

DETAILED PROJECT REPORT

Coconut Oil Extraction





By



2023



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1. OVERVIEW OF THE JLG MEMBERS

Name of the JLG:

Number of the members.

Name of Gram Panchayat/Taluk:

Name of the District:

Account details of JLG:

Details of JLG members with Hierarchy;

- 1.
- _
- 2.
- 3.
- 4.
- 5.
- 6.

KYC:

Aadhar/PAN/Photo:



2. OBJECTIVES OF SVSY

Under Yuva Niti 2022, the new Swami Vivekananda Yuva Shakti Yojana is proposed on the following grounds to achieve holistic development of 2.1 crore youth of the state and to bring about constructive social change by the youth in keeping with the India@2047 vision of the Hon'ble Prime Minister.

The current scenario of the state on various parameters is as follows:

- Political Representation: Out of total 1,01,308 members in rural local bodies, 12,411 (12.25 per cent) youths and 360 youths (5.36 per cent) out of 6713 municipal councillors are political representatives.
- ii. Education: Out of a total of 2.1 crore youth, 21.55 lakh (10.37 per cent) students are in high school, 11.75 lakh (5.65 per cent), 6.45 lakh (3.10 per cent) in general degree colleges, 1.51 lakh (2.72 per cent), 1.11 lakh in polytechnics. (0.53 per cent), 0.74 lakh (0.36 per cent) The total number of students studying in medical courses is 43.12 lakh, which is per cent of the total youth. 21 percent will be. Remaining 157.88 lakh youth have below 10th standard education.
- **iii. Employment:** According to the National Skill Development Corporation report, out of the total 2.1 crore youth in the state, 82 lakh (41 per cent) youth are in the labour force. As the remaining 119 lakh youth (59 per cent) are not in the professional labour force, they need to be given skill training to make them self-reliant.



- iv. Skill Development: Out of the total 82 lakh youth in the workforce, 16 lakh youth (20 per cent) have received skill vocational training. The remaining 66 lakh (80 percent) youth need to be given skill development training. Out of this, only one lakh youth are being trained by the NLRM department every year. Therefore 65 lakh untrained rural youth need skill training. To achieve this every school needs to provide vocational education from class 6 onwards.
- v. Internship: According to the 6th Economic Census, there are a total of 28.80 lakh enterprises in the state, out of which 78,022 enterprises employ more than 8 people. About 30 lakh youths can be trained in skills by undertaking the internship program for a period of three months in local industries related to agriculture and agri-based/MSME/self-employment/service sector.
- vi. Migration Control: Rural people have migrated from various districts to urban areas for job opportunities, of which 40 lakh (20 percent) youth are in Bangalore city. Therefore, there is a need to provide more employment opportunities at the village level.
- vii. Consolidation of programs for rural employment: In total there are 27,395 revenue villages in the state and it is proposed to form Swami Vivekananda Self Help Groups, one in each village, on the model of Women's Self-Help Groups to provide self-employment to the unorganized workers in these. There are about 15 to 20 youth in each group, and 5.50 lakh youth in 27,395 self-help groups have received Rs. 1.5 lakh to provide margin money estimated at Rs. 410 crores will be required.



- viii. Bank Linked Schemes: Coordination and inclusion of Yuva Shakti schemes with schemes linked to 25 banks. There are 35000 shelves of projects under the Mudra loan scheme, and steps will be taken to select the financial activities of the selfhelp societies based on these models.
- ix. Training: Skill development training will be imparted to the youth under the National Entrepreneurship Mission under the 18 programs being implemented by various departments under this scheme. Training for agriculture and other activities will be provided through the Rural Development Self Employment Training Institute (RUDSETI).
- x. Formation of State Level Committee: It is proposed to constitute a committee under the chairmanship of the Minister of Youth Empowerment and Sports at the State level for implementation and monitoring of the programme. RDPR, Commerce and Industry, Labour, Skill Development and Bank representatives will be members of this committee.
- **xi. District Level Committee:** It is proposed to constitute a District Level Committee under the Chairmanship of the Chief Executive Officer of the Zilla Panchayat for the implementation and supervision of the program at the district level. The members

of this committee are the officers of Rural Development and Panchayat Raj, Commerce and Industry, Labour, Skill Development Departments and District Lead Bank Managers.



xii. Village level stewardship: The village level stewardship of this program will be handled by Rural Development and Panchayat Raj Departments and Youth Empowerment and Sports Departments.

3. ABOUT VKF

VKF is a Think Tank of Community Change Champions who are from various walks of Social Spaces with diverse backgrounds and specialists from their domains.

VKF is a platform that enables as a think tank to evolve an aggregation of the social impact service providers and entrepreneurs for bringing about a transformational movement of social Change that is measurable on the lines of the Strategic Sustainable Development Goals (SSDG) of United Nation (UN).

VKF's strong focus is on enhancing the rural mass entrepreneurship development clubbed with rural livelihood options. In this direction, VKF team is working with the rural livelihood SHGs members and handholding them to elevate themselves to newer socio-economic status and uplifting the whole geography of the cluster by setting up of Common Facility Centres.

VKF's experience spans across conceptualizing cluster mapping, conducting baseline surveys, awareness creation, trust building activities, capacity building, design thinking activities etc., to enhance capabilities of the artisans and livelihood SHGs in the clusters.

VKF also indulges in working with MSME, ESTC, IDEMI, Tribes India, NRLM and WCD to support rural masses in terms upgrading their livelihood opportunities. It also facilitates in preparation of DPR, Govt. liaising, market linkage activities, brand



awareness, branding initiatives, value addition of the products produced by clusters etc.

4. NAME OF PRODUCT AND TECHNOLOGY

Coconut Oil

With a rich history dating back to the 5th century, coconuts have long been cultivated in tropical regions throughout the Pacific Islands, India, China, Africa, and South America. Today, global coconut oil production exceeds 3.5 million metric tons (MT), with the Philippines and Indonesia producing more than three-fourths of the world's supply. The worldwide market is set to reach nearly \$5 billion by next year.

Copra oil continues to see steady demand thanks to its distinctively tropical flavor and aroma, potential health benefits, and unique fatty acid profile. This unique composition gives coconut oil value across various uses, from cooking to cosmetics to industrial applications. By understanding how to press this oil from copra more efficiently, processors can tap into the growing potential of this value.

Dried Coconut are crushed in a screw press expeller to separate the copra oil from the solid meal. Containing up to 70% oil by weight, coconuts have the highest oil content of any oilseed. To capture as much of this oil as possible, processors press copra twice by running the material through two presses or the same press again. This approach uses twice as much energy and potentially doubles the equipment footprint in the plant.



5. DELIVERABLES AND MARKET OF THE PRODUCT Coconut/ Copra oil

Copra oil contains a high proportion of saturated fat to unsaturated fat, giving it a longer shelf life than other vegetable oils that are high in unsaturated fats. Many of the fatty acids in coconut oil are absorbed and metabolized into energy more rapidly than other fats. For this reason, many people tout coconut oil as part of a healthy diet. It is also high in minerals like manganese, which help maintain healthy functions of the brain, immune, and nervous systems.

Although it is widely consumed in cooking and baking applications, coconut oil serves a variety of other uses. Its unique fatty acid composition gives it other valuable qualities like moisturizing (when applied on the skin as a topical), antibacterial (when swished in the mouth like a mouthwash), and quick lathering (when used to produce specialty soaps and surfactants). Some studies suggest that it contains antiviral properties, which make it useful in pharmaceuticals to fight viruses like herpes and influenza.

Project Assumptions:

This model DPR for Copra Oil Expeller is basically on certain assumptions that may vary with capacity, location, raw materials availability etc. An entrepreneur can use this model DPR format and modify as per requirement and suitability. The assumptions made in preparation of this particular DPR are given in Table below. Therefore, land and civil infrastructures are assumed as already available with the entrepreneur.



Table: Detailed Project Assumptions					
Parameter	ameter Value				
Assumed Capacity of the Copra Oil Expeller	30 Kg/ Hour				
Utilization of capacity:	Year 1	60%			
	Year 2	65%			
	Year 3	70%			
	Year 4	75%			
	Year 5	80%			
Working days per year:	210 days				
Working hours per day:	8-10 hours				
Average price of raw material (Copra):	Rs. 90/ kg				
Average sale price of Finished product	Rs. 240/ lit				



Details of Machinery



Commercial Expeller Multi Seed Oil Press

Capacity: 300 kgs/ hr.

Power: 5 HP

Material: SS

Supplier: Pro B Products

Location: Peenya, Bengaluru

Market Output:

VKF will hand hold them to facilitating better packing and market linkage.



Market Linkage

- ✤ Star Hotels
- * Super Markets
- Organic Stores

- * <u>Retailers</u>
- Exclusive Oil stores
- Pharma

6. ROLE OF EACH OF THE JLG MEMBERS

How JLG will participate:

- 2 persons will be used to procurement
- 2 persons for production
- 1 person for the logistics
- 1 person for branding and sales
- 1 person for waste management like selling the end users

7. SOFT INTERVENTION

The following are the soft interventions to be arranged:

- Awareness on financial inclusion will help in getting the assistance from Government and other sources.
- Export promotional orientation for the JLG members.
- Awareness/ training programme on product quality, handling practices.
- Capacity Building activity
- Trust Building activities



- Programmes on technical skill enhancement to unit owners.
- Programmes on Business and entrepreneurship skill enhancement to unit owners
- Mass entrepreneurship development program in the JLG eco system.

8. ESTIMATED COST OF THE PROJECT AND THE IMPLEMENTATION SCHEDULE

The proposed cost of the project is as follows:

SI. No.	Details	Cost in Rs.
1	Bank Loan	4,50,000
2	Govt of Karnataka contribution	50,000
3	Total	5,00,000

SI.	Details	Cost in Rs
No.		
1.	Machine cost	3,10,000
2.	Furniture	30,000
3.	Working capital (Shed deposit, electric	1,10,000
	connection deposit, Miscellaneous and	
	preoperative expenses)	
	Total	4,50,000



The proposed project implementation schedule is as follows:

SI. No.	Project Component	Schedule		
1	Shed for the project on rental basis	Identified		
2	Electricity and Water facility Installation	Present		
3	Arrival of Machinery	Within 1 months of Order		
4	Erection of Machinery	Within 5 days of arrival		
5	Commissioning	Within 2-4 days of erection		
6	Commercial Usage	Within 2 months from approval		

9. LAND/SHED STATUS:

The JLG has already identified the shed required for the project within the project area.

10. SWOT ANALYSIS OF THE PROJECT

I. Strength

- JLG members are very young and aware of demand of copra oil in the local as well as the national market.
- There is abundant raw material available in the district.
- The source of raw material procurement is very convenient due to local availability and helping farmers.



- Farmers bring copra and extract oil for their house hold use, sells locally available markets, where they pay service charges.
- Waste from oil extraction called cake is very good cattle feed and has good demand.

II. <u>Weakness</u>

- There are hardly any systematic efforts made to improve in the local organic oil industry which is so vital from the point of view of its importance of using organic oil and greater self-employment potential.
- The JLG members lack insufficient place for working/processing in their units. All the process was being carried at one small area.
- The JLG members are unable to purchase modern machineries due to financial limitations.
- The JLG members have poor access to national and international markets. This will affect initially the profitability of the JLG members.
- There is no branding for the product.

III. <u>Opportunities</u>

- It has been realized that by organizing modern trend of organic oil is big boon.
- JLG members are still very young if they start performing well in business and in future modern process machinery with better productivity and quality as well as special features for the final product.



IV. <u>Threats</u>

- Due to poor market access the profitability of the JLG members may fall bit low level. This may discourage initially to JLG members.
- Major player in the industry will sell it for lower price at the beginning and JLG members need to work hard.

11. <u>YOUTH EMPOWERMENT IMPACT OF THE PROJECT ON</u> <u>ECOSYSTEM</u>

We have surplus youths in the state, graduate, undergraduate etc. supporting them to create self-employment will motivate to become entrepreneurs, they will live independent life.

Entrepreneurship will greatly impact the lifestyle of the youths, if businesses work along with their involvement of all the members towards creating awareness and promoting positive impacts on others.

Ecosystem Support from Project-

As the demand for copra oil continues to grow, processors stand to profit from the "Tree of Life" if they can find ways to crush this nut more efficiently and economically.



The youth service program will empower coconut farmers model in sense of concern that many coconuts farmer who have difficulty in processing their coconut fruit because the price of copra is very cheap which causes losses to farmers.

Youth's while experiencing the business will help spread the value of Kalpavruksha (coconut tree) and its oil health benefits.

By organically extraction of oil and use age will give better health to society.

12. THE END PRODUCTS PRODUCED WITH THE MACHINE



Fig: Copra oil and meal



13. <u>FINANCIALS</u> CASH FLOW STATEMENT

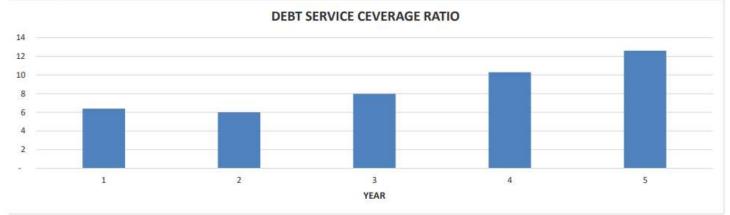
Year	_				
Particulars	Year 1	Year 2	Year 3	Year 4	Year 5
REVENUE FROM SALE OF OIL					
No. of working days in a Year	300	300	300	300	300
Less : Days for off Season	90	90	90	90	90
No. of Machine Running days in a Year	210	210	210	210	210
Capacity of the machine in kgs (30 kg per hr)	240	240	240	240	240
Production in litres	60%	60%	60%	60%	60%
Utilisation of the Capacity (%)	50%	55%	60%	65%	70%
No of litres Produced in a year	15,120	16,632	18,144	19,656	21,168
Rate per Litre	240	264	290	319	351
Gross Revenue earned per annum - A	36,28,800	43,90,848	52,69,018	62,78,913	74,38,097
REVENUE FROM SALE OF WASTE					
No. of Machine Running days in a Year	210	210	210	210	210
Capacity of the machine in kgs (30 kg per hr)	240	240	240	240	240
Utilisation of the Capacity (%)	50%	55%	60%	65%	70%
Cattle Feeds (Waste) in %	30%	30%	30%	30%	30%
Cattle Feeds (Waste) in kgs	7,560	8,316	9,072	9,828	10,584
Rate per kg	15	16	17	17	18
Gross Revenue earned per annum - B	1,13,400	1,30,977	1,50,028	1,70,657	1,92,974
COST OF RAW MATERIALS					
Consumption of Raw Materials	25,200	27,720	30,240	32,760	35,280
Rate per Kgs	90	99	109	120	132
Total Cost of Raw Material per annum - C	22,68,000	27,44,280	32,93,136	39,24,320	46,48,810
EXPENDITURE	7 20 000	7.02.000	0 71 000	0.59.220	11.00.070
Salaries and Wages	7,20,000	7,92,000	8,71,200	9,58,320	11,02,068
Electricity Charges	72,000	79,200	87,120	95,832	1,05,415
Other Manufacturing Expenses	42,000	46,200	50,820	55,902	61,492
Transportation and Travelling	30,000	33,000	36,300	39,930	43,923
Rent	72,000	79,200	87,120	95,832	1,05,415
Miscellaneous Expenses	7,500	8,250	9,075	9,983	10,981
Total Expenditure - D	9,43,500	10,37,850	11,41,635	12,55,799	14,29,294
Net Profit before Interest /Cash Flow (A+B-C-D)	5,30,700	7,39,695	9,84,275	12,69,451	15,52,966



DSCR STATEMENT

PROJECTED TERM LOAN DSCR STATEMENT

A 1 - 1	Year 1	Year 2	Year 3	Year 4	Year 5
	Projected	Projected	Projected	Projected	Projected
Profit available to service the debt	5,30,700	7,39,695	9,84,275	12,69,451	15,52,966
Loan Repayment	41,072	88,210	96,964	1,06,588	1,17,166
Interest on Term Loan	41,945	35,073	26,318	16,695	6,116
Debt to be Served	83,016	1,23,283	1,23,283	1,23,283	1,23,283
Debt Service Coverage Ratio	6	6	8	10	13
AVERAGE DSCR	2 2	0.	9	10	





REPAYMENT SCHEDULE

DETAIL REPAYMENT SCHEDULE

Year	Quarter	Loan Installment	Principal Payment	Loan Outstanding	Interest at 9.5%	Cumulative Interest
1	1	10,688	(H)	4,50,000	10,688	
	2	10,688	3 2 1	4,50,000	10,688	1
	3	30,821	20,293	4,29,707	10,528	
	4	30,821	20,779	4,08,928	10,042	41,945
2	1	30,821	21,276	3,87,652	9,544	
	2	30,821	21,786	3,65,867	9,035	
	3	30,821	22,307	3,43,560	8,514	
	4	30,821	22,841	3,20,719	7,980	35,073
3	1	30,821	23,388	2,97,331	7,433	
	2	30,821	23,948	2,73,383	6,873	
	3	30,821	24,521	2,48,862	6,300]
	4	30,821	25,108	2,23,754	5,713	26,318
4	1	30,821	25,709	1,98,045	5,112	
	2	30,821	26,324	1,71,721	4,496	
	3	30,821	26,955	1,44,766	3,866	
	4	30,821	27,600	1,17,166	3,221	16,695
5	1	30,821	28,261	88,906	2,560	
	2	30,821	28,937	59,969	1,884]
	3	30,821	29,630	30,339	1,191]
10	4	30,821	30,339	0	482	6,116
1	Fotal	5,76,147	4,50,000		1,26,147	1,26,147



BREAKEVEN ANALYSIS

Investment Value Including Margin Rs. 500000

Year ended	Year 1 Projected	Year 2 Projected	Year 3 Projected	Year 4 Projected	Year 5 Projected
Cash Flow as per Statement of Income Less : Interest on Loan	5,30,700 41,945	7,39,695 35,073	9,84,275 26,318	12,69,451 16,695	15,52,966
Less : Estimated Drawings/Personal Expenses	2,65,350	3,69,848	4,92,137	6,34,725	7,76,483
Net Cash Flow	2,23,405	3,34,775	4,65,819	6,18,030	7,70,366
Cumulative Cash Flow	2,23,405	5,58,180	10,23,999	16,42,029	24,12,396

Break Even Investment (in years)

1 Year and 9.9 Months

