Mela Ventures

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FoundrPwr

The DeepTech Funding Playbook

A founder's guide to what VCs are looking for



For two decades, an Indian startup meant consumer internet, e-commerce, fintech or SaaS sold to the world. **That has shifted.**

India's startup story is entering a new chapter, and **DeepTech is at the centre of it.** India now hosts more than 4,200 DeepTech startups, making it the sixth-largest DeepTech base globally, with over 550 added in 2025 alone.[1] DeepTech funding reached $2.3 billion that year, up 37%,[1] while the category's share of total VC and PE funding in India has climbed from 4% in 2016 to roughly 15% in 2025.[2]

Several forces are pulling in the same direction. The ₹1 lakh crore Research, Development and Innovation (RDI) Scheme, followed by the ₹10,000 crore Fund of Funds 2.0 focused on DeepTech and manufacturing, has strengthened the capital ecosystem. Mission-led policy in semiconductors, space and biotech has given entire categories legitimacy, funding and clearer procurement pathways. Research institutions, too, are increasingly backing companies directly rather than only incubating them.

But building a DeepTech company and financing one requires a different playbook. For years, venture investing in India has been largely built around commercial milestones: revenue, customer acquisition, growth and retention. DeepTech companies operate on a different timeline. Technology development takes longer, commercialisation takes longer, and the capital required to get there is often significantly higher.

This creates a fundamental challenge for both founders and investors: **what should we underwrite before the company reaches its commercial milestones?** For founders, this changes how the fundraising conversation needs to be approached. Being in a favoured category does not, by itself, tell you how much to raise, when to raise it, or what an investor needs to believe before committing capital. The more important question is: what are the critical technical and commercial milestones that the next round of capital will help you achieve, and how do those milestones materially de-risk the business?

*We recently hosted **Vishesh Rajaram, founding partner at Speciale Invest** (a leading DeepTech fund) for a **FoundrPwr session** on how DeepTech actually gets funded. What follows are the key insights from the session, written for founders: The questions they will face, the work that should be done before meeting VCs, and what to do differently as a result.*



[1] Nasscom–Zinnov, Momentum to Maturity: Indian Tech Start-up Report 2025, February 2026. Global ranking from Nasscom DeepTech, nasscom.in/deeptech [2] India Deep Tech Alliance, AI and Deep Tech Investments Landscape: 2026 Edition, February 2026

A pre-pitch check-list for founders

The story

- [ ] A brief answer to why this problem, and why this team, without slides.
- [ ] A commercial explanation as fluent as the technical one.
- [ ] Co-founder(s) with complementary skillsets.

The risk plan

- [ ] The key risks listed, with money, resources, and time needed to mitigate them.
- [ ] A fundraise plan broken down by key risks, with each round sized to clear a specific risk with a buffer.
- [ ] Clear milestones to be achieved before the next round is raised.

The market

- [ ] A named customer who is facing the problem and therefore willing to co-design and eventually buy.
- [ ] A view on whether the pain is sector-wide or confined to one/few account(s); velocity of customer matters.

The competitive clock

- [ ] Assess competitors' ability to deliver the solution over the next few years, rather than based on their capabilities today, given DeepTech's long gestation period.

The investor

- [ ] Research on the fund's interest, stage preferences and cheque sizes.
- [ ] Preparation for detailed scrutiny, as investors will assess the founding team's technical, customer, and market depth.

The runway

- [ ] Current runway vs. plan.
- [ ] Action underway to address any underperformance or overspending vs. plan.

Non-dilutive options

- [ ] Try and use grants, shared labs and infrastructure whenever possible. These options should be pursued in parallel with the equity round.

1. The two questions founders should be ready for:

Speciale applies a filter before either question comes up. Vishesh looks for **ideas that are exponential rather than incremental**, and technologically very hard to solve, with a commercial angle taken as a given. The reasoning behind it is simple. A company that builds something most people cannot build tends to end up in a monopolistic position if it succeeds, and at the early stages that is the only kind of payoff that justifies the risk an investor is carrying.

Beyond that filter, there is very little to analyse at pre-seed and seed. Hence investors would want to build conviction on the following:

- Why does this problem need to be solved?
- Why is this the team to solve it?

