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— P R E S E N T S —



IDEAS THAT SHAPE TOMORROW'S INDIA



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1st Edition

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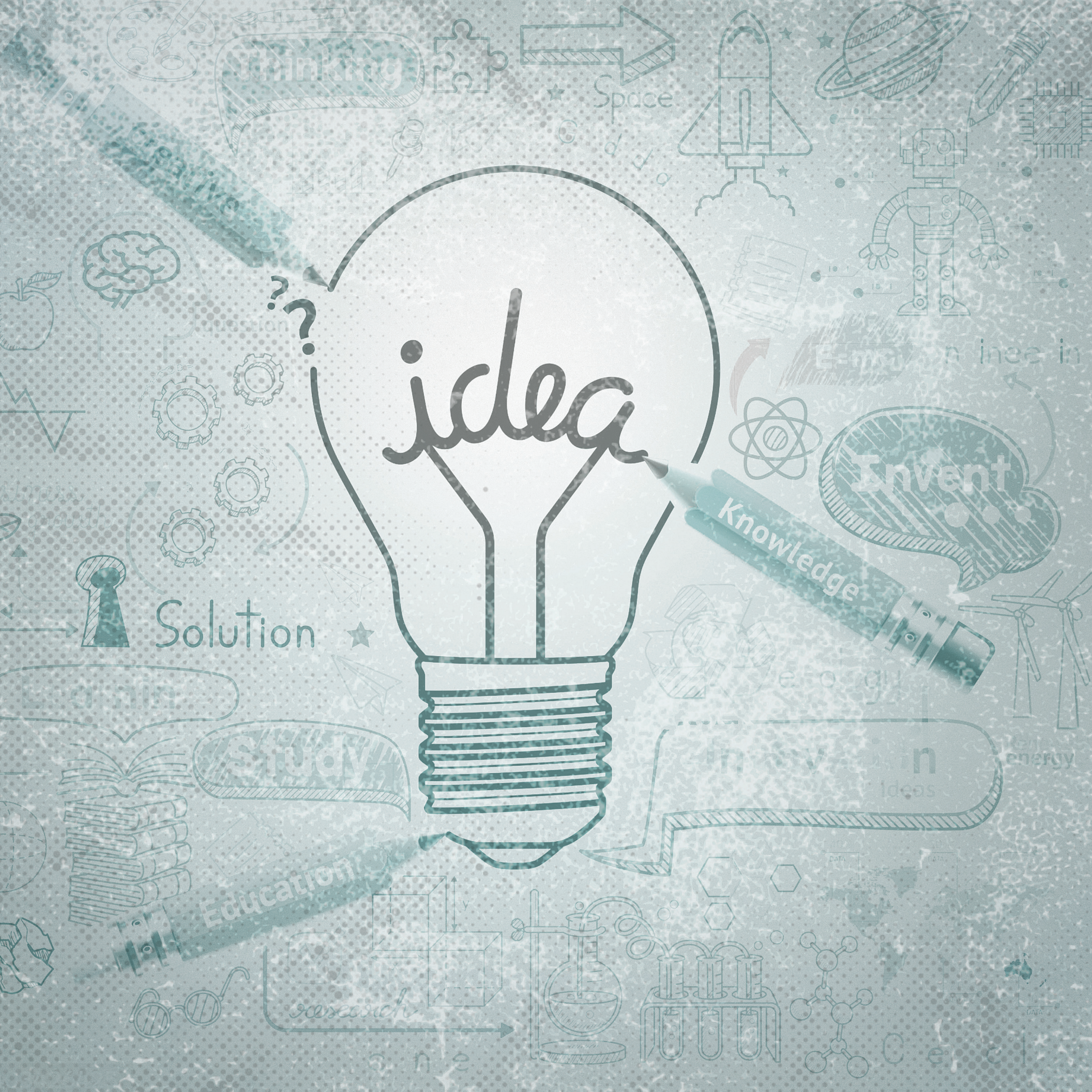
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Foreword



THE ARCHITECTS OF OUR TOMORROW

FOR nearly two centuries, The Times of India has served as more than just a chronicler of current events; we have been a steadfast steward of the national narrative. From the ink of our earliest editions to the digital pulse of today, our legacy has been defined not just by reporting on change, but by driving it. As India's most trusted news brand, we believe our highest calling is to catalyse societal progress by igniting conversations that shape policy, culture and history

We recognised that while India is a land of challenges, it is also a reservoir of immense ingenuity. However, great ideas often perish for the lack of a platform credible enough to withstand scrutiny and powerful enough to command attention.

It is with this vision that we conceptualised the Ideas for India initiative. TOI's credo of "Change Begins Here" reflects the progressive and industrious spirit of Indians on the move, with ideas and plans for a better India, and we wanted to channelise that spirit.

The response to the initiative in its first year has exceeded our expectations. This compendium is the culmination of that effort. The concepts detailed within these pages are not theoretical musings; they are rigorous, scalable blueprints for nation-building.

What stands out most is the source of this intellectual capital: our youth. The demographic dividend is often discussed in economic terms, but its true value lies in its imaginative capacity. The participants featured here have looked at age-old problems—from urban congestion to rural healthcare—through a lens unburdened by cynicism. They have offered solutions that demand nationwide adoption.

