

# **Detailed Project Report**

# Paper Egg Tray Manufacturing





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:



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

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 Development Goal of 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 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

### Paper Egg Tray Manufacturing Unit:

A paper egg tray manufacturing machine is a type of equipment that is used to produce paper egg trays in large quantities. The machine can make egg trays of different sizes and shapes by molding and drying a mixture of recycled paper and water. Egg trays are typically designed to hold a dozen eggs, though some are also made to hold 18 or 24 eggs. They are usually moulded into a series of small, individual pockets, each of which is designed to hold one egg. The pockets help keep the eggs in place and prevent them from rolling around and potentially cracking during transport.

### 5. DELIVERABLES AND MARKET OF THE PRODUCT

• **Protection**: Egg trays are designed to protect eggs from damage during transport, by preventing them from rolling around and colliding with each other or with other surfaces. The individual pockets of an egg tray help cushion the eggs and prevent them from breaking.



- **Convenience**: Egg trays are convenient to use, as they are easy to stack and transport, whether you are transporting a small or large number of eggs. They can also be easily disposed of or recycled after use.
- **Durability**: Egg trays are designed to be strong and durable, to ensure that they can withstand the rigors of transport and protect the eggs inside.
- **Sustainability**: Egg trays made from paper pulp are often made from recycled materials, making them an eco-friendly option. They are also biodegradable and can be easily disposed of or recycled after use.
- **Cost-effectiveness**: Egg trays are a cost-effective way to transport eggs, as they are typically made from inexpensive materials and can be reused multiple times (in the case of plastic trays). This makes them an affordable option for egg producers and retailers.

**Project Assumptions**: This model DPR for Egg Tray Manufacturing Unit 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 DPR are given in Table. Therefore, land and civil infrastructures are assumed as already available with the entrepreneur.

| Table: Detailed Project Assumptions |       |  |  |  |
|-------------------------------------|-------|--|--|--|
| Parameter                           | Value |  |  |  |



| Assumed Capacity of the  |             |     |
|--------------------------|-------------|-----|
| Paper Egg Tray           | 100 kgs per |     |
| Manufacturing Unit:      | day         |     |
| Utilization of capacity: | Year 1      | 70% |
|                          | Year 2      | 70% |
|                          | Year 3      | 75% |
|                          | Year 4      | 80% |
|                          | Year 5      | 85% |
| Working days per year:   | 300 days    |     |
| Working hours per day:   | 8-10 hours  |     |
| Average price of raw     |             |     |
| material:                | Rs. 40/ kg  |     |
| Average sale price of    |             |     |
| product                  | Rs. 90/ kg  |     |

### **Machineries**



| Three Phase Paper Automatic |  |  |  |  |  |
|-----------------------------|--|--|--|--|--|
| Egg Tray Machine            |  |  |  |  |  |
| Capacity: 100 kg per day    |  |  |  |  |  |
| Voltage: 320V               |  |  |  |  |  |
| Material: Mild Steel        |  |  |  |  |  |
| Panchal Engine Works        |  |  |  |  |  |
| Kurukshetra, Haryana        |  |  |  |  |  |

### Machinery is also available in Bengaluru and Coimbatore.

#### Market Output:

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



#### Market Linkage

- Grocery Stores
- Poultry Farms
- ✤ Egg Distributors
- Packaging Manufacturers

\* Supermarkets and Departmental

**Stores** 

- E-commerce
- Wholesalers

# 6. ROLE OF EACH OF THE JLG MEMBERS

#### How JLG will participate:

- 2 persons will be used to procurement of raw materials
- 2 persons for production
- 2 persons for the logistics & sales
- 2 persons for sieving
- 2 persons for maintenance of machines

### 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. | Percentage |
|---------|------------------|-------------|------------|
| 1       | Bank Loan        | 4,50,000    | 90%        |
| 2       | JLG contribution | 45,000      | 10%        |
| 3       | Total            | 4,95,000    | 100%       |

| SI. No. | Details      | Cost in Rs. |
|---------|--------------|-------------|
|         |              |             |
| 1       | Machine Cost | 3,15,000    |
| 2       | Furniture    | 50,000      |



|   | TOTAL  | 4,95,000 |
|---|--|----------|
|   | connection deposit, Miscellaneous and preoperative expenses) |          |
| 3 | Working capital (Shed deposit, electric                      | 1,30,000 |

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<br>erection   |
| 6       | Commercial Usage                            | Within 2 months from<br>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

- Growing awareness among entrepreneurs about the need for modernization, managerial and technical skill.
- Egg trays provide a safe and convenient way to transport eggs, protecting them from damage during transport and preventing them from rolling around and breaking.
- They are available in a range of sizes and configurations to accommodate different quantities of eggs.
- Egg trays made from paper pulp are an eco-friendly option, as they are made from recycled materials and are biodegradable.
- The cluster members are having good coordination among themselves and are serious about resolving cluster problems.

