

PARTICULARS	I	II	III	IV	V
<u>Finished Goods</u>					
(10 Days requirement)	1.73	2.00	2.28	2.57	2.88
<u>Raw Material</u>					
(10 Days requirement)	0.77	0.89	1.02	1.16	1.30
Closing Stock	2.50	2.89	3.30	3.73	4.18

COMPUTATION OF WORKING CAPITAL REQUIREMENT

Particulars	Amount	Margin(10%)	Net Amount
Stock in Hand	2.50		
Less:			
Sundry Creditors	0.77		
Paid Stock	1.73	0.17	1.56
Sundry Debtors	1.67	0.17	1.50
Working Capital Requirement			3.06
Margin			0.34
MPBF			3.06
Working Capital Demand			3.06

REPAYMENT SCHEDULE OF TERM LOAN

11.0%

Year	Particulars	Amount	Addition	Total	Interest	Repayment	CI Balance
I	Opening Balance						
	Ist Quarter	-	15.53	15.53	0.43	-	15.53
	Iind Quarter	15.53	-	15.53	0.43	-	15.53
	IIIrd Quarter	15.53	-	15.53	0.43	0.86	14.66
	Ivth Quarter	14.66	-	14.66	0.40	0.86	13.80
					1.68	1.73	
II	Opening Balance						
	Ist Quarter	13.80	-	13.80	0.38	0.86	12.94
	Iind Quarter	12.94	-	12.94	0.36	0.86	12.08
	IIIrd Quarter	12.08	-	12.08	0.33	0.86	11.21
	Ivth Quarter	11.21		11.21	0.31	0.86	10.35
					1.38	3.45	
III	Opening Balance						
	Ist Quarter	10.35	-	10.35	0.28	0.86	9.49
	Iind Quarter	9.49	-	9.49	0.26	0.86	8.62
	IIIrd Quarter	8.62	-	8.62	0.24	0.86	7.76
	Ivth Quarter	7.76		7.76	0.21	0.86	6.90
					1.00	3.45	
IV	Opening Balance						
	Ist Quarter	6.90	-	6.90	0.19	0.86	6.04
	Iind Quarter	6.04	-	6.04	0.17	0.86	5.18
	IIIrd Quarter	5.18	-	5.18	0.14	0.86	4.31
	Ivth Quarter	4.31		4.31	0.12	0.86	3.45
					0.62	3.45	
V	Opening Balance						
	Ist Quarter	3.45	-	3.45	0.09	0.86	2.59
	Iind Quarter	2.59	-	2.59	0.07	0.86	1.73
	IIIrd Quarter	1.73	-	1.73	0.05	0.86	0.86
	Ivth Quarter	0.86		0.86	0.02	0.86	- 0.00
					0.24	3.45	

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>	4.91	6.35	7.98	9.00	10.62
Interest on Term Loan	1.68	1.38	1.00	0.62	0.24
Total	6.59	7.72	8.98	9.62	10.86
<u>REPAYMENT</u>					
Repayment of Term Loan	1.73	3.45	3.45	3.45	3.45
Interest on Term Loan	1.68	1.38	1.00	0.62	0.24
Total	3.41	4.83	4.45	4.07	3.69
DEBT SERVICE COVERAGE RATIO	1.93	1.60	2.02	2.37	2.95
AVERAGE D.S.C.R.			2.14		

Assumptions:

- 1.** Production Capacity of Palm Oil is 600 Kg per day. First year, Capacity has been taken @ 40%.
- 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.
- 4.** Credit period to Sundry Debtors has been given for 10 days.
- 5.** Credit period by the Sundry Creditors has been provided for 10 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 18 KWH.
- 10.** Selling Prices & Raw material costing has been increased by 3% & 2% respectively in the subsequent years

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