

Technical Specification - Cargo Van with Modifications		
1	Base Vehicle Specification	
	Vehicle Type:	Fully enclosed commercial cargo panel van; rigid monocoque or chassis-cab frame
	Load Capacity:	≥ 1 ton (preferred up to 1.6 tons)
	Payload Capacity Range:	1,200 – 1,600 kg (up to 1,680 kg acceptable)
	Cargo Volume:	8.0 – 12.0 m ³ (up to 14.8 m ³ acceptable)
	Length:	5.0 – 6.35 m
	Width:	1.90 – 2.10 m
	Height:	2.0 – 2.80 m (should fit for a person to stand inside the van without hitting the roof)
	Internal Headroom:	≥ 1.80 m (up to 2.14 m acceptable)
	Powertrain:	Diesel (2.2L, BS6/Euro 6) and/or Electric (EV)
	Transmission:	Diesel: Manual ≥ 5-speed or Automatic; EV: Automatic
	Safety Systems:	Anti-lock Braking System (ABS), Electronic Brakeforce Distribution (EBD)/Electronic Stability Control (ESC), Airbags (driver + passenger), Reverse Assist (sensors/camera), ADAS Desirable
	Door:	2 front and 1 back
	Comfort Features:	Factory AC, ergonomic driver seat, infotainment, power steering
2	Modification / Mobile Unit Requirements	
	Partition Wall:	Three Separate internal zones: oDonor counseling oMilk expression oCold storage
	Auxiliary Power:	≥ 3.0 kW continuous, ≥ 5.0 kW surge; ≥ 5.0 kWh battery; inverter + generator backup
	Cold Chain:	Medical-grade freezer (-20°C) for milk storage
		Transport cooler (2–8°C) for short term storage
		Continuous temperature monitoring (data logger)
		Backup power: inverter + portable generator
		Curtain to separate room for breastfeeding mother
	Hygiene & Infection Control:	Washable sterile interior surfaces
		Integrated washbasin (water tank + tap)

	Hygiene & Infection Control:	Alcohol sanitizer dispenser
		Biohazard waste disposal system
	Seating:	Driver seats
		Two reclining chairs for breastfeeding mothers
		Two wooden benches with foam for doctors and nursing staff
	Infant Care:	Baby cradle installed
	Medical Equipment:	Two hospital-grade breast pumps (closed system)
		Sterile collection containers + labeling system
		BP monitor, thermometer
	Storage:	Two sets of secure storage rack and cabinet, made of wood (same material with the benches)
		One set hanging shelf with sliding glass doors
	Environmental Control:	Reinforced AC (20–25°C)
		Ventilation and Privacy setup
	Other Fixtures:	Wall Clock
		4 sets of small wall-mounted fan
2 small wooden hanging table to put the breastfeeding pump		
Multiple power sockets (≥4 AC sockets for pumps, refrigerator, fans, and auxiliary devices)		
Battery backup system for uninterrupted operation		
Permanent Vehicle Graphics:	Custom-printed text and image using Vinyl Wraps & Decals or spray-paint	
3	Compliance & Nepal Context	
	Nepal Context:	Designed for difficult terrain and remote outreach
		Strong cold-chain reliability required

4 Sample Picture for reference



5 Required Exterior Design