The evaluation from over 11,000 entries to the final 30 you see in these pages was rigorous. It involved scrutiny, difficult choices & multiple sessions. We looked for more than just novelty; we looked for viability, scalability, and heart.

As you turn these pages, I invite you to look beyond the text. Do not see this merely as a collection of contest entries. See it for what it truly is: a manifesto for the next decade of India's growth. These are the sparks that, with the right support from government and industry, have the potential to ignite the engines of our future.

The Times of India is proud to present these visionaries. The future is no longer a distant abstraction; it is written here, for the world to take note.

Sivakumar Sundaram
CEO, The Times of India



Foreword



INDIA stands at a defining moment in its history. With the vision of Viksit Bharat 2047, we are shaping a future built on inclusion, innovation, and collaboration. This is not just a government agenda, it is a national mission that calls for every citizen, every enterprise, and every institution to contribute.

The most transformative ideas often start small, rooted in local realities yet carrying the potential to create nationwide impact. When these ideas are nurtured and scaled responsibly, they become movements that change lives. This is the essence of Ideas for India: a platform that celebrates imagination and action and turns aspirations into reality.

Our innovation ecosystem is thriving. From digital public goods like UPI and Aadhaar to AI-driven solutions in healthcare, India is setting global benchmarks for inclusive technology. Our talent pool — 65% under 35 years old — is the cornerstone of this transformation, powering progress not just for India, but for the world. Global Capability Centers exemplify this shift, delivering strategic value to enterprises worldwide and reinforcing India's position as a hub of capability and leadership.

India is no longer just a participant in global progress — it is a catalyst. From digital payment systems that inspire global models to technology-driven solutions that address universal challenges, India is exporting ideas, not just products. This is India's new narrative: from cost arbitrage to capability leadership.

At Optum, part of UnitedHealth Group, we share this commitment to progress. Our mission is simple: to help people live healthier lives and make the health system work better for everyone.

As we look ahead, let us remember: every idea matters. Every spark can ignite change. Together, through collaboration and innovation, we can create an India that does not just dream of a better future but builds it.

It is an honour to be part of this journey of ideas and impact. Let us turn vision into action and make Viksit Bharat a reality — one idea at a time.

Uma Ratnam Krishnan

Managing Director
Optum India



Foreword



THE INNOVATION IMPERATIVE

INDIA stands at a rare inflexion point in history. We have the demographics, the digital infrastructure, and the global intent to define the 21st century. The vision of a Viksit Bharat (Developed India) by 2047 is not just an aspiration; it is a deadline. However, the path from developing to developed is not linear. It requires us to solve complex, intergenerational challenges—from sustainable urbanisation to equitable healthcare—at a speed and scale that few nations have attempted before.

Government and industry cannot walk this path alone. The complexity of India's challenges requires a "whole-of-society" approach, where the intellectual capital of our citizens becomes a critical national asset.

This is why the TOI Ideas for India initiative is so significant.

We often talk about India's demographic dividend, but a dividend is only realised when talent is given a canvas. This platform has served as that canvas. By inviting the youth to engage with critical themes such as manufacturing, sustainability, and social well-being, this campaign has done more than run a contest; it has democratised the R&D of nation-building.

As someone who has spent years investing in institutions and individuals to drive systemic change, and most recently through my work at The Convergence Foundation, I have learned that the scarcest resource is seldom capital—it is valid, scalable ideas championed by committed leaders. The compendium you hold in your hands is a catalogue of exactly that resource. It represents a shift from ad-hoc problem-solving to structured, innovative thinking.

The 30+ blueprints featured here are not merely student projects. They are signals of a new India that is unafraid to apply science, technology, and empathy to entrenched problems.

However, an idea on paper is only a promise. The true test lies in execution. I urge the readers—policymakers, investors, and civil society leaders—to view these pages not as an end, but as a beginning. We must nurture these innovations, stress-test them, and help them scale.

If this compendium proves one thing, it is that India's future will not be imported; it will be invented right here, by minds like these.

Ashish Dhawan

Founder, The Convergence Foundation
Founding Chairperson, Board of Trustees, Ashoka University

It's time to build India's vision board

Is India evolving the way it should? Or are we replicating a formula for development used by the rest of the world? We may share problems like environmental degradation and limited access to healthcare, but our solutions will work only when they factor in the unique realities of our country.

For these solutions, we need the brightest Indian minds. **The Times of India** and **Optum** invite you to **Ideas for India** - your chance to positively contribute to India's growth story. Are you an innovator with an idea that's ready to be scaled up? Bring it forth. Help it grow.

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THE TIMES OF INDIA

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TOI IDEAS *for* INDIA

India's Vision Board for Viksit Bharat

India stands at the cusp of a transformative era. To realise the vision of a developed nation—Viksit Bharat—by 2047, the country requires not just economic momentum, but a fundamental reimagining of its solutions. Recognising this national imperative, The Times of India launched Ideas for India, a thought-leadership initiative designed to channel the nation's collective ingenuity toward actionable progress.