What shapes the answers:

- **Motivation tells an investor more than a resume.** Vishesh asks founders directly why they have chosen to do this at all. Most people sitting across from him already have a good job and a settled life, so understanding what pushed them to give that up is more revealing.

- **Most investors are wary of solo founders.** Running any startup means wearing several hats at once, and a DeepTech company asks for more of them than most, so a team with complementary skill sets tends to produce better outcomes. There is also a signalling value in it: a co-founder is evidence that at least one other capable person was convinced enough to commit years of their life to the idea. The journey is long and often lonely.

- **Problem criticality and outcome potential shape risk appetite.** Speciale has backed a company working on viruses that attack solid tumours, and another building an indigenous satellite navigation system for India. When the opportunity is large enough, investors may overlook some gaps and focus instead on whether the team is credible enough to pursue it.

What this means for founders:

Both questions should have clear, concise answers without needing slides. Co-founding teams often provide greater confidence at the early stage in DeepTech.

> “If you’re able to articulate - 1. Why you want to solve this problem, 2. Why this is a deep problem to solve for, & 3. Why you are the best team to solve for this, you have the attention of most investors in the room.”

2. Founders should break the business down into risks before an investor does

DeepTech diligence requires a bottom-up approach. Most early-stage investors while doing detailed diligence will try to identify the company's major risks and work out the probability and capital to mitigate them. Founders who have already done that exercise are in a far stronger position when it happens.

The market is rarely the risk
Vishesh points to the Adyar Cancer Institute in Chennai, which fills with patients by four in the morning. Demand for a better cure for cancer is never in question. Similarly, for a potential DeepTech winner, demand is rarely a challenge.

Execution is the risk
The harder question is whether the technology can be executed in a way an investor is able to underwrite. Can a defined amount of capital, deployed over a defined period, produce something competitive that makes money? Confidence in that answer comes from two places:

- The investor's read on the founders, and their ability to build this specific company.
- A roadmap that breaks technology risk into clear milestones, each building confidence for the next.

Why the bar sits high
At the business-plan or first-prototype stage, Vishesh says the return expectation is high enough that Speciale does not bother modelling it in a spreadsheet. What the firm is looking for is a small number of companies in the portfolio, each capable of returning the entire fund on its own.

That carries an important lesson for founders: if the realistic outcome is a good but modest business, venture capital may not be the right instrument.

What this means for founders:

Founders should write down the key risks in the business, along with the money, people and time it would take to mitigate each one.

"Most DeepTech investors invest across multiple verticals rather than specialising in one. Founders therefore need to educate investors on the technology, market and opportunity well enough to build conviction."

3. Raise for the next proof point, not the whole journey

There is no universal template. Semiconductor, space and energy founders work to different capital and time profiles, and a sequence that suits one will not suit another. The exercise, though, is the same everywhere.

Establish the shape of the journey

- How long from here to the first customer or to commercialisation?
- What are the real roadblocks along the way?
- How much capital does each one cost to clear?

Then size the round against it

- **Raise against the next risk.** Capital and risk have to move together, which means the money cannot all be raised upfront, and it cannot all be deferred to later rounds either.

- **Expect the first cheque to be a judgement call.** There is almost nothing to evaluate at that point, so the decision rests on whether the founder and the investor genuinely connect. Vishesh describes it as very little science and mostly art.

- **Under-raising is the more common error.** Taking too little capital leaves a company in what he calls no man's land, back in the market before it has enough progress to show.

- **Milestones need to be fundable.** A first milestone that costs fifty million dollars has not broken the problem down into fundable pieces.

Budget for the fact that fundraising never stops
Vishesh recalls meeting an Israeli founder who introduced himself as a CEO who sells shares, and says it took him years to appreciate how accurate that description was. Somewhere between a fifth and a quarter of a DeepTech CEO's time goes into raising capital.

What this means for founders:

A round should be sized to address a defined risk with sufficient buffer, and the proof point for the next round defined.

> "It's like climbing Everest — you build these steps in and you keep stepping up, and every level you go, you're unlocking a higher position, you're mitigating risk. That's the only way to do this."

4. Market velocity matters more than market size

Founders are trained to open with TAM. Vishesh is more interested in how quickly the need is moving, and a single customer in real difficulty tends to carry more weight in a pitch than a large addressable number.

