Drone Opportunities in India: What Smit Shah Told Us

Notes from a ~50 min conversation with Smit Shah, President of the Drone Federation of India (DFI), on where a new entrant could build a real business, including the map he drew of the industry.

WHO	WITH	INTRODUCED BY	GOAL
Smit Shah, DFI	Arnav Bhatia	Dadi & Shreeya	Find 1–2 opportunities worth pursuing

1 The big picture

600 → 200
Of ~600 Indian drone companies, he expects only ~200 to survive. Most pick the wrong problem or lack depth.

Volume wins
A business only works with a path to **high volume at low–medium margin**, plus a clear reason others can't copy you.

Start now
"The hype is right now." Aim for a first paying pilot customer within ~18–20 months.

2 Smit's map of the drone industry · redrawn from his sketch (original on page 3)

Highlighted where he'd invest with ~₹50 cr · Option exists, not his pick · ~~Crossed~~ he ruled out

A · COMPONENTS
Needs R&D *and* manufacturing

Civil · *low margin, high volume*

Important:
- **Remote controllers**
- **Cameras**
- Comms
- Autopilot
- Battery

Less important:
- Motors
- Propellers

Military
- **Critical parts**
- Non-critical

Critical: medium margin, medium volume · Non-critical: low margin, high volume

B·I · MILITARY DRONES
Surveillance (ISR) · *by range*
- <25 km
- <100 km
- **300 km**

Strike
- **100 km**
- **1,000–2,000 km**

Logistics · *high altitude (HA)*
- **100 kg HA**
- **200 kg HA**

e.g. supplying posts like Siachen, where helicopters carry only ~100 kg

B·II · CIVIL DRONES
Surveillance + survey
- **Docked drones**

Drone lives on site and flies itself daily: airports, mines, power lines

Logistics
- **Ship → port**
- **Oil rig → port**
- **Hilly regions**
- **Marshland**

Agriculture
- Spraying drones

Only if DJI-class: obstacle avoidance, idiot-proof software, portable

Healthcare delivery
- Pathology samples

Funded by corporate CSR, not patients

BUSINESS TYPES — Component maker · Drone maker · Software · ~~Service provider~~ · ~~Training~~

3 What he ruled out

✕ Training
~250 schools, certificates largely sold; good training doesn't pay.

✕ Service provider
Flying drones for clients on occasional jobs doesn't scale.

✕ Hobby / kit drones
~200 assemblers using Chinese parts will always undercut.

✕ Consumer drones
Can't beat DJI: "like trying to build an iPhone."

4 His ₹50 cr picks, explained

Long-range military drones

300 km surveillance, plus strike drones at 100 km and 1,000–2,000 km. Each range class is a separate business: "like hatchback vs sedan vs truck." Don't build several at once.

Buyer Indian armed forces
Route in Co-found or invest in an existing 10–20 person startup that has the tech

High-altitude cargo drones (military)

Carry 100–200 kg to high posts. Removing a helicopter's two pilots frees ~300 kg of payload; the open problem is autonomous flight.

Buyer Indian Army
Catch Deep engineering, high capital

Docked surveillance & survey (civil)

Drones stationed permanently on site, flying daily. One pilot can run 4 sites remotely. Each site needs its own drone, which drives volume.

Buyer Airports, mines, power-line operators
Why Recurring daily use: his clearest "sustainable" model

Civil cargo routes

Places that are slow or costly to reach by road or boat: ship to port, oil rig to port, hilly regions, marshland.

Buyer Ports, shipping and oil & gas operators, hill-region logistics

Component areas worth exploring

At ₹50 cr he wouldn't start a general components company. These three are the exceptions he highlighted, and the defence rules below favour them.

Critical military parts

Flight controllers, radio links, navigation (INS/GPS), ground control software. The Army's 2026 security framework names these as "critical" and bars Chinese-origin parts.

Margin Medium margin, medium volume
Buyer Military drone makers bidding on tenders

Cameras & sensors

Day and thermal (EO/IR) cameras and gimbals. Defence tenders now require cameras from Indian sources, and few Indian firms make them (e.g. EON Space Labs, BEL).

Buyer Military and civil drone makers
Catch Thermal sensor chips are still mostly imported

Remote controllers

Handheld controllers and ground stations. Covered by the drone PLI incentive (~20% of value added) and needed by every drone maker.

Buyer All drone makers
Catch Civil side is low margin; needs volume

Why now: ~₹20,000 cr of fast-track military drone orders are planned from Indian makers, with deliveries in 18–24 months. In 2025 the Army cancelled ₹230 cr of drone contracts over Chinese parts, so makers urgently need verified Indian suppliers. **Ask Smit:** which drone makers are struggling to source these parts, and who already supplies them?