#### II. <u>Weakness</u>

- Quality control issues, as some manufacturers may use low-quality ingredients, which can lead to a decrease in the quality of the final product.
- They may not provide as much protection for eggs as other packaging options, such as foam or molded plastic trays.
- Some egg trays may not be as durable as other packaging options and may not hold up as well during transport or when exposed to moisture.



#### III. <u>Opportunities</u>

- There is an increasing demand for eco-friendly and sustainable packaging options, which could benefit paper pulp egg trays.
- Expansion of market reach by utilizing e-commerce platforms and marketing through social media.
- Egg trays could be marketed to a wider range of customers, including small-scale egg producers and backyard chicken keepers.

#### 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.
- The increasing use of plastic packaging in general may reduce demand for ecofriendly packaging options, such as paper pulp egg trays.

# 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**

- Reducing Waste: Paper egg trays are made from recycled paper, which reduces the amount of waste that would otherwise end up in landfills or oceans. By reusing paper that has already been produced, this process helps reduce the need for additional raw materials and conserves resources.
- **Biodegradable:** Unlike plastic or Styrofoam egg trays, paper egg trays are biodegradable and can be easily decomposed in a short period of time. This helps to reduce the amount of non-biodegradable waste in the environment.
- **Carbon Footprint Reduction**: The production of paper egg trays typically requires less energy and emits less greenhouse gas than the production of plastic or Styrofoam egg trays. This can help to reduce the overall carbon footprint of the business.

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







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

| Year 1    | Year 2   | Voor 2   |   |   |
|-----------|--|--|---|---|
|           |  | rear 5   | Year 4  | Year 5  |
|           |  |  |   |   |
| 300       | 300  | 300  | 300   | 300   |
| -         | -  | -  | -   | -   |
| 300       | 300  | 300  | 300   | 300   |
| 100       | 100  | 100  | 100   | 100   |
| 100%      | 100%   | 100%   | 100%  | 100%  |
| 70%       | 70%  | 75%  | 80%   | 85%   |
| 21,000    | 21,000   | 22,500   | 24,000  | 25,500  |
| 90        | 99   | 109  | 120   | 132   |
| 18,90,000 | 20,79,000  | 24,50,250  | 28,74,960   | 33,60,110   |
|           |  |  |   |   |
|           |  |  |   |   |
| 21,000    | 21,000   | 22,500   | 24,000  | 25,500  |
| 40        | 44   | 48   | 53  | 59  |
| 8,40,000  | 9,24,000   | 10,89,000  | 12,77,760   | 14,93,382   |
|           |  |  |   |   |
|           |  |  |   |   |
| 3,60,000  | 3,96,000   | 4,35,600   | 4,79,160  | 5,27,076  |
| 1,08,000  | 1,18,800   | 1,30,680   | 1,43,748  | 1,58,123  |
| 25,000    | 27,500   | 30,250   | 33,275  | 36,603  |
| 1,14,000  | 1,25,400   | 1,37,940   | 1,51,734  | 1,66,907  |
| 36,000    | 39,600   | 43,560   | 47,916  | 52,708  |
| 25,000    | 27,500   | 30,250   | 33,275  | 36,603  |
| 6,68,000  | 7,34,800   | 8,08,280   | 8,89,108  | 9,78,019  |
| 3,82,000  | 4,20,200   | 5,52,970   | 7,08,092  | 8,88,709  |
|           | 300<br>-<br>300<br>100<br>100%<br>70%<br>21,000<br>90<br>18,90,000<br>21,000<br>40<br>8,40,000<br>3,60,000<br>1,08,000<br>25,000<br>1,14,000<br>36,000<br>25,000<br>6,68,000 | 300 300   - -   300 300   100 100   100% 100%   100% 100%   100% 100%   100% 70%   21,000 21,000   90 99   18,90,000 20,79,000   21,000 21,000   21,000 21,000   21,000 21,000   40 44   8,40,000 9,24,000   3,60,000 3,96,000   1,08,000 1,18,800   25,000 27,500   1,14,000 1,25,400   36,000 39,600   25,000 27,500   3,82,000 4,20,200 | 300   300   300     -   -   -     300   300   300     100   100   100     100%   100%   100%     100%   100%   100%     100%   100%   100%     100%   100%   100%     100%   70%   75%     21,000   21,000   22,500     90   99   109     18,90,000   20,79,000   24,50,250     21,000   21,000   22,500     40   44   48     8,40,000   9,24,000   10,89,000     40   44   48     3,60,000   3,96,000   4,35,600     1,08,000   1,18,800   1,30,680     25,000   27,500   30,250     1,14,000   1,25,400   1,37,940     36,000   39,600   43,560     25,000   27,500   30,250     6,68,000   7,34,800   8,08,280 <td< td=""><td>300   300   300   300     -   -   -   -     300   300   300   300     100   100   100   100     100%   100%   100%   100%     100%   100%   100%   100%     100%   100%   100%   100%     70%   70%   75%   80%     21,000   21,000   22,500   24,000     90   99   109   120     18,90,000   20,79,000   24,50,250   28,74,960     21,000   21,000   22,500   24,000     40   44   48   53     8,40,000   9,24,000   10,89,000   12,77,760     40   44   48   53     8,40,000   3,96,000   4,35,600   4,79,160     1,08,000   1,18,800   1,30,680   1,43,748     25,000   27,500   30,250   33,275     1,14,000   1,25,400   1</td></td<> | 300   300   300   300     -   -   -   -     300   300   300   300     100   100   100   100     100%   100%   100%   100%     100%   100%   100%   100%     100%   100%   100%   100%     70%   70%   75%   80%     21,000   21,000   22,500   24,000     90   99   109   120     18,90,000   20,79,000   24,50,250   28,74,960     21,000   21,000   22,500   24,000     40   44   48   53     8,40,000   9,24,000   10,89,000   12,77,760     40   44   48   53     8,40,000   3,96,000   4,35,600   4,79,160     1,08,000   1,18,800   1,30,680   1,43,748     25,000   27,500   30,250   33,275     1,14,000   1,25,400   1 |



#### **DSCR STATEMENT**

#### 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 | 3,82,000  | 4,20,200  | 5,52,970  | 7,08,092  | 8,88,709  |
| 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          | 5         | 3         | 4         | 6         | 7         |
| AVERAGE DSCR                         |           |           | 5         |           |           |







#### **BREAKEVEN ANALYSIS**

Investment Value Including Margin Rs. 500000

| Year<br>ended                                  | Year 1<br>Projected | Year 2<br>Projected | Year 3<br>Projected | Year 4<br>Projected | Year 5<br>Projected |
|--|---------------------|---------------------|---------------------|---------------------|---------------------|
|  |                     |                     |                     |                     |                     |
| Cash Flow as per Statement of Income           | 3,82,000            | 4,20,200            | 5,52,970            | 7,08,092            | 8,88,709            |
| Less : Interest on Loan                        | 41,945              | 35,073              | 26,318              | 16,695              | 6,116               |
| Less : Estimated Drawings/Personal<br>Expenses | 1,91,000            | 2,10,100            | 2,76,485            | 3,54,046            | 4,44,354            |
| Net Cash Flow                                  | 1,49,055            | 1,75,027            | 2,50,167            | 3,37,351            | 4,38,238            |
| Cumulative Cash Flow                           | 1,49,055            | 3,24,082            | 5,74,249            | 9,11,600            | 13,49,838           |
| Break Even Investment (in year                 | rs)                 | 2 \                 | /ear and 8.4 N      | lonths              |                     |

#### **REPAYMENT**

#### DETAIL REPAYMENT SCHEDULE

| Year | Quarter | Loan Installment | Principal Payment | Loan Outstanding | Interest at 9.5% | <b>Cumulative Interest</b> |
|------|---------|------------------|-------------------|------------------|------------------|----------------------------|
| 1    | 1       | 10,688           | -                 | 4,50,000         | 10,688           |                            |
|      | 2       | 10,688           | -                 | 4,50,000         | 10,688           |                            |
|      | 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 <i>,</i> 969  | 1,884            |                            |
|      | 3       | 30,821           | 29,630            | 30,339           | 1,191            |                            |
|      | 4       | 30,821           | 30,339            | 0                | 482              | 6,116                      |
| Т    | otal    | 5,76,147         | 4,50,000          |                  | 1,26,147         | 1,26,147                   |





#### Designated Contact Details for this project

Email ID : contact@vkfoundations.org Mobile : 9845938269 / 9986024478 / 9902256304 Website: vkfoundations.org