The campaign was conceived with a singular belief: the answers to India's greatest challenges lie within its people. It is anchored in a powerful promise: **Your Idea Today – India's Progress Tomorrow.**

The Innovation Challenge

At the core of this initiative was a nationwide call to action, inviting students, innovators, and change-makers to submit scalable blueprints across three critical pillars of development:

- Make in India for the World: Enhancing manufacturing prowess and global footprint.
- Environmental Sustainability: Solutions for climate resilience and green energy.
- Health & Social Wellbeing: Bridging gaps in healthcare, education, and equity.

The response was a testament to India's intellectual vitality, with over 11,000 entries received from across the country. Through a rigorous, multi-stage evaluation, these were distilled down to the most promising finalists.

The Grand Summit: Where Vision Meets Authority

The initiative culminates at a definitive National Summit, a high-impact forum where the roadmap for a developed India is discussed and defined. Here, top policymakers, experts and industry leaders converge to deliberate on the country's strategic priorities.

This Summit also serves as the launchpad for our finalists. On this prestigious stage, the selected innovators present their prototypes directly to the nation's leadership, bridging the gap between plan and practice.

The Compendium

This book captures the essence of that journey. It presents the top ideas that withstood scrutiny and earned their place on the main stage—innovations that are not just theoretical, but potential building blocks of the India we aspire to create.

InnoVISION:

India's Leading Opinion Makers on Ideas That Drive Progress

20

TIMES Special INNOVISION

THE TIMES OF INDIA, NEW DELHI
SATURDAY, SEPTEMBER 13, 2025

Four Ideas For A New Idea Of India

Design govt jobs to reduce their economically perverse attraction for millions of applicants, turn larger villages into new towns, change cropping patterns & reverse the economic squeezing of the middle class



BY INVITATION
Abhijit Banerjee

I usually don't recommend moving the goal posts to win the match, but in the case of Viksit Bharat I think it is the only way to win. What, after all, does it mean to be developed? To be rich like the US, a society so affluent with anger — against self-employed women, successful immigrants (like me), supply Black people and no doubt others, that the entire vocabulary of the state is dominated by words of violence and destruction? Where else do govt leaders celebrate feeding the life work of so many of their colleagues into "wood-chippers" and immigrants are repatriated in chains, feeding the bloodlust of those who voted this new govt into office? Or to be like China, the land of skyscrapers and highways and bullet trains, but also peering into cameras at every turn ensuring compliance to a monolithic state? My hope for India is that we will have the courage to be different, to set our own targets and ideals. And not just because, as many have said, the goal of raising per capita GDP by a factor of five in the next 25 years seems remote, especially given the post-Trump mess in the global economy. Our growth seems to be slowing, while I am happy to leave the debate on whether this is temporary or structural to those more willing and perhaps able to read the tea leaves. It reminds that reaching the 2047 GDP goal we have set for ourselves would require us to grow faster than we have ever grown on a sustained basis, in a world economy that is not exactly looking any better.

Nor does it seem plausible that we will be able to build Chinese-style infrastructure any time soon. I don't exactly know how they came up with this number but the World Bank estimates that India needs to spend Rs 4 lakh crore on urban infrastructure to meet the growing needs of the population every year until 2048. Right now the govt investment is close to one-tenth of that. The Bank says that private investment will need to step in for the rest, but doesn't seem to believe that it will happen.

I am not sure that this changes very much in terms of economic policies. There are still the standard concerns of how: improving education, health and the investment climate, enhancing connectivity and raising productivity. To that I add a few more key steps, also not particularly original, but perhaps not discussed enough.

RATIONALISING THE GOVT

The lions of our young are dominated by a technocracy masquerading as meritocracy. In the National Sample Survey, young men who have more than high school education show a striking pattern: through their mid 30s, instead of going to work, a third to a half of them are neither working nor looking for work. Instead they claim to be studying, though only about 10% actually go for postgraduate degrees. The rest are preparing for the many gateway exams that regulate access to those "good positions", as teachers, bankers and bureaucrats, that most Indian middle-class families dream of. And for most of them it is just a dream — less than 1% of the 200 million applications for central govt jobs between 2011 and 2021 resulted in a job, according to most sources, and surely for the weaker 80% of that massive applicant pool this probability is nearly zero. If they are still applying, it is mostly a way to postpone the unpleasant moment when they accept that they too will not get one of those prized jobs.

From the point of the macroeconomy, these years spent honing test-taking skills and memorising random facts (like who is Abhijit Banerjee?) is a pure waste. Moreover by its very design it produces millions of failures, scared for life. The way to fix this problem is not to get rid of the exams, but to drastically reduce the premium that people put on these jobs. Indian govt teachers, for example, are among the best paid in the world, even more so than in the US. And then there are several more in trying for those coveted jobs. The way to fix this is to try to get rid of the exams, but to drastically reduce the premium that people put on these jobs. Indian govt teachers, for example, are among the best paid in the world, even more so than in the US. And then there are several more in trying for those coveted jobs. The way to fix this is to try to get rid of the exams, but to drastically reduce the premium that people put on these jobs. Indian govt teachers, for example, are among the best paid in the world, even more so than in the US. And then there are several more in trying for those coveted jobs.

