

# **DETAILED PROJECT REPORT**

# **EV Passenger System**



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:



An EV passenger vehicle refers to an electric vehicle designed to carry passengers. Unlike traditional gasoline-powered vehicles that use internal combustion engines to convert fuel into energy, EV passenger vehicles use electric motors powered by rechargeable batteries. EV passenger vehicles can range from small compact cars to large SUVs and minivans, and are becoming increasingly popular due to their environmental benefits and lower operating costs compared to gasoline-powered vehicles. They produce zero emissions and require less maintenance, as they have fewer moving parts than traditional vehicles.

Some popular examples of EV passenger vehicles include the Tesla Model S, Nissan Leaf, Chevrolet Bolt, and BMW i3, among many others.

## 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 Passenger Vehicle System**

Power Source: EV passenger vehicles are powered by electric motors, which are powered by rechargeable batteries. They do not rely on gasoline or diesel fuel like traditional vehicles.



EV passenger vehicles produce zero emissions, making them environmentally friendly and a great option for reducing carbon footprints. They also typically require less energy to operate compared to traditional vehicles.

The range of an EV passenger vehicle varies depending on the battery capacity and driving conditions. Most modern EVs can travel up to 200-300 miles on a single charge, although this can vary based on factors such as weather, driving style, and terrain.

Charging: EV passenger vehicles can be charged at home using a wall outlet or a dedicated EV charging station. They can also be charged at public charging stations, which are becoming more common in urban areas. EV passenger vehicles can be very fast and responsive, thanks to the instant torque of electric motors. They also tend to be quiet and smooth, providing a comfortable ride for passengers.

## 5. DELIVERABLES AND MARKET OF THE PRODUCT

- The deliverables of an EV passenger vehicle include the vehicle itself, as well as any associated components and services, such as charging infrastructure, battery replacement or maintenance, and software updates.
- In addition, manufacturers of EV passenger vehicles may also provide warranties, financing options, and customer support services to help customers with their purchase and ongoing use of the vehicle.
- The market for EV passenger vehicles is growing rapidly, driven by factors such as increasing environmental awareness, government incentives and



regulations, and technological advancements in battery and electric motor technology. In particular, the market for EV passenger vehicles is expected to grow significantly in the coming years, as more consumers and businesses adopt sustainable transportation solutions and as the cost of EVs continues to decrease.

## **Project Assumptions:**

This model DPR for EV Passenger Vehicle 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				
Capacity of the Vehicle					
per Day in Kms	240 kms/day				
Utilization of capacity:	Year 1	65%			
	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				
Rate per Kilo meter	15				



### **Machineries**



Khalsa-EV Khalsa Plus SS Passenger E
Rickshaw
Vehicle Capacity
4+1 Seater
Charger
16 amp Trontek
Uttar Pradesh

### Also available in Bangalore

## Market Output:

VKF will hand hold them to facilitating better market linkage.

The end users will be as follows:

### Market Linkage

- School Student transportation,
- Passenger transportation,
- ✤ Last mile connectivity,
- Tourist transportation

## 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. <u>SOFT INTERVENTION</u>

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	3,42,000	90%
2	JLG contribution	38,000	10%
3	Total	3,80,000	100%



SI. No.	Details	Cost in Rs.
1	EV Passenger System	2,20,000
2	Interior Cost	60,000
3	Working capital (Shed deposit, electric connection deposit, Miscellaneous and preoperative expenses)	1,30,000
	TOTAL	Rs.3,80,000/-

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. Strengths
- Environmental Benefits: EV passenger vehicles produce zero emissions, making them environmentally friendly and a great option for reducing carbon footprints.
- Lower Operating Costs: EV passenger vehicles typically require less energy to operate compared to traditional vehicles, leading to lower fuel costs and maintenance costs over time.
- Technology Advancements: Advances in battery and electric motor technology are making EV passenger vehicles more efficient, powerful, and affordable.
- Innovation: The EV passenger vehicle market is still relatively new, allowing for innovation and differentiation among competitors.
- II. <u>Weaknesses</u>
- The machines require regular maintenance, which can add to the overall cost of ownership.
- 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 passenger vehicle can still be limited compared to traditional vehicles, although this is improving over time.
- Charging Infrastructure: The availability and accessibility of charging infrastructure for EV passenger vehicles is still not as widespread as traditional fuel stations, which can limit their use for long-distance travel.
- Cost: The initial purchase price of an EV passenger vehicle can still be higher than a traditional vehicle, although this is decreasing over time.

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

- 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 Market: The market for EV passenger vehicles is growing rapidly, providing opportunities for new entrants and established players to capture market share.
- Government Incentives: Governments around the world are providing incentives for EV adoption, which can drive demand and make EVs more affordable for consumers.