5 Beyond drones: ammunition & explosives

Explosives raw material

The "powder and paste" others turn into munitions. **"Highest need in the world for the next 10 years."** ~₹200–300 cr.

Ammunition plant

~₹300–400 cr, heavy land and licensing rules, one customer (Army). Drone makers need such a partner for payloads.

Missiles

Recently opened to private companies, but needs ₹2–3k cr or more.

6 What happens next

THIS MONTH
1-page plan: capital available, civil vs military, top 2 areas. Share with Smit.

THEN
Smit sets up **visits to drone companies** in the chosen areas.

12–13 NOV
DFI components event: meet makers and suppliers.

FEBRUARY
Aero India, Bengaluru: India's biggest aerospace and defence show.

7 Where I'm leaning · ranked by need, scale and return

1 Explosives & ammunition supply

Make the raw material ("powder and paste") that munitions makers need. Smit called it the highest need in the world for the next decade, and every armed drone also needs an ammunition partner.

NEED	SCALE	CAPITAL	FIRST STEP
Very high, 10+ years	Very large; global demand	~₹200–300 cr (needs partners or raise)	Ask Smit for intros to existing makers

2 Docked surveillance for airports & infrastructure

Drones based permanently on site, flying security and inspection rounds daily. Starts with airports, then mines and power lines. Each new site needs its own drone, so it grows site by site.

NEED	SCALE	CAPITAL	FIRST STEP
Daily, recurring	Every airport, mine, power line	Fits ~₹50 cr	Paid pilot at one airport via Bird

3 Cargo drones for hard-to-reach places

One heavy-lift platform, two markets: the Army's high-altitude posts (100–200 kg, e.g. Siachen) and civil routes such as ship to port, oil rig to port, hills and marshland.

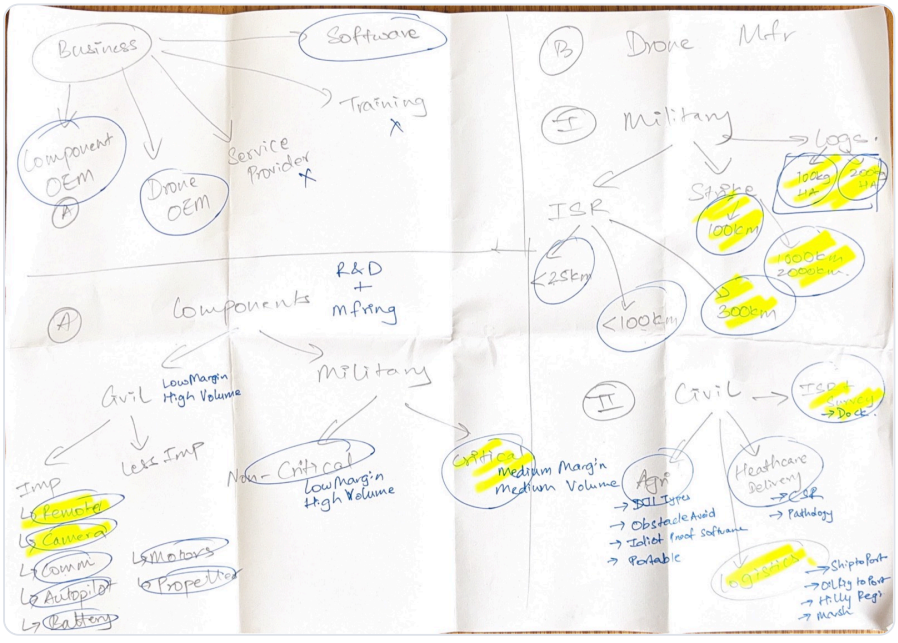
NEED	SCALE	CAPITAL	FIRST STEP
High; helicopters are costly and limited	Military first, then civil	High; back an existing startup	Ask Smit for 3–5 startups to visit

4 Zipline-style medical delivery network

Like Zipline in Africa: drones delivering blood, medicines and lab samples from a central hub to remote clinics. In India it would be funded by corporate CSR, starting with pathology sample collection.

NEED	SCALE	CAPITAL	FIRST STEP
Real, but in remote areas only	Hub by hub; slower	Moderate; CSR-funded	Talk to a lab chain + CSR funder

Smit's original sketch



Prepared from a recorded, machine-transcribed conversation (Hindi/English) and Smit's hand-drawn sketch. Figures are Smit's estimates and may be slightly misheard.