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The bulk of the transformation can come from turning our many larger villages into cities. Land is still very cheap and abundant relative to big cities, and infrastructure needs to be built mostly from scratch



A part of what we need to get there is to implement the 7th amendment that was meant to be the pathway to urban self-governance. Municipal leaders with much more control over the resources they raise will raise more resources (in particular from real estate taxes) and complete land or to speed the money will.

But the bulk of the transformation can come from turning our many larger villages, many of which are still very poor and abundant relative to our big cities, and the infrastructure needs to be built mostly from scratch and therefore can take full advantage of modern technological advances. Policy can help by coordinating the creation of an (appropriately chosen) industrial zone so that there is one or more of these new towns. There is compelling evidence from Tishara Ganga's recent research at MIT that this particular form of industrial policy works and generates

in a range of useful skills (including leadership and life skills). And very little time gets wasted on mugging up for tests. Introducing a trial period would drastically reduce the cost of an entry-level civil servant and allow the hiring of many more than under the current system; I argue below that we in fact need these extra hands.

REIMAGINING OUR CITIES If we can't have shiny modern skyscraper cities that can have? Roads without potholes, walkable footpaths, fresh free residential playgrounds, sewers that don't stink, drains that drain, public playgrounds for children — less costly new investments, better maintenance and more committed urban leadership.

Our environmental challenges are coming to a head. Living in many of the north Indian cities, especially in the winter months, is pure martyrdom. It is calculated that life expectancy in Delhi could have been seven years more had air quality met the WHO standards. We have dire drinking water problems in many cities, including many where there is no dearth of rainwater. Both Bangalore and Chennai get more than twice as much rain as famously wet London. The water table in Punjab and Haryana is falling fast, thanks to the growing of summer rice that is entirely climate insensitive, the burning of these rice stalks then creates the killer smog that is choking Delhi. Drainage in many cities is failing, thanks to irresponsible construction that interrupts drainage channels and the pl-

substantial productivity gains. Right now, however, the in-conflict are all wrong. Rural residents have access to better water. To hold the village to become a town. We need a set of policy changes that level that playground.

Once that happens, we will need boots on the ground that will help make these new cities into the kind of places we want. My experience with the grant leadership often lacks horizontal support. To hold the village to become a town. We need a set of policy changes that level that playground.

CLEANING UP ENVIRONMENTAL MESS Our environmental challenges are coming to a head. Living in many of the north Indian cities, especially in the winter months, is pure martyrdom. It is calculated that life expectancy in Delhi could have been seven years more had air quality met the WHO standards. We have dire drinking water problems in many cities, including many where there is no dearth of rainwater. Both Bangalore and Chennai get more than twice as much rain as famously wet London. The water table in Punjab and Haryana is falling fast, thanks to the growing of summer rice that is entirely climate insensitive, the burning of these rice stalks then creates the killer smog that is choking Delhi. Drainage in many cities is failing, thanks to irresponsible construction that interrupts drainage channels and the pl-

ing up of garbage inside the sewers. These issues are well-known and there is a lot of agreement on the solutions — we need to dig, install living the culture in hot dry areas through our price support system, harvest rainwater better, regulate construction to limit interference with the system of drainage and the production of that and so on. Politics is of course one reason they don't happen, but the lack of governance capacity is also an issue. Once again an expanded entry-level bureaucracy can help here.

COMBATING INEQUALITY

The govt's position is that inequality is going down. And indeed this is what the data shows. Unfortunately what it means is entirely something else.

As anyone who uses Indian survey data knows, most surveys almost entirely miss the richest few percent, because the surveyors can't get into their houses gated communities, and even if they manage, they are politely asked to come back later. Therefore, the rich in the data are merely the high end of the middle classes. And what the data is saying is that the middle classes are getting squeezed, which is consistent with the flat demand for low- to mid-range vehicles and the current emphasis on premiumisation, which is a fancy way to describe products that only the very rich can afford. And if the middle classes are lagging and the less affluent are also struggling (as the govt recognised with its tax break) where is the growth going? It is the very rich that are taking it, evidenced, for one, by the rapid rise of high-end restaurants all over India and fancy international tourism (I recently watched a group of desi teenagers buying a couple hundred dollars of Dubai Chocolate, while I waited in line to get just one).

The tax cut at best a temporary remedy for this problem, especially because the govt also needs money to build the India that we want. We still get most of our tax revenue from indirect taxes, which tend to be regressive.

The road remedy is to plug the loopholes that allow the rich to get away without paying their fair share of taxes. In particular all those many of our rich live and sell in India but seem to pay taxes in Dubai or Mauritius or other tax havens. We have to stop that, along with the option of declaring that your businesses are losing so much money that you don't need to pay taxes while spending millions on cars or parties. Moreover we need mechanisms that ensure that the govt's Economic Survey points out, is not happening right now this is why middle classes are falling behind.

On the other side I am flabbergasted by the views of two Supreme Court justices that we are creating a class of parasites through our redistributive policies. We spend more than 1.2% of the main welfare scheme. To put this in perspective, this is about half of the increase in the profit share between 2001 and 2014. More importantly we should never forget that most poor people in India are poor because they never had a chance — born into the caste system, educated in our technological educational institutions, rejected by our selective farm labour market.