- **Urgency on the customer's side buys a founder time.** One Speciale company making membranes for green hydrogen won a pilot unusually early, and not because of how it pitched. The customer was struggling to produce green hydrogen at all and was willing to work with an unfinished product to get there. Customers in that position engage early and with real intent.

- **Marginal improvement gets a very different reception.** A customer being offered something twenty percent cheaper or ten percent better has little reason to engage with an early-stage company.

- **The strongest signal is pain felt across a sector.** One desperate customer is a good start, but genuine velocity comes when the same problem is felt across the industry.

- **Customer input early in the design process increases the probability of success.** In DeepTech, you cannot launch a work-in-progress product and fix it later through customer feedback. For example, if a startup is building a robot for an automotive factory, they need to understand the customer's environment, processes and constraints upfront. This has become easier than it was, since most large companies now run open innovation or corporate development teams whose job is to talk to startups.

- **Depth matters more than geography.** Asked whether a DeepTech company needs a global market, Vishesh reframes the question around whether the market has enough depth to produce a real outcome. If that market is only India, that is perfectly acceptable.

    - Unlike software, where there are not enough buyers in India willing to pay North American or European prices while the cost of building stays the same, DeepTech has genuine depth across many domestic markets.

    - Separately, Vishesh notes a growing push towards building critical technologies that India currently lacks and imports.

What this means for founders:

Come with deep insight into the customer's problem and a clear view of the market opportunity that justifies the years it will take to build.

> "People love TAM and large TAMs. I pay a lot more attention to the velocity of the TAM. The greater the velocity, the more compelling the need. If a customer feels the urgency, you're in a great place."

5. Speed of execution determines who wins

Working on a hard problem does not mean nobody else is working on it. The rest of the market keeps improving in smaller steps, and small increments applied consistently can overtake a larger leap that arrives late. Speed of execution is as much a competitive variable as the science itself.

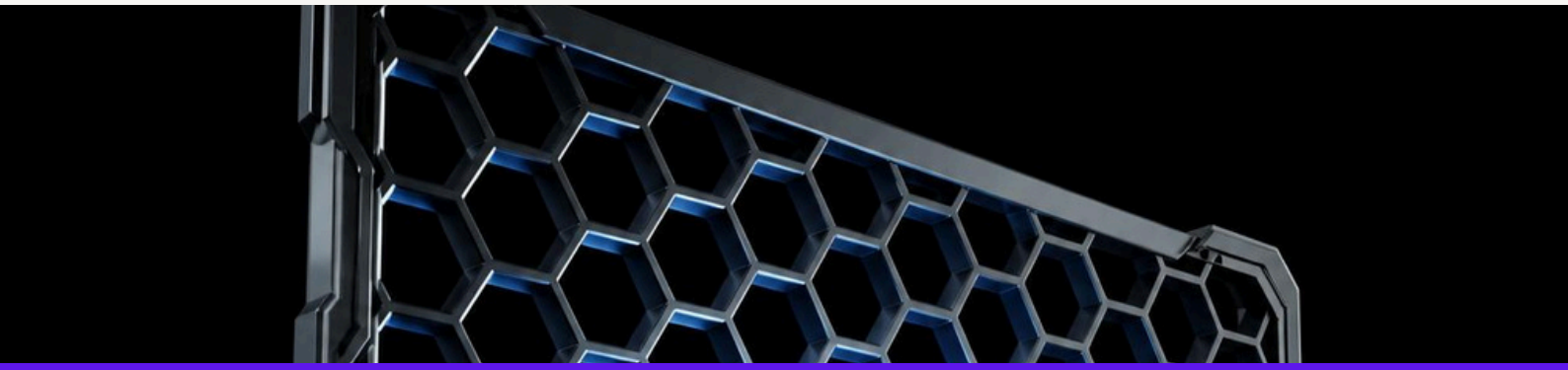
The development costs and the clock are both compressing

- For instance, a drug discovery company at C-CAMP worked on four programmes and out-licensed one, all on under a million dollars of funding. Vishesh estimates that would have taken ten times the capital and five times the time a decade ago.
- In semiconductors, a first tape-out that used to cost around ten million dollars can now be done for roughly two million.
- The pattern is consistent across categories: the same capital buys more, or the same result arrives sooner, and frequently both. That works in a startup's favour and against it in equal measure, since competitors are operating with the same advantage.