 Emerging Markets: There are opportunities to expand the market for EV passenger vehicles in emerging markets, where there is growing demand for sustainable transportation solutions.

### 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.
- Competition: The EV passenger vehicle market is becoming increasingly competitive, with established automakers and new entrants vying for market share.
- Battery Supply: The supply of batteries for EV passenger vehicles could become a bottleneck if demand outstrips supply, potentially limiting growth in the market.
- Regulatory Environment: Changes in government regulations and incentives could impact the demand and adoption of EV passenger vehicles.

# 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.

## 12. THE SERVICES WILL BE PROVIDED FROM EV PASSENGER SYSTEM





## 13. FINANCIALS

#### CASH FLOW STATEMENT

Year					
Particulars	Year 1	Year 2	Year 3	Year 4	Year 5
REVENUE FROM SALE OF EV PASSENGER					
No. of working days in a Year	300	300	300	300	300
Capacity of the Vehicle per Day in Kms	240	240	240	240	240
Utilisation of the Capacity (%)	65%	70%	75%	80%	85%
Number of kilo meters in a year	46,800	50,400	54,000	57,600	61,200
Rate per Kilo meter	15	17	18	20	22
Gross Revenue earned per annum – A	7,02,000	8,31,600	9,80,100	11,49,984	13,44,044
EXPENDITURE					
Salaries and Wages	1,44,000	1,58,400	1,74,240	1,91,664	2,10,830
Electricity Charges	2,10,600	2,49,480	2,94,030	3,44,995	4,03,213
Repairs and Maintenance	60,000	66,000	72,600	79,860	87,846
Miscellaneous Expenses	60,000	66,000	72,600	79,860	87,846
Total Expenditure – B	4,74,600	5,39,880	6,13,470	6,96,379	7,89,736
Net Profit before Interest /Cash Flow (A-B)	2,27,400	2,91,720	3,66,630	4,53,605	5,54,308

## **DSCR STATEMENT**

### PROJECTED TERM LOAN DSCR STATEMENT

Year 1	Year 2	Year 3	Year 4
Projected	Projected	Projected	Projected
2,27,400	2,91,720	3,66,630	4,53,605
50,476	1,08,408	1,19,167	63,948
31,500	23,055	12,296	1,784
81,977	1,31,463	1,31,463	65,732
3	2	3	7
	4		
	Year 1 Projected 2,27,400 50,476 31,500 81,977 3	Year 1         Year 2           Projected         Projected           2,27,400         2,91,720           50,476         1,08,408           31,500         23,055           81,977         1,31,463           3         2           4         4	Year 1         Year 2         Year 3           Projected         Projected         Projected           2,27,400         2,91,720         3,66,630           50,476         1,08,408         1,19,167           31,500         23,055         12,296           81,977         1,31,463         1,31,463           3         2         3           4         4         4



# BREAKEVEN ANALYSIS

	Year 1	Year 2	Year 3	Year 4	Year 5
Year ended	Projected	Projected	Projected	Projected	Projected
Cash Flow as per Statement of Income	2,27,400	2,91,720	3,66,630	4,53,605	5,54,308
Less : Interest on Loan	31,500	23,055	12,296	1,784	-
Less : Estimated Drawings/Personal Expenses	1,13,700	1,45,860	1,83,315	2,26,802	2,77,154
Net Cash Flow	82,200	1,22,805	1,71,019	2,25,019	2,77,154
Cumulative Cash Flow	82,200	2,05,005	3,76,024	6,01,043	8,78,197
Break Even Investment (in years)		3 1	ear and 0.2 Mo	nths	

**Investment Value Including Margin Rs. 380000** 



## **REPAYMENT SCHEDULE**

#### DETAIL REPAYMENT SCHEDULE

Year	Quarter	Loan Installment	<b>Principal Payment</b>	Loan Outstanding	Interest at 9.5%	<b>Cumulative Interest</b>
1	1	8,123	-	3,42,000	8,123	
	2	8,123	-	3,42,000	8,123	
	3	32,866	24,940	3,17,060	7,926	
	4	32,866	25,537	2,91,524	7,329	31,500
2	1	32,866	26,148	2,65,376	6,718	
	2	32,866	26,774	2,38,602	6,092	
	3	32,866	27,415	2,11,187	5,451	
	4	32,866	28,071	1,83,115	4,795	23,055
3	1	32,866	28,743	1,54,372	4,123	
	2	32,866	29,431	1,24,941	3,435	
	3	32,866	30,136	94,805	2,730	
	4	32,866	30,857	63,948	2,009	12,296
4	1	32,866	31,596	32,352	1,270	
	2	32,866	32,352	0	514	1,784
Total		4,10,635	3,42,000		68,635	68,635