The general point is that our current process of development is creating many exclusions — between the very rich and everyone else, between those who get the good jobs and those who just become the excess, between those who can afford to live in first- and second-tier cities and the rest, between those who get running water at home and can afford the air purifiers and everyone else, and so on. We cannot have a good society without addressing those. Urgently.

The article goes in the *Nobel prize*

Abhijit Banerjee

2019 - Nobel prize
winner in Economics

Five Key Innovations That Can Transform India

Affordable technologies that can clean dirty water, deliver piped water to every family, produce green batteries that use domestically found minerals, get accurate data to farmers, and cut project delays



BY INVITATION
Amitabh Kant

In 1714, the British Empire faced a crippling challenge: ships could not determine longitude at sea. The then British govt responded with the Longitude Prize, which spurred breakthroughs like John Harrison's marine chronometer and transformed navigation. As a result of this innovation, the sea never set on the British Empire for the next 200 years. That was the impact of innovation. Centuries later the United States applied a similar approach when DARPA, America's advanced Research Projects Agency, catalysed the creation of technologies like the Internet, GPS, and autonomous vehicles by backing innovative startups. These innovations must be what, when govt or bold problems and back solutions at scale, they unlock innovations that reshape nations.

Today, India faces its own innovation gap. Despite a thriving startup ecosystem and an enviable demographic dividend, we lag in producing transformative technologies. We file patents but do not commercialise them. In 2023, India paid \$14.1 billion in R&D outlays but earned only \$1.1 billion in receipts, a recovery rate of just 11%. Down from 14% in 2014. Our R&D spend remains 0.6% of GDP far below South Korea, Israel or the EU. Research institutions and entrepreneurs operate in silos. Limiting the flow of knowledge from lab to market.

SEWAGE-FREE INDIA Current sewage in India's single most significant source of water pollution, contaminating rivers, groundwater and impacting public health. We need an innovative device to convert waste into safe manure, biogas, and clean water. We can dramatically cut water borne diseases while keeping the household cost of the device to just Rs 2,000.

SAFE WATER FOR MILLIONS A few mid-2020s, 4% of rural households have had water connections under the Jal Jeeva Mission. We must invest a low-cost spectrometer that measures water quality in real-time, and leverages AI to monitor and predict water quality. This will be the next step in making clean water available for all at just Rs 4 to Rs 20/litre per family.

LIGHT GREEN BATTERY India's clean energy transition is hampered by dependence on battery imports. We must build a durable battery for both mobility and energy storage. It

must be designed around minerals available in India, or in abundance globally, that double battery life and drive clean energy adoption.

SMART AGRICULTURE Millions of Indian farmers remain vulnerable to rainfall variability, soil degradation, and market unpredictability. Every single Indian farmer must be provided with precise advice on their mobile app, which integrates soil, water, weather, and price data and connects them to real-time markets to enable them to get the best returns.

120-DAY FLYOVERS/UNDERPASSES Infrastructure delays choke our cities, increase costs, and slow growth. We must complete flyovers and tunnels within 120 days, 60 days of designing and planning, 20 days of preparation, and 30 days of construction, cutting costs by 30%, and transforming urban mobility.

These are not Utopian ideas. They are practical, high-impact areas where Indian innovators can deliver globally competitive solutions. — If given the right push, for such innovations to succeed, we need three things.

First, political and administrative will. As digital public infrastructure, bank account opening, and digital payments have shown, we can turn India into a hub of innovations requiring top-level oversight. A single empowered agency should curate

the problems, provide mentorship, track delivery, and procure technology. Second, govt procurement reform. India's innovators need scale to thrive. The govt must consolidate demand and become the first buyer of technology. Committing substantial outlays for new technologies, ensuring updated codes and procurement norms will truly ensure "Make in India" for these products. Govt being the first buyer is critical.

Third, a pro-innovator ecosystem. We must throw open these problems to the world to find solutions. Consortia must be Indian headquartered, with a majority Indian ownership and manufacturing. This ensures that when we solve national problems, the value accrues to Indian companies and workers, not foreign intermediaries. Expert incentives and global positioning can then ensure our innovators are not overlooked.

If India embraces this model, the payoff will be transformative. Just as the Longitude Prize shaped Britain's naval supremacy, and DARPA's support of US technology superpower, national innovation can turn India into a hub of problem-solving innovation. But the impact will not stop at our borders. The Global South, home to over 7 billion people, faces the same challenges: sewage, water, energy, agricultural productivity and speedy infrastructure development. Western nations have largely left the capacity for mass-scale infrastructure building. India still has it. If we pioneer low-cost, scalable solutions to these common problems, others will follow. In doing so, India can become not just an economic leader, but also a model for inclusive innovation across the developing world.

This is not charity. It is strategy. By solving our problems, we solve theirs. And by leading the Global South into a new era of innovation, we ensure that India's growth is resilient, interconnected, and globally relevant. We must now throw open the challenge of innovation to our innovators — set bold targets, back them with resources, and give them the freedom to think differently, even to fail. This is how we will build an India that is not only rich, but the world's most innovative. This is how India will leapfrog into the future. This is how we choose not only India, but the world's problem-solving innovation.