What this means for founders:

Incumbent performance should be plotted at the delivery date rather than at today's levels. If the competition catches up at launch, either the timeline or the target has to change, and that is cheaper to discover early.

> "We invested in a company that wants to make a battery two times better four years from now. But there could be ten other guys who are going to improve by fifteen percent and compound year on year. If you slow down execution, you're going to miss the bus."



6. The customer voice belongs in the room throughout the build

Asked what his failed investments had in common, Vishesh points to companies losing sight of the customer who was meant to pay for the technology. This is the standing risk for founders emerging from research, and that group is a large one, since most DeepTech founders have some academic connection.

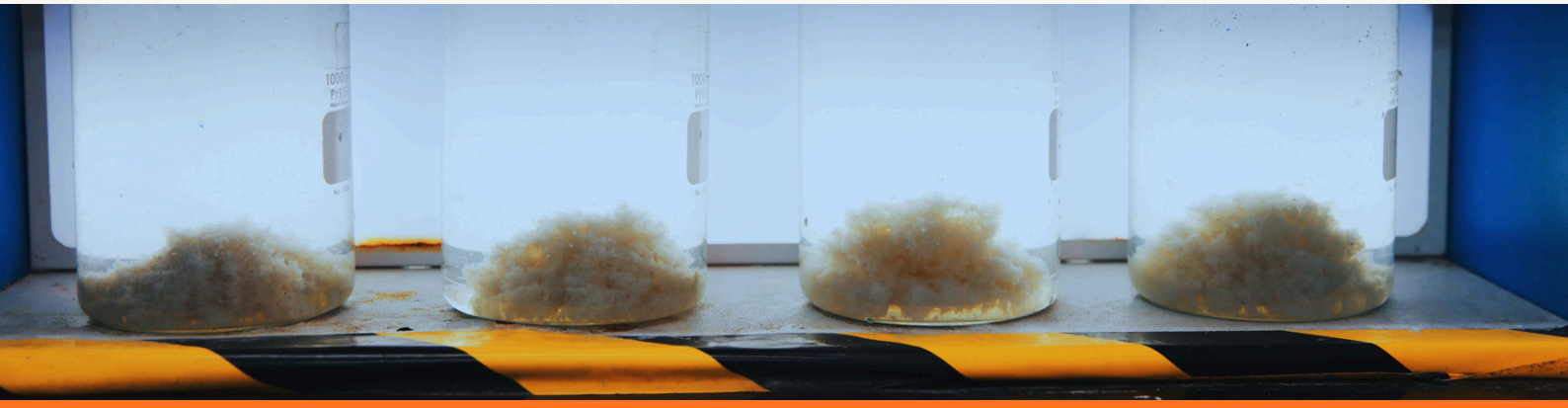
What should be done at early stage?

- **What matters is that someone in the founding team is accountable for the customer's view.** The title is less important than having somebody in the founding group who consistently thinks on behalf of the buyer.
- **Hiring a career salesperson early usually backfires.** If the product is three years away from being ready, a commercial hire has nothing to sell in the meantime, and they tend to grow restless and leave.
- **The customer changes as the company grows.** In year one it is effectively the investor, because someone has to fund the work. A founder does not have to be a polished communicator, but does need to explain why the company should exist in a way that makes sense to an investor now, and to a customer later.
- **This is a skill that can be brought in.** IIT Bombay runs a programme that introduces academic founders to operators, and Entrepreneur First does something similar for technical people looking for a counterpart.

What this means for founders:

Every founding team should have a person who owns the customer's view.

> "As long as there's someone among the founders that wears the hat of 'I'm going to think on behalf of my customer', that's a great place to be."



7. Mistakes to avoid while reaching out to investors

These come up repeatedly, and all of them are avoidable before the meeting is booked.

Skipping the homework on the investor
The questions here are basic ones. Does this fund write cheques of this size, at this stage, in this sector, and has it done so before?

One thing worth knowing: DeepTech investors in India are still generalists. Vishesh reckons the ecosystem is quite some time away from having category specialists, such as those who only do biotech, and describes funds like his as covering four or five sectors. An imperfect vertical match is not a reason for a founder to rule themselves out.

