DETAILED PROJECT REPORT

EV LOADER SOLUTION SYSTEMS

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:

An EV loader, also known as an electric vehicle (EV) charger or EV charging station, is a Device that is used to charge the batteries of electric vehicles. It provides a source of electrical power to recharge the battery of an electric vehicle, allowing it to run for longer periods of time before requiring another charge.

EV loaders come in different types, including Level 1, Level 2, and Level 3 chargers. Level 1 chargers are the most basic type of EV loader and can be plugged into a standard household outlet. Level 2 chargers are faster and require a dedicated circuit and a higher voltage electrical connection. Level 3 chargers, also known as DC fast chargers, are the fastest type of EV loader and are typically found at public charging stations.

EV loaders can be installed in different locations, including private homes, workplaces, public areas, and commercial properties. The availability of EV loaders is an important factor in the adoption of electric vehicles, as it enables EV drivers to charge their vehicles conveniently and reliably.

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

EV Loader Solution Systems

EV LOADER is a solution that has been created to provide electric vehicle drivers with more accessible and convenient charging options. It is a flexible and scalable infrastructure that can be easily installed and managed by businesses, individuals, and governments.

One of the significant advantages of EV LOADER is its ability to cater to a wide range of charging requirements. The system supports various charging standards such as CCS, CHAdeMO, and AC, making it compatible with most electric vehicle models. It can also be configured to provide fast or regular charging, depending on the user's needs.

EV LOADER is its modular design, which enables it to be expanded and customized easily. It can be installed in different locations, from private garages to public parking lots, and configured to support one or multiple charging stations. Furthermore, it can be integrated with other technologies such as solar panels or energy storage solutions to make it more sustainable and efficient.

EV LOADER also provides advanced monitoring and management capabilities through its cloud-based platform. Users can track usage, Revenue, and station performance and generate reports. Additionally, the system comes equipped with safety features like fire suppression systems and remote shutdown capabilities to ensure user and vehicle safety.

In summary, EV LOADER is a comprehensive solution that meets the increasing demand for electric vehicle charging infrastructure. Its flexibility and scalability make it suitable for various applications, from small businesses to large public installations. With its advanced monitoring and management capabilities, EV LOADER makes it easy for users to manage their charging infrastructure and provide electric vehicle drivers with a seamless charging experience.

5. DELIVERABLES AND MARKET OF THE PRODUCT

The EV Loader Solution Systems provides several deliverables to meet the changing needs of electric vehicle drivers. Here are some of the key deliverables:

- **Charging Stations:** EV LOADER offers charging stations that support multiple charging standards, including CCS, CHAdeMO, and AC. The charging stations can be configured to provide fast or regular charging, depending on the user's needs.
- **Modular Design:** EV LOADER's modular design allows for easy expansion and customization. The system can be installed in various locations and configured to support one or multiple charging stations.
- **Scalability:** EV LOADER is scalable and can support a range of applications, from small businesses to large public installations.
- **Compatibility:** EV LOADER is compatible with most electric vehicle models, ensuring that drivers can easily access charging stations.

- **Monitoring and Management:** EV LOADER provides a cloud-based platform that enables users to monitor the performance of their charging stations, track usage and Revenue, and generate reports.
- **Safety Features:** EV LOADER is equipped with various safety features, such as fire suppression systems and remote shutdown capabilities, to ensure user and vehicle safety.
- **Integration:** EV LOADER can be integrated with other technologies such as solar panels or energy storage solutions to enhance its sustainability and efficiency.

Overall, the EV Loader Solution Systems delivers a comprehensive and flexible infrastructure for electric vehicle charging. Its modular design, scalability, compatibility, monitoring, and management capabilities, and safety features make it an ideal solution for businesses, individuals, and governments looking to provide electric vehicle charging infrastructure.

Project Assumptions:

This model DPR for EV Loader Solution System 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.

Table: Detailed Project Assumptions		
Parameter	Value	
Assumed Capacity of the Loader per day in kms	150 Kms	
Utilization of capacity:	Year 1	65%
	Year 2	70%
	Year 3	75%
	Year 4	80%
	Year 5	85%
Working days per year: Working hours per day:	300 days 8-10 hours	
Rate per KM	30 Kms	

Machineries

Kinetic Green→Electric Loader
Capacity- 90KM per Charge
4 Hours For full charge
500 Kg Loading Capacity
Pune, Maharashtra

Market Output:

VKF will hand hold them to facilitating better market linkage.

