

Project Profile

Pick And Drop Service in Ladakh



1. INTRODUCTION

Ladakh, a high-altitude Union Territory, has emerged as one of India's fastest-growing tourism hubs, attracting **over 700,000 visitors in 2023** (Ladakh Tourism Department). However, the region's transportation infrastructure struggles to meet demand due to extreme weather, rugged terrain, and seasonal road closures (e.g., Zoji La Pass). A **Pick and Drop Service** addresses these challenges by offering reliable, safe, and eco-friendly transport solutions tailored to Ladakh's unique needs. This service will cater to tourists, locals, and businesses, enhancing mobility while supporting the region's **carbon-neutral goals** under the *Ladakh Vision 2047*.

2. PRODUCT & ITS APPLICATION

Core Services:

1. Tourist-Centric Solutions:

- **Airport Transfers:** Lehigh Airport to hotels in Lehigh, Nubra, and Pangong.
- **Customized Tours:** Multi-day packages (e.g., "*Golden Triangle*": Lehigh-Pangong-Tso Moriri).
- **Adventure Logistics:** Shuttles for trekkers (Markha Valley, Chadar Trek) and bikers.

2. Local Mobility:

- **Daily Commutes:** Affordable rides for villagers in Zaskar, Changthang, and Dras.
- **School/Corporate Shuttles:** Safe transport for students and employees.

3. Specialized Services:

- **Medical Emergency Transport:** Partnering with SNM Hospital, Leh.
- **EV Charging Stations:** Solar-powered hubs along key routes (Leh-Kargil Highway).

USPs:

- **All-Terrain Fleet:** 4x4 SUVs (Mahindra Thar, Toyota Innova) and electric minibuses (Tata Starbus EV).
 - **Multilingual Drivers:** Trained in English, Hindi, Ladakhi, and basic Tibetan.
 - **Sustainability:** 30% electric vehicles (EVs) by Year 3, offsetting 50+ tons of CO2 annually.
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3. DESIRED QUALIFICATION FOR PROMOTER

- **Education:**
 - Bachelor's in Business Administration (Logistics/Tourism) or equivalent.
 - Certifications: PMP (Project Management Professional), EV Fleet Management.
 - **Experience:**
 - 3+ years in transport/logistics, preferably in mountainous regions.
 - Experience in crisis management (e.g., landslide response, medical emergencies).
 - **Skills:**
 - Proficiency in route optimization tools (Google Earth, RoadWarrior).
 - Knowledge of Ladakh's cultural nuances and tourist preferences.
 - **Local Partnerships:**
 - Ties with **Ladakh Taxi Union** and **Tourism Department** for permits.
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4. INDUSTRY LOOKOUT AND TRENDS

Growth Drivers:

- **Tourism Boom:** 25% YoY growth in adventure tourism (ATTA 2023).
- **Government Support:**
 - **FAME-II Subsidy:** 20% off EVs under the Faster Adoption of Manufacturing of Electric Vehicles scheme.
 - **Ladakh EV Policy:** Tax waivers for green transport initiatives.
- **Digital Transformation:** 60% of tourists book rides via apps (MakeMyTrip, Thrillophilia).

Challenges:

- **Seasonal Demand:** 80% of revenue generated May–October.
- **Operational Costs:** High fuel prices (₹110/liter diesel) and EV charging infrastructure gaps.

5. MARKET POTENTIAL & MARKETING ISSUES

Market Segmentation:

Segment	Target Audience	Revenue Potential (Annual)
Tourists	500,000+ visitors	₹8–10 crore
Locals	50,000+ rural residents	₹2–3 crore
Corporate	Hotels, NGOs, Govt. offices	₹1–2 crore

Marketing Strategies:

- **Digital:**

- **App Development:** *Ladakh RidePro* with real-time tracking, multilingual interface.
- **SEO/Social Media:** Blog series: *"10 Must-Visit Hidden Gems in Ladakh – How to Reach?"*
- **On-Ground:**
 - Kiosks at Leh Airport and Main Bazaar for last-minute bookings.
 - Partnerships with homestays for bundled stay+transport packages.
- **Sustainability Branding:**
 - Carbon-neutral badges for EV rides, promoting eco-conscious tourism.