The author goes India's GDP Shaper and is a former NITI Aayog CEO



Amitabh Kant
Ex G20 Sherpa and
Former CEO, NITI
Aayog

CHALKS TO CLICKS

We have EdTech, but is it the right one?

To prepare for the future, investing in human capital is key, and early childhood education can offer the highest returns. Betting on this, non-profits across India are decentralising education using tech & innovation



BY INVITATION
Ashish Dhawan

Indian children born today will enter the workforce as young adults by 2047. At this point, India has largely won the battle for universal school enrolment. The one that beckons is universal school learning — imparting high-quality education that will create opportunity for all and provide the human capital for a developed India by 2047.

Economics Nobel Laureate James Heckman's work on human capital emphasises the high returns on investment in early childhood education (ECE), as early interventions enhance cognitive and non-cognitive skills critical to long-term success. The well-known Heckman curve shows that for all stages of education, the highest economic returns come from the earliest investments in children. To raise the collective intelligence of the nation there is a strong case for investing heavily in ECE, raising its share of the Samagra Shiksha budget to 5% (up from around 2% currently).

The ubiquity of smartphones in India today — a recent survey reported a smartphone ownership of 1.2 per household in urban India and 1.3 in rural India — offers a never-before-seen opportunity to rapidly scale up high-quality educational inputs to children across the country regardless of their socio-economic status. This is a simple idea with great power. Educational non-profits have begun work on precisely this, and these efforts will only expand in future.

For instance, Rocket Learning, a non-profit launched in 2020, has developed interactive and highly engaging educational content that can be delivered over WhatsApp to teachers, parents and children. Every day on these micro-WhatsApp groups, it sends low-income teachers and parents contextualised content in the local language that they can use for play-based activities

with children in the classroom or at home. These activities take less than 20 minutes and involve readily available materials.

Research shows that greater parental involvement in children's education leads to improved academic performance. That sense of participation is reinforced by encouraging parents and educators to share images and videos back to the WhatsApp groups, creating a sense of a shared learning community.

Chimple is an android app developed in India, that uses games to instil foundational literacy and numeracy through a teacher-directed, at-home learning model. Using the app, a teacher can remotely assign content for children to practice, based on the teaching plan for the week. In a pilot study involving Class 1 and 2 students in Haryana, the treatment group saw a 50% improvement in test scores over the year with 10 minutes of usage of Chimple in a day. Similar improvements were seen in English as well, and the low-performing learners at the baseline benefited even more.

Going up to higher grades of schooling, new learning opportunities can be reinforced by generative AI — a powerful use-case for which is Personalised Adaptive Learning (PAL). Instead



CAN ONE IDEA CHANGE A NATION? We believe it can. BRING YOUR IDEAS & SHAPE THE STORY OF VIKSIT BHARAT

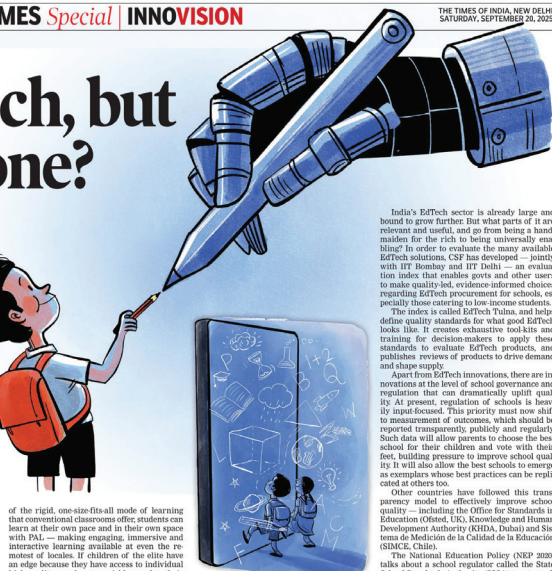


Illustration: Uday Deb

of the rigid, one-size-fits-all mode of learning that conventional classrooms offer, students can learn at their own pace and in their own space with PAL — making engaging, immersive and interactive learning available at even the remotest of locales. If children of the cities have an edge because they have access to individual high-quality coaches to quickly resolve their problems, such access can be universalised with the help of PAL.

Educational non-profit Central Square Foundation (CSF) is working with Khata Academy to contextualise Khanmigo, India's AI-powered personal tutor for low-income contexts. State govts are beginning to leverage PAL for their school systems. Anshra Pradesh has been an AI-powered Teacher Coach for govt school teachers, which can provide actionable feedback to teachers and identify effective levers for measurable improvements in classroom practice. AI tools can also grade large volumes of student work, reducing the minutes of paper checking time to 20 seconds. They can provide nuanced understanding of a student's performance and actionable insights based on it, thus reducing teachers' workload and enabling them to engage more students.

personalise audio with voice cloning. AI can also drive data analysis at the back-end, using learning messages to draw nuanced insights into how well specific educational programmes are working.