The end users will be as follows:

Market Linkage ❖ Gas delivery, ❖ Last mile connectivity on delivery	❖ Village vegetable market, ❖ Farmers produce, ❖ Shifting Loading Services within city

6. ROLE OF EACH OF THE JLG MEMBERS

How JLG will participate:

- 2 persons for Servicing
- 2 persons for logistics & sales
- 1 person for maintenance
- 1 person for marketing

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:

Sl. No.	Details	Cost in Rs.	Percentage
1	Bank Loan	3,78,000	90%
2	JLG contribution	42,000	10%
3	**Total**	**4,20,000**	**100%**

Sl. No.	Details	Cost in Rs.
1	Machine Cost (Truck Cost)	2,50,000
2	Miscellaneous and preoperative expenses	50,000
3	Working capital (Shed deposit, electric connection deposit,)	1,20,000
	TOTAL	**4,20,000**

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. Strengths

- Eco-friendliness: The EV Loader Solution Systems is environmentally friendly and produces no emissions, making it an attractive option for environmentally conscious customers.
- Mobility: The EV Loader Solution Systems is mobile and can reach a variety of locations, making it accessible to a wide range of customers.

- Cost-Effective: The EV Loader Solution Systems is cheaper to operate and maintain compared to traditional food trucks, due to lower fuel and maintenance costs.

II. Weaknesses

- The machines require regular maintenance, which can add to the overall cost of ownership.
- Products have lower export potential as there is poor quality due to lack of proper technologies. Hence, there is a need to popularize scientific and eco-friendly methods of tofu making.
- 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.
- Limited Range: The range of an EV Loader Solution Systems is limited by the battery's capacity, which can limit its mobility and accessibility.
- Limited Power Supply: The power supply required to recharge the EV Loader's battery can be limited in rural areas, which can hinder its operation.
- Higher Initial Cost: The initial cost of purchasing an EV Loader Solution Systems can be higher than a traditional loader, which can be a barrier to entry for some entrepreneurs.

III. Opportunities

- 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 products and value addition products also can be done within JLG members.
- Young JLG members have long way to go with new Innovation in the recycle production it will help to create global impact on recycling.
- Growing Demand: There is a growing demand for eco-friendly and sustainable food options, which the EV Loader Solution Systems can cater to.
- Mobile Ordering: The use of mobile apps and online ordering can help the EV Loader Solution Systems reach a wider customer base and improve its efficiency.
- New Markets: The EV Loader Solution Systems can explore new markets, such as corporate Events, music festivals, and catering, to create additional revenue streams.

IV. Threats

- Due to poor market access the profitability of the JLG members may fall bit low Level. This may discourage initially to JLG members.
- Main attributed to less profitability of plastic processing industry is due to lower price at the beginning and JLG members need to work hard.
- Competition: The EV Loader Solution Systems faces competition from traditional food trucks and restaurants that offer similar food options.

- Regulatory Challenges: The regulatory environment surrounding the EV Loader Solution Systems can be complex, especially in rural areas, where permits and licenses may be limited.
- Technology Limitations: The technology used in the EV Loader Solution Systems is still Evolving, which can present challenges in terms of battery life, charging infrastructure, and kitchen equipment.

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.

Ecosystem Support from Project

- **Longevity and durability:** They are often made to last for generations and can be repaired and maintained over time, reducing the need for frequent replacement and reducing waste**.**