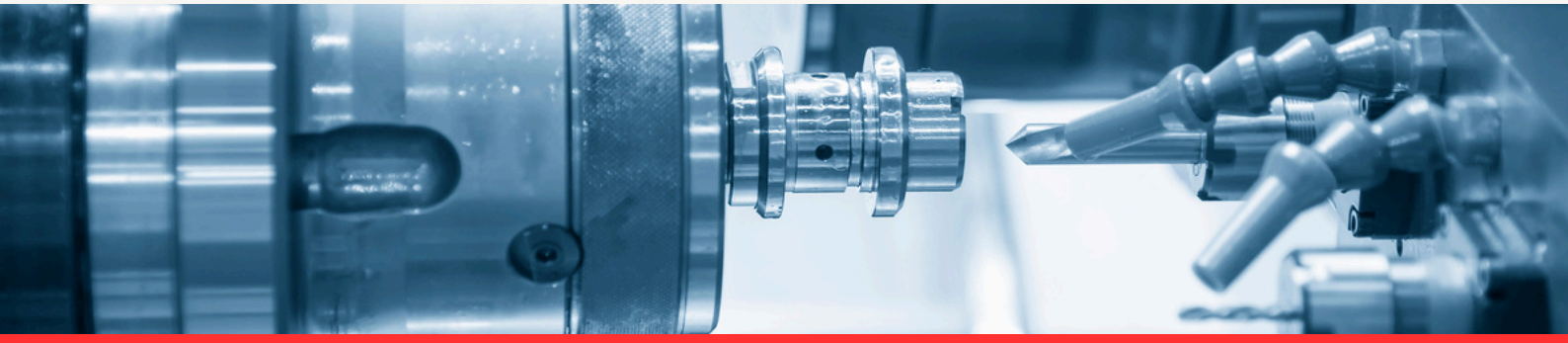
Overselling the science and underselling the market
Vishesh is more patient here. A technically strong team that cannot articulate the commercial opportunity in the first meeting will get a few more chances. But during the evaluation process, the team should be able to explain what the technology means for the market and how it can make money.

What to expect from the process: A DeepTech VC would want at least eight to ten hours with founders before deciding, so the preparation should be for depth.

What this means for founders:

Founders should check the fund's cheque size, stage and sector history before the meeting is booked, and rehearse the commercial answer at least as hard as the technical one.

"Keep perspective on who you're talking to. Do a little research on the VC you're meeting, whether they can really write this kind of cheque. Is the space interesting enough to them?"



8. Runway is a monthly discipline, not a quarterly one

Vishesh thinks about runway as a journey with four variables: the distance still to travel, the time available, the fuel in the tank, and the rate at which the engine is being run, which determines the mileage. A company that runs dry midway cannot count on anyone arriving to help it.

No plan is delivered in full, and investors do not expect one to be. The working expectation is somewhere around 70-80% of plan. Most VCs review this monthly with portfolio companies, using a simple quadrant of what was achieved against what was spent, and founders can run the same test on themselves:



Responding to the quadrant 'in the red':
It is not a crisis, but something else in the business has to compensate. The options:

- A customer willing to write a cheque.
- A strategic investor or another VC brought into the round.
- Persuading the existing investor to back the company again.

Either way, the responsibility sits with the founder to reach the endpoint with fuel still in the tank. The part founders most often get wrong is the frequency of the review.

What this means for founders:

The quadrant should be run on the company's own numbers every month rather than at the next board meeting. In the underachieved and overspent quadrant, the compensating move needs to start while there is still runway to negotiate from.

"You can't run a startup on a quarterly gap review, it needs more frequent oversight."

9. Look at capital and infrastructure that costs no equity

Grants run in parallel, not as a stepping stone

- They run independently of equity rather than as a stage that precedes it, so both are worth pursuing at once.
- As Vishesh frames it, capital is one axis and time is the other, and time is the only one a founder can control.

Two reasons to sit inside an incubator

- **Infrastructure.** When Agnikul started in 2018 it sat inside the National Centre for Combustion Research at IIT Madras and ran its early tests on million dollars of equipment that was already there, which meant it never had to raise money to build any of it.

- **Domain access.** Places like NCBS or C-CAMP put a founder in a room with the customers and researchers who can validate both the methodology and need.