Key Challenges & Solutions:

Challenge	Solution
Off-Season Low Demand	Discounted rates for locals, corporate contracts
Vehicle Maintenance	In-house garage with trained mechanics
EV Charging Gaps	Solar-powered stations at key tourist hubs

6. RAW MATERIAL & INFRASTRUCTURE REQUIREMENTS

Category	Items	Specifications
Vehicles	4x4 SUVs, EVs, minibuses	High ground clearance, heated interiors
Tech	GPS trackers, booking software	Integration with UPI, multilingual support
Charging Stations	Solar-powered EV chargers	4 stations along Leh-Pangong route

7. OPERATIONAL PROCESS

1. **Booking & Dispatch:**
 - **App/Website:** Real-time availability, dynamic pricing (peak/off-peak).
 - **AI-Driven Routing:** Avoid roadblocks (e.g., landslide-prone areas).
2. **Service Execution:**
 - **Safety Protocols:** Altitude sickness kits, emergency oxygen cylinders.
 - **Cultural Engagement:** Drivers share folklore during rides (e.g., Hemis Festival history).
3. **Post-Service:**
 - **Feedback Loop:** SMS/email surveys linked to loyalty discounts.

8. MANPOWER REQUIREMENT

Role	No.	Monthly Cost (INR)	Training
Drivers	15	30,000	Defensive driving, CPR certification
Customer Support	5	25,000	Multilingual (English, Hindi, Ladakhi)
EV Technicians	3	35,000	Tata Motors-certified EV training
Operations Manager	1	60,000	Logistics software (Route4Me)
Total	24	6,30,000	

9. IMPLEMENTATION SCHEDULE

Phase	Timeline	Key Activities	Milestones
Phase 1: Setup	Months 1–3	Procure vehicles, set up charging stations	10 EVs operational, app beta launch

Phase	Timeline	Key Activities	Milestones
Phase 2: Pilot	Months 4–6	Serve 500+ tourists, collect feedback	90% customer satisfaction
Phase 3: Expansion	Months 7–12	Launch in Kargil/Nubra, corporate tie-ups	₹1 crore+ revenue

10. COST OF PROJECT

Component	Cost (INR)	Breakdown
Vehicles	1,20,00,000	10 SUVs, 5 EVs, 3 minibuses
Charging Infrastructure	15,00,000	Solar panels, Tesla Superchargers
Tech & App Development	20,00,000	GPS, booking platform, cybersecurity
Marketing	10,00,000	Influencers, trade fairs, SEO
Contingency	15,00,000	Vehicle repairs, fuel hikes
Total	1,80,00,000	

11. MEANS OF FINANCE

Source	Amount (INR)	Terms
Promoter Equity	50,00,000	28% of total
Bank Loan (SBI)	1,00,00,000	8% interest, 7-year moratorium
FAME-II Subsidy	30,00,000	20% grant on EVs

12. MACHINERY/EQUIPMENT

Equipment	Quantity	Cost (INR)	Purpose
Mahindra Thar 4x4	10	75,00,000	Rugged terrain reliability
Tata Starbus EV	5	45,00,000	Eco-friendly group transport
Solar Chargers	4	12,00,000	Off-grid EV charging

13. PROFITABILITY CALCULATIONS

Metric	Year 1	Year 2	Year 3
Revenue	₹2,00,00,000	₹3,50,00,000	₹5,00,00,000
Operating Costs	₹1,40,00,000	₹2,20,00,000	₹3,00,00,000
EBITDA	₹50,00,000	₹1,20,00,000	₹1,80,00,000
Net Profit (Post-Tax)	₹30,00,000	₹72,00,000	₹1,08,00,000
ROI	17%	40%	60%

14. BREAKEVEN ANALYSIS

- Fixed Costs: ₹1,20,00,000/year (EMI, salaries, rent).
- Variable Cost/Ride: ₹800 (fuel, maintenance).
- Average Revenue/Ride: ₹2,500.
- BEP
(Rides/Year): $\frac{1,20,00,000}{2,500 - 800} = 7,059 \text{ rides/year}$

15. STATUTORY/GOVERNMENT APPROVALS

Approval	Authority	Timeline
Tourist Vehicle Permit	Ladakh Transport Department	30 days
EV Charging License	Ladakh Renewable Energy Dev. Agency	45 days
PSP License	Regional Transport Office (RTO)	15 days

16. BACKWARD & FORWARD INTEGRATIONS

- **Backward:**
 - **Local Garage Tie-Ups:** Discounted repairs with Leh-based workshops.
 - **Driver Training:** Collaboration with **Ladakh Skill Development Mission**.
- **Forward:**
 - **Travel Aggregators:** Integration with MakeMyTrip, Yatra for seamless bookings.
 - **Carbon Credits:** Partner with **Carbonify** to monetize emission reductions.