CSF has entered into partnerships to build an AI-powered Teacher Coach for govt school teachers, which can provide actionable feedback to teachers and identify effective levers for measurable improvements in classroom practice. AI tools can also grade large volumes of student work, reducing the minutes of paper checking time to 20 seconds. They can provide nuanced understanding of a student's performance and actionable insights based on it, thus reducing teachers' workload and enabling them to engage more students.

India's EdTech sector is already large and bound to grow further. But what parts of it are relevant and useful, and go from being a hand-maiden for the rich to being universally enabling? In order to evaluate the many available EdTech solutions, CSF has developed — jointly with IIT Bombay and IIT Delhi — an evaluation index that enables govt and other users to make quality-led, evidence-informed choices regarding EdTech procurement for schools, especially those catering to low-income students.

The index is called EdTech Tula, and helps define quality standards for what good EdTech looks like. It creates exhaustive tool-kits and training for decision-makers to apply these standards to evaluate EdTech products, and publishes reviews of products to drive demand and shape supply.

Apart from EdTech innovations, there are innovations at the level of school governance and regulation that can dramatically uplift quality. At present, regulation of schools is heavily input-focused. This priority must now shift to measurement of outcomes, which should be reported transparently, publicly and regularly. Such data will allow parents to choose the best school for their children and vote with their feet, building pressure to improve school quality. It will also allow the best schools to emerge as exemplars whose best practices can be replicated at others too.

Other countries have followed this transparency model to effectively improve school quality — including the Office for Standards in Education (Ofsted, UK), Knowledge and Human Development Authority (KHDA, Dubai) and Sistema de Medicin de la Calidad de la Educacin (SIMCE, Chile).

The National Education Policy (NEP 2020) talks about a school regulator called the State School Standards Authority (SSSA) to set standards and publicise the level of each school in the state, based on those standards. To be effective, SSSAs need to function independently of the department of education and other govt bodies, and assess the quality of all schools — whether public or private — impartially. As NEP 2020 recommends, they should shift regulation from being overly restrictive (especially for private schools) to being "light but tight". SSSAs should regularly report on the quality of schools and put these out in the public domain.

Every child in India deserves a chance to reach their full potential. With new technologies as well as enabling reforms, we will be well on our way towards fulfilling that dream.

The writer is founder-CEO of The Convergence Foundation, and founder chairperson of Central Square Foundation

Ashish Dhawan

Founder-CEO, The Convergence Foundation and Founder-Chairperson, Central Square Foundation

On welfare, results matter more than amount spent

A booming economy sits uneasily atop deep income divides. A smarter, reliable welfare architecture can transform 'safety nets' into 'trampolines' — lifting India's poorest into the promise of growth



BY INVITATION
Karthik Muralidharan

Despite global headwinds, India is the world's fastest growing large economy and by 2047, aspires to be a *Viksit Bharat* or a fully developed nation. Getting there will require us to pay attention to both growth and welfare.

The centrality of welfare for citizens well-being is seen in India's income distribution. Our mean per capita income of \$2700/year puts us in lower middle-income-country status. But the average hides vast inequalities. As the 2023 India's Valley Report highlights, there are "three Indias" by income: India 1 — the top 10% with incomes around \$15,000/year; India 2 — the next 20% at around \$3,000/year; and India 3 — the bottom 70%, with incomes around \$1,000/year. In other words, around a billion Indians have incomes comparable to those of poor sub-Saharan African countries, and it is mainly through welfare programmes, such as free foodgrains and cash transfers, that India obtains at least some of the benefits of growth.

Before we despair at these inequalities, it is worth noting that rising inequality has historically accompanied the growth process. Income back. Many Indian welfare programmes behave like safety nets that keep people afloat in a better of India's democracy that electoral incentives push all political parties to distribute the benefits of growth through welfare. This "Indian mode" has done reasonably well — delivering growth rates of 6-7% with welfare contributing to inclusive

it mainly benefits better-off farmers: the top 5% of landowners capture around 50% of the subsidy. It also hurts efficiency by encouraging water-intensive crops, depleting groundwater, and raising industrial power tariffs through cross-subsidies. This is therefore "welfare" that hurts both equity and efficiency.

In contrast, the National Rural Employment Guarantee Scheme (NREGS) promotes equity by mainly benefiting landless labourers. Research shows that improving its implementation (by reducing corruption and payment delays) also raised wages, employment, and incomes, and sharply reduced rural poverty. These efficiency gains came from NREGS increasing workers' bargaining power against landlords with market power, and from the multiplier effect on economic activity of greater demand from the rural poor.

These examples highlight a key fact: welfare is not a monolith. Some programmes hurt both equity and efficiency while others advance both. So, we can deliver much better outcomes with the same welfare budget by phasing out the former and investing more in the latter.