The choice of institution should be deliberate. Vishesh backed a company working on tumour-killing viruses whose founder had no prior connection to the institute he set up in, neither as a student nor as a PhD. He chose it because it had the animal testing setup his drugs needed, and researchers who were willing to engage with the work.

Why the timing favours founders now

- Three-year sabbaticals to build companies are permitted, and PhD students take breaks to start up.
- Academic HR policy no longer weighs a career purely on citations and publications.
- Centres of excellence are increasingly funded by commercial capital tied to a corporate's innovation roadmap.
- Policy in several areas has significantly progressed, such as through the Semiconductor Mission, the Nuclear Energy Mission, the Clean Hydrogen Mission and the Space Policy.

What this means for founders:

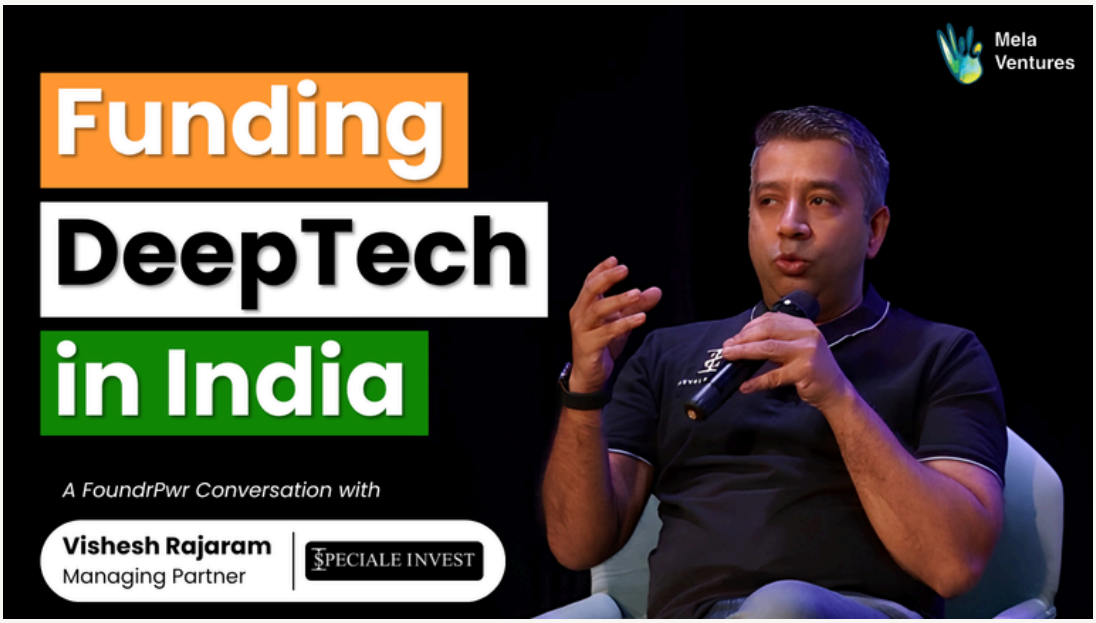
Founders should apply for grants, use shared labs and institutional infrastructure as much as possible and save on equity.

"We just have to execute. We just have to be more patient. You are going to fail a few times. That's fine. We just have to go there and build."

In closing

Fundraising in DeepTech is better understood as a sequence of trades between risk and capital than as a single decision. The founders who raise well can clearly show investors: what risk each round removes, what it will cost, and what will be different after it. While the science has to hold up, what Vishesh has found over a decade of investing is that the science is rarely the deciding factor.

> “We need more companies to be successful, because success breeds success. That will create more believers, more capital coming in.”



Click here to watch the video

Mela Ventures

About Us

Mela Ventures is an early-stage Venture Capital firm backing audacious founders solving globally relevant problems across EnterpriseTech, DeepTech, and ClimateTech. Mela Ventures was founded by Krishnakumar Natarajan, and N S Parthasarathy, who had previously co-founded Mindtree. Mela Ventures enables success beyond funding through strategic and operational insights, access to proprietary networks, and technical guidance for scalability. Since 2020, Mela has invested in over 15 pioneering startups including Vunet, GalaxEye, Mindgrove, and Indra.



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Our office: Level 14, Dondusa Complex, No.9/1, 909 SKAV, Residency Rd, Bengaluru, Karnataka - 560001