17. TRAINING & DEVELOPMENT

- **Defensive Driving Courses:** Partnering with **Maruti Suzuki Driving School**.
- **EV Maintenance:** Certified programs with **Tata Motors**.
- **Cultural Sensitivity Workshops:** Led by **Ladakh Arts & Media Org**.

Conclusion

This Pick and Drop Service is poised to revolutionize Ladakh's transport ecosystem, targeting **₹5 crore annual revenue by Year 3** with a **60% ROI**. By prioritizing safety, sustainability, and cultural engagement, it addresses critical mobility gaps while supporting Ladakh's tourism and environmental goals. Strategic tech integration and partnerships ensure scalability, positioning Ladakh as a model for high-altitude, eco-friendly transportation.

2. PRODUCT & ITS APPLICATION

Core Services:

Tourist-Centric Solutions:

- **Motorcycle Rentals:**
 - **Adventure Bike Tours:** Fleet of Royal Enfield Himalayan, KTM 390 Adventure, and Revolt RV400 (electric) for self-ride or guided tours (e.g., Leh-Manali Highway, Khardung La Pass).
 - **Safety Kits:** Include helmets, GPS trackers, and puncture repair kits.
 - **Guided Motorbike Expeditions:** Multi-day packages with mechanic support and overnight camping gear.
- **Self-Drive Car Rentals:**
 - Mahindra Scorpio, Tata Safari, and Tata Nexon EV for independent travelers.
 - **Flexible Plans:** Hourly, daily, or weekly rentals with Ladakh-specific navigation apps.

Local Mobility:

- **Bike Taxis:** Bajaj Pulsar motorcycles for quick village-to-village commutes in Zaskar and Nubra Valley.

USPs:

- **Diverse Fleet:** Combines 4x4 SUVs, EVs, minibuses, **adventure motorcycles, and self-drive cars.**
 - **Adventure-Ready:** Bike/car rentals include route maps, emergency SOS buttons, and on-call mechanic support.
 - **Sustainability:** Electric motorcycles (Revolt RV400) and cars (Nexon EV) to complement existing EV fleet.
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3. DESIRED QUALIFICATION FOR PROMOTER

Skills:

- **Knowledge of motorcycle tourism trends** and experience in managing mixed fleets (cars + bikes).

Local Partnerships:

- **Tie-ups with Ladakh Motorcycle Association** for guided tour permits and event collaborations (e.g., Rider Mania Ladakh).
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4. INDUSTRY LOOKOUT AND TRENDS

Growth Drivers:

- **Rise in Motorcycle Tourism:** 35% YoY growth in bike rentals (IMTJA 2023 Report).
- **Self-Drive Demand:** 40% of millennials prefer independent car rentals over group tours (MakeMyTrip Survey 2023).

5. MARKET POTENTIAL & MARKETING ISSUES

Market Segmentation:

Segment	New Additions	Revenue Potential (Annual)
Tourists	Motorcycle rentals, self-drive cars	+₹3–4 crore

Marketing Strategies:

- **Adventure-Focused Campaigns:**
 - Collaborate with YouTube influencers (e.g., "Ladakh on Two Wheels" vlog series).
 - Sponsor bike rallies (e.g., "Conquer Khardung La Challenge").
- **Self-Drive Packages:**
 - Promote "Freedom on Four Wheels" packages with curated pit stops (e.g., magnetic hill, Lamayuru Monastery).