12. THE SERVICES WILL BE PROVIDED FROM EV LOADER SOLUTION SYSTEMS

13. FINANCIALS

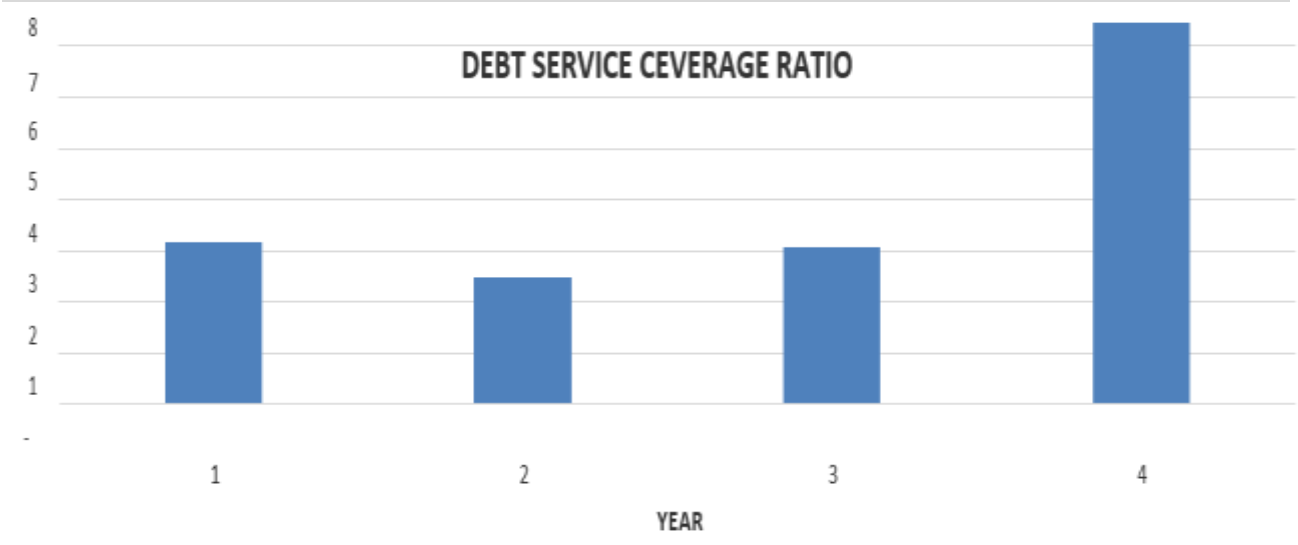
CASH FLOW STATEMENT

Year / PARTICULARS	Year 1	Year 2	Year 3	Year 4	Year 5
REVENUE FROM SALE OF EV LOADER SYSTEM					
No. of working days in a Year	300	300	300	300	300
Capacity of the Vehicle per Day in Kms	150	150	150	150	150
Utilisation of the Capacity (%)	65%	70%	75%	80%	85%
Number of kilo meters in a year	29,250	31,500	33,750	36,000	38,250
Rate per Kilo meter	30	33	36	40	44
Gross Revenue earned per annum - A	**8,77,500**	**10,39,500**	**12,25,125**	**14,37,480**	**16,80,055**
EXPENDITURE					
Salaries and Wages	2,88,000	3,31,200	3,80,880	4,38,012	5,03,714
Power and Fuel Expenses	1,75,500	2,07,900	2,45,025	2,87,496	3,36,011
Repairs and Maintenance	78,000	85,800	94,380	1,03,818	1,14,200
Miscellaneous Expenses	50,000	55,000	60,500	66,550	73,205
Total Expenditure - B	**5,91,500**	**6,79,900**	**7,80,785**	**8,95,876**	**10,27,130**
Net Profit before Interest /Cash Flow (A-B)	**2,86,000**	**3,59,600**	**4,44,340**	**5,41,604**	**6,52,925**

DSCR STATEMENT

PROJECTED TERM LOAN DSCR STATEMENT

	Year 1	Year 2	Year 3	Year 4
	Projected	Projected	Projected	Projected
Profit available to service the debt	**2,86,000**	**3,59,600**	**4,44,340**	**5,41,604**
Loan Repayment	55,790	1,19,820	1,31,711	70,679
Interest on Term Loan	34,816	25,482	13,590	1,971
Debt to be Served	**90,606**	**1,45,301**	**1,45,301**	**72,651**
Debt Service Coverage Ratio	3	2	3	7
AVERAGE DSCR	**4**			



BREAKEVEN ANALYSIS

Investment Value Including Margin
Rs. 420000

Year ended	Year 1 Projected	Year 2 Projected	Year 3 Projected	Year 4 Projected	Year 5 Projected
Cash Flow as per Statement of Income	2,86,000	3,59,600	4,44,340	5,41,604	6,52,925
Less : Interest on Loan	34,816	25,482	13,590	1,971	-
Less : Estimated Drawings/Personal Expenses	1,43,000	1,79,800	2,22,170	2,70,802	3,26,463
Net Cash Flow	**1,08,184**	**1,54,318**	**2,08,580**	**2,68,831**	**3,26,463**
Cumulative Cash Flow	**1,08,184**	**2,62,502**	**4,71,082**	**7,39,913**	**10,66,375**
Break Even Investment (in years)	**2 Year and 9.1 Months**				

REPAYMENT SCHEDULE

DETAIL REPAYMENT SCHEDULE

Year	Quarter	Loan Installment	Principal Payment	Loan Outstanding	Interest at 9.5%	Cumulative Interest
1	1	8,978	-	3,78,000	8,978	
	2	8,978	-	3,78,000	8,978	
	3	36,325	27,565	3,50,435	8,760	
	4	36,325	28,225	3,22,210	8,101	34,816
2	1	36,325	28,900	2,93,310	7,425	
	2	36,325	29,592	2,63,717	6,733	
	3	36,325	30,301	2,33,417	6,025	
	4	36,325	31,026	2,02,391	5,299	25,482
3	1	36,325	31,769	1,70,622	4,557	
	2	36,325	32,529	1,38,093	3,796	
	3	36,325	33,308	1,04,785	3,017	
	4	36,325	34,105	70,679	2,220	13,590
4	1	36,325	34,922	35,758	1,404	
	2	36,325	35,758	0	568	1,971
Total		**4,53,859**	**3,78,000**		**75,859**	**75,859**

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