Singapore's President, Tharman Shanmugaratnam, has distinguished between safety nets and trampolines. Both protect people when they fall, but nets can trap them, whereas trampolines help them bounce back. Many Indian welfare programmes behave like safety nets that keep people afloat in a better of India's democracy that electoral incentives push all political parties to distribute the benefits of growth through welfare. This "Indian mode" has done reasonably well — delivering growth rates of 6-7% with welfare contributing to inclusive



CAN ONE IDEA CHANGE A NATION? We believe it can. BRING YOUR IDEAS & SHAPE THE STORY OF VIKSIT BHARAT

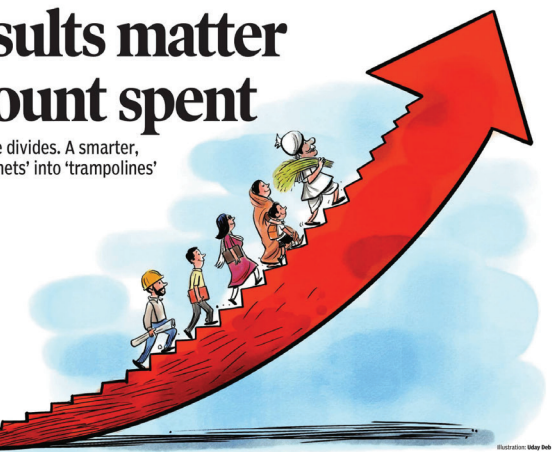


Illustration: Uday Deb

to specific locations or activities would enable people to migrate to higher-productivity urban areas, invest in skills, and take more risks. This will expedite India's structural transformation (moving labour from farm to non-farm, rural to urban, and informal to formal sectors, which in turn is key to faster growth).

The Promise of Income Transfers
A recent study in Jharkhand highlights the promise of income transfers. Mothers received Rs 500 per month for two years after household expenditure rose significantly, calorie intake increased, and dietary diversity and quality improved. We also found a meaningful reduction in intra-household gender inequality. Child's cognitive and motor skills also improved. The take-away is clear: targeted cash transfers to women can improve nutrition, gender equity and child development — and thereby promote both short-term equity and long-term productivity.

The good news is that India's world-leading digital payments infrastructure has enabled a sharp increase in income-transfer programmes.

Women-focused transfers alone have grown from nearly zero in 2018 to around Rs 2 lakh crore annually (0.6% of GDP in 2022 and now reach over 10 million beneficiaries). The focus should now be on improving design and delivery so that this fiscal commitment translates to maximum impact. Three key principles are noted below:

Rationalisation and coherence: India has hundreds of overlapping central and state schemes. Consolidating them into fewer, better-funded, and more coherent programmes would reduce duplication, improve administration, and deliver more for citizens.

Predictability and reliability: Welfare is only meaningful if it arrives on time, every time. Sporadic announcements and erratic delivery blunt impact. Building systems that deliver predictably will transform welfare from patchwork relief into genuine social insurance.

Empowerment and choice: Once citizens trust that income transfers will arrive reliably, the payments infrastructure can be used to build a choice-based welfare architecture. For instance, giving farmers a choice between input subsidies and income support would empower them to use welfare funds as they see fit. This

would help shift farmer welfare from nets that trap them in low-productivity farming to trampolines that enable mobility and productivity.

Conclusion

Welfare programmes are a moral, political, and economic necessity for Viksit Bharat. Yet, public debate focuses more on the amount of welfare spending than on its effectiveness. A key insight is that the same budget can deliver much greater effective welfare if we shrink programmes that hurt equity and efficiency and expand those that promote both.

Doing so with a focus on rationalisation, reliability, and citizen choice will allow India's welfare spending to become a powerful engine of both equity and efficiency. Done right, welfare can protect the vulnerable, empower upward mobility, and boost productivity — laying the foundations for achieving an inclusive Viksit Bharat by 2047.

The author is the Tata Chancellor's Professor of Economics at UC San Diego and author of *Accelerating India's Development: A State-Led Roadmap for Effective Governance*

Karthik Muralidharan

Tata Chancellor's Professor of Economics at University of California, San Diego

Why 'pharmacy of the world' can't copy the formula forever

Despite being a global drug supplier, India's healthcare sector leans heavily on imported ingredients and borrowed technologies. Sustainable success now needs original innovation — in medtech, biotech, and pharmaceuticals



BY INVITATION
K VijayRaghavan

Access to healthcare for a population of 140 crore (14 billion) is a task that appears formidable. India has a relatively young population, which is often referred to as a 'demographic dividend'. However, the country is also undergoing a demographic transition, with the proportion of older people gradually increasing.

As of 2025, it was estimated that close to a quarter of our population is composed of children and adolescents (0-14 years). And 6% of our population is in the 15-64 age group, expected to rise for some time before starting to decline. Our elderly population (65 years and above) is currently the smallest group, but is projected to increase substantially in coming decades. A similar stratification can be done on economic lines, as well as state-wise.

Put simply, breaking down the nature of the target population for healthcare is ideal. Each section — rich, middle-income, or poor — has common and distinct requirements of healthcare access and delivery. How improvements in each category can be addressed can then be decided. Despite enormous challenges, India has addressed this formidable task squarely and reasonably. Yet, much remains to be done.

Scaling Technology For Healthcare

How can we scale technology for healthcare delivery to low and middle-income families across this complex range of requirements? One aspect of this relates to the equipment and instruments required for diagnostics and delivery, and



Illustration: Uday Deb

the other aspect refers to the chemistry, biