



# Detailed Project Report

## Areca Leaf Plates, Cutleries and Cups Making Unit



By



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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:**



Areca leaf plates are plates made from the leaves of the Areca palm tree, which is native to tropical regions in Asia. The plates are created by collecting the fallen Areca leaves, cleaning them thoroughly, and then pressing them into a variety of plate shapes and sizes.

Areca leaf plates are becoming increasingly popular as an eco-friendly alternative to traditional paper or plastic plates. They are biodegradable, compostable, and made from renewable materials, making them a great choice for people who want to reduce their environmental impact.

## **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:

- i. 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 self-help 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 is primarily focused on the development of Karnataka state in collaboration and co-creation initiatives.

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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 CFCs.

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 facilitating Common Facility Centres, Preparation of DPR, Govt. liaising, market linkage activities, brand awareness, branding initiatives, value addition of the products produced by clusters etc. In this, regards we have collaborated and working with MSME, ESTC, IDEMI, Tribes India, NRLM and WCD to support rural masses in terms upgrading their livelihood opportunities.

#### **4. NAME OF PRODUCT AND TECHNOLOGY**

##### **Areca Leaf Plate and Cup Making Machine**

Areca leaf plates and cups are a popular eco-friendly alternative to traditional disposable plates and cups made from plastic or Styrofoam. These products are made from the leaves of the Areca palm tree, which are collected, cleaned, and then heat-pressed to form a variety of tableware items.

There are several types of Areca leaf plate and cup making machines available in the market, ranging from manual to semi-automatic and fully automatic machines. These





plates and cups are an excellent alternative to single-use plastic and paper products, which are not biodegradable and contribute to environmental pollution.

When you use an Areca cup and plate making machine, you can produce plates and cups in various sizes and shapes, depending on the molds that come with the machine. The plates and cups can be used for a variety of purposes, such as serving food at events, restaurants, and homes.

Dakshina Kannada district is known for its rich cultural heritage and is home to several areca leaf plate and cup making units. Chikmagalur district is a major producer of coffee and is also a hub for areca nut cultivation, making it an ideal location for areca leaf plate and cup production.

## **5. DELIVERABLES AND MARKET OF THE PRODUCT**

- Areca leaf plates: These plates come in various shapes and sizes and can be used for serving food at events and parties. They are also ideal for use in restaurants and cafeterias.
- Areca leaf bowls: These bowls are perfect for serving soups, stews, and curries.
- Areca leaf cups: These cups come in various sizes and can be used for serving hot and cold beverages, such as tea, coffee, and juice.
- Areca leaf trays: These trays are ideal for serving appetizers, snacks, and desserts.

Overall, Areca cup and plate making machines offer a sustainable and eco-friendly solution to the growing problem of plastic and paper waste.



## **Project Assumptions:**

This model DPR for ARECA Leaf Plates and Cups Making Machine 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. Therefore, land and civil infrastructures are assumed as already available with the entrepreneur.

<b>Table: Detailed Project Assumptions</b>		
Parameter	Value	
Assumed Capacity of the Areca Leaf Plates and Cups Making Unit:	100 kgs/day	
Utilization of capacity:	Year 1	70%
	Year 2	75%
	Year 3	80%
	Year 4	85%
	Year 5	90%
Working days per year:	200 days	
Working hours per day:	8-10 hours	
Average price of raw material:	Rs. 10/Kg	
Average sale price of product	Rs. 80/ Kg	



## Machineries



ARG Hydraulic Areca Leaf Plate and Cup Making Machine

Capacity:

1800-2000 Plates/Day

Material: Mild Steel and Aluminum

ARG Tech Machinery

**Machinery is also available in Bengaluru.**

## Market Output:

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

<u>Market Linkage</u> ❖ <u>E commerce</u> ❖ <u>Kirana Store</u>	❖ <u>Super Markets,</u> ❖ <u>Quick commerce</u> ❖ <u>Restaurants</u>
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## 6. ROLE OF EACH OF THE JLG MEMBERS

### How JLG will participate:

- 2 persons will be used to procurement of raw materials
- 4 persons for production
- 3 person for the logistics & sales
- 1person on training and monitoring process



## **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:

<b>Sl. No.</b>	<b>Details</b>	<b>Cost in Rs.</b>	<b>Percentage</b>
1	Bank Loan	2,25,000	90%
2	Govt of Karnataka contribution	225,00	10%
3	<b>Total</b>	<b>247500</b>	<b>100%</b>



Sl. No.	Details	Cost in Rs.
1	Machine Cost	1,07,500
2	Furniture	30,000
3	Working capital (Shed deposit, electric connection deposit, Miscellaneous and preoperative expenses)	1,10,000
	<b>TOTAL</b>	<b>Rs.2,47,500/-</b>

The proposed project implementation schedule is as follows:

Sl. 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

- Eco-friendly and sustainable: Areca leaf plates and cups are biodegradable and do not harm the environment. The machine that produces these products is also eco-friendly and sustainable, as it consumes less power and produces less waste.
- Cost-effective: Areca leaf plates and cups are relatively inexpensive to produce compared to plastic and paper plates and cups.
- Customizable: The machine can produce plates and cups of different sizes and shapes, and the molds can be customized according to specific requirements.
- Demand: With growing concerns about the environment, the demand for eco-friendly and sustainable products like Areca leaf plates and cups is increasing.