6. RAW MATERIAL & INFRASTRUCTURE REQUIREMENTS

Category	New Items	Specifications
Vehicles	20 motorcycles, 8 self-drive cars	All-weather tires, ABS brakes
Tech	Bike rental software, self-drive apps	Real-time damage reporting

8. MANPOWER REQUIREMENT

Role	No.	Monthly Cost (INR)	Training
Bike Mechanics	2	28,000	Royal Enfield-certified
Rental Coordinators	3	22,000	Fleet management tools

Total Manpower | 29 | ₹7,10,000 |

10. COST OF PROJECT

Component	Revised Cost (INR)	Breakdown
Vehicles	₹1,60,00,000	+10 motorcycles (₹25 lakh), 5 self-drive cars (₹15 lakh)
Tech	₹22,00,000	Bike rental software (₹2 lakh)

Total | ₹2,02,00,000 |

12. MACHINERY/EQUIPMENT

Equipment	Quantity	Cost (INR)	Purpose
Royal Enfield Himalayan	10	25,00,000	High-altitude biking
Tata Nexon EV	5	75,00,000	Self-drive eco-tours

13. PROFITABILITY CALCULATIONS

Metric	Year 1	Year 2	Year 3
Revenue	₹2,50,00,000	₹4,00,00,000	₹6,00,00,000
Motorcycle/Car Rentals	₹50,00,000	₹1,00,00,000	₹1,50,00,000

15. STATUTORY/GOVERNMENT APPROVALS

New Approval	Authority	Timeline
Motorcycle Rental License	Ladakh Transport Dept	20 days

17. TRAINING & DEVELOPMENT

- **Advanced Bike Handling:** Training for riders on icy roads and river crossings.
- **Self-Drive Safety:** Navigation workshops for car renters.

. 18. Machinery Suppliers

For a **Pick & Drop Service in Ladakh**, besides vehicles themselves, you'll need a variety of supporting equipment & technology suppliers (tracking, fleet management, minibuses/vans) suited to rugged high-altitude terrain. Below are some recommended machinery/supply categories + specific suppliers you can include in your project document.

Key Equipment / Machinery Categories

1. Passenger vehicles (vans / minibuses / large capacity) for pick & drop.
2. GPS & fleet-tracking systems for safety, route monitoring & management.
3. Communication & emergency equipment (panic buttons, two-way radio).
4. Maintenance & service equipment (for remote region: spares, rugged tyres, 4×4 drives).

5. Software dashboards & mobile apps for booking, tracking, driver management.

Recommended Suppliers in India

Here are some suppliers you can list:

- Trakomatic — Advanced GPS vehicle tracking system for fleet use. trakomatic.in
- IndTrack Technology Pvt Ltd — Full GPS/GIS tracking solution provider, vehicles & logistics. indtrack.com
- RoadPoint Ltd — GPS vehicle tracker manufacturer/distributor, suits fleet & commercial vehicles. roadpoint.in
- Netra360 — Manufacturer of GPS track devices & fleet systems based in Gujarat. netra360.com
- Vehicle/van dealers in Leh/Ladakh region for procuring actual transport vehicles. For example: local van dealers listed in Leh. Justdial+1

Why These Suppliers Fit Your Project

- Tracking & fleet systems are **critical** for pick & drop, especially in remote terrain like Ladakh: you need real-time location, safety, route-monitoring.
- Local vehicle dealers ensure you can source vehicles suited for the altitude & terrain (e.g., 4×4, higher clearance, reliable spares).
- Using high quality gear helps you deliver a **safe, reliable service** (important for customers, tourism, local commuters).
- Suppliers listed are based in India, so easier logistics, support, servicing compared to purely import solutions.

Tip for Implementation in Ladakh Context

- Choose GPS trackers/vehicles certified for **high-altitude operations**, cold weather & remote network.
- Ensure backup communication (mobile signals may be weak in some areas).
- Vehicles should have rugged build, high clearance, preferably 4WD for off-road/hilly tracks.
- Plan for spare parts availability locally or from nearby cities (Jammu, Srinagar, Chandigarh) because supply to Leh can be delayed.
- Ensure tracking/fleet management software has offline mode or ability to cache, given connectivity issues in Ladakh.

Conclusion

Adding **motorcycle and car rental facilities** diversifies revenue streams, taps into adventure tourism trends, and enhances tourist autonomy. The revised project

targets **₹6 crore annual revenue by Year 3**, with motorcycles and self-drive cars contributing **25% of total revenue**. This integration strengthens Ladakh's position as a holistic adventure mobility hub.