### II. Weakness

- Limited awareness: The use of Areca leaf plates and cups is not yet widespread, and many people are not aware of the benefits of using these products.
- Availability of raw materials: The availability of Areca palm leaves can be a constraint as it is limited to specific regions.
- Skill required: Manufacturing Areca leaf plates and cups requires some level of skill and training, which may be a barrier to entry for some entrepreneurs.



### III. Opportunities

- Growing demand for eco-friendly products: As more people become aware of the impact of plastic on the environment, the demand for eco-friendly products like Areca leaf plates and cups is likely to increase.
- Export market: There is a significant opportunity to export Areca leaf plates and cups to other countries that are looking for sustainable and eco-friendly alternatives to plastic and paper plates and cups.
- Diversification: Areca leaf plate and cup making machines can be used to produce other eco-friendly products such as bowls and trays.

### IV. Threats

- Competition: There is competition from other eco-friendly products such as bamboo plates and cups.
- Regulatory environment: Changes in government policies or regulations that may affect the use or production of Areca leaf plates and cups could pose a threat to the industry.
- Quality concerns: Poor quality products could harm the reputation of the Areca leaf plate and cup making machine industry.





## **11. YOUTH EMPOWERMENT IMPACT OF THE PROJECT ON ECOSYSTEM**

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.

## **12. THE END PRODUCTS PRODUCED FROM THE MACHINE**





## 13. FINANCIALS

### CASH FLOW STATEMENT

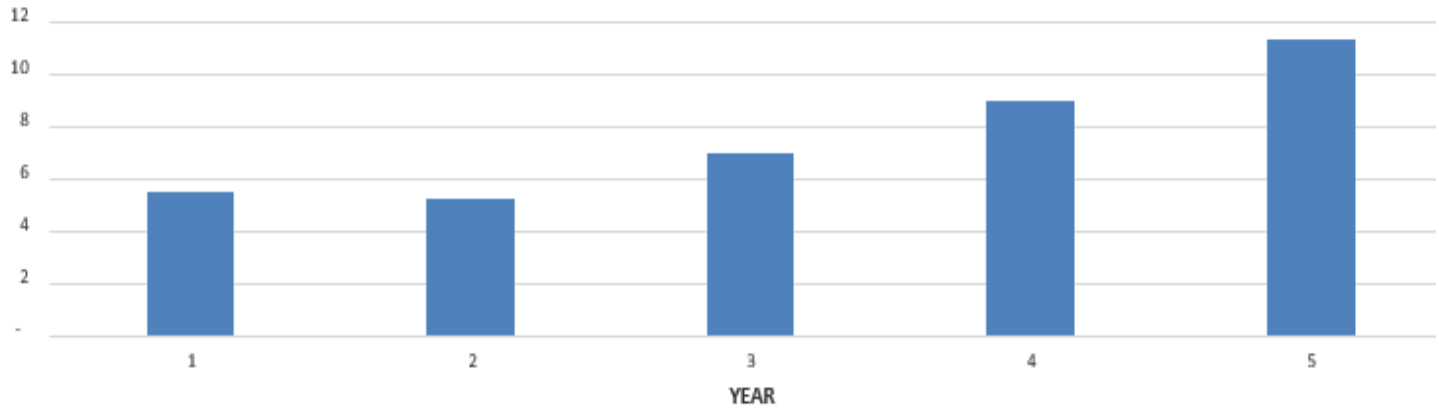
Particulars	Year				
	Year 1	Year 2	Year 3	Year 4	Year 5
<b><u>REVENUE FROM SALE OF ARECA LEAF PLATES ETC</u></b>					
No. of working days in a Year	300	300	300	300	300
Less : Days for off Season	100	100	100	100	100
No. of Machine Running days in a Year	200	200	200	200	200
Capacity of the machine in Kgs per day	100	100	100	100	100
Production in KG	90%	90%	90%	90%	90%
Utilisation of the Capacity (%)	70%	75%	80%	85%	90%
Production during the year (in KGs)	12,600	13,500	14,400	15,300	16,200
Rate per KG	80	88	97	106	117
<b>Gross Revenue earned per annum - A</b>	<b>10,08,000</b>	<b>11,88,000</b>	<b>13,93,920</b>	<b>16,29,144</b>	<b>18,97,474</b>
<b><u>REVENUE FROM SALE OF WASTE</u></b>					
No. of Machine Running days in a Year	200	200	200	200	200
Capacity of the machine in Kgs per day	100	100	100	100	100
Utilisation of the Capacity (%)	70%	75%	80%	85%	90%
Waste in %	10%	10%	10%	10%	10%
Waste in in Kgs	1,400	1,500	1,600	1,700	1,800
Rate per kg	10	11	11	12	12
<b>Gross Revenue earned per annum - B</b>	<b>14,000</b>	<b>15,750</b>	<b>17,640</b>	<b>19,680</b>	<b>21,879</b>
<b><u>COST OF RAW MATERIALS</u></b>					
Consumption of Raw Materials	14,000	15,000	16,000	17,000	18,000
Rate per KG	10	11	12	13	15
<b>Total Cost of Raw Material per annum - C</b>	<b>1,40,000</b>	<b>1,65,000</b>	<b>1,93,600</b>	<b>2,26,270</b>	<b>2,63,538</b>
<b><u>EXPENDITURE</u></b>					
Salaries and Wages	3,60,000	3,96,000	4,35,600	4,79,160	5,27,076
Electricity Charges	96,000	1,05,600	1,16,160	1,27,776	1,40,554
Rent	1,20,000	1,32,000	1,45,200	1,59,720	1,75,692
Transportation and Travelling	30,000	33,000	36,300	39,930	43,923
Packaging and Promotion Expenses	24,000	26,400	29,040	31,944	35,138
Miscellaneous Expense	24,000	26,400	29,040	31,944	35,138
<b>Total Expenditure - D</b>	<b>6,54,000</b>	<b>7,19,400</b>	<b>7,91,340</b>	<b>8,70,474</b>	<b>9,57,521</b>
<b>Net Profit before Interest /Cash Flow (A+B-C-D)</b>	<b>2,28,000</b>	<b>3,19,350</b>	<b>4,26,620</b>	<b>5,52,080</b>	<b>6,98,293</b>



**PROJECTED TERM LOAN DSCR STATEMENT**

	Year 1	Year 2	Year 3	Year 4	Year 5
	Projected	Projected	Projected	Projected	Projected
Profit available to service the debt	2,28,000	3,19,350	4,26,620	5,52,080	6,98,293
Loan	20,536	44,105	48,482	53,294	58,583
Repayment	20,972	17,536	13,159	8,347	3,058
Interest on Term Loan					
<b>Debt to be Served</b>	<b>41,508</b>	<b>61,641</b>	<b>61,641</b>	<b>61,641</b>	<b>61,641</b>
Debt Service Coverage Ratio	5	5	7	9	11
<b>AVERAGE DSCR</b>	<b>8</b>				

**DEBT SERVICE CEVERAGE RATIO**



**BREAKEVEN ANALYSIS**

**Investment Value Including Margin Rs. 250000**

Year ended	Year 1	Year 2	Year 3	Year 4	Year 5
	Projected	Projected	Projected	Projected	Projected
Cash Flow as per Statement of Income					
	2,28,000	3,19,350	4,26,620	5,52,080	6,98,293
Less : Interest on Loan	20,972	17,536	13,159	8,347	3,058
Less : Estimated Drawings/Personal Expenses	1,14,000	1,59,675	2,13,310	2,76,040	3,49,147
<b>Net Cash Flow</b>	<b>93,028</b>	<b>1,42,139</b>	<b>2,00,151</b>	<b>2,67,692</b>	<b>3,46,088</b>
<b>Cumulative Cash Flow</b>	<b>93,028</b>	<b>2,35,166</b>	<b>4,35,317</b>	<b>7,03,009</b>	<b>10,49,098</b>
<b>Break Even Investment (in years)</b>	<b>2 Year and 0.9 Months</b>				



## Repayment Schedule

### DETAIL REPAYMENT SCHEDULE

Year	Quarter	Loan Installment	Principal Payment	Loan Outstanding	Interest at 9.5%	Cumulative Interest
1	1	5,344	-	2,25,000	5,344	20,972
	2	5,344	-	2,25,000	5,344	
	3	15,410	10,146	2,14,854	5,264	
	4	15,410	10,389	2,04,464	5,021	
2	1	15,410	10,638	1,93,826	4,772	17,536
	2	15,410	10,893	1,82,933	4,518	
	3	15,410	11,154	1,71,780	4,257	
	4	15,410	11,421	1,60,359	3,990	
3	1	15,410	11,694	1,48,665	3,716	13,159
	2	15,410	11,974	1,36,692	3,437	
	3	15,410	12,260	1,24,431	3,150	
	4	15,410	12,554	1,11,877	2,856	
4	1	15,410	12,854	99,023	2,556	8,347
	2	15,410	13,162	85,860	2,248	
	3	15,410	13,477	72,383	1,933	
	4	15,410	13,800	58,583	1,610	
5	1	15,410	14,130	44,453	1,280	3,058
	2	15,410	14,469	29,984	942	
	3	15,410	14,815	15,170	595	
	4	15,410	15,170	0	241	
<b>Total</b>		<b>2,88,074</b>	<b>2,25,000</b>		<b>63,074</b>	<b>63,074</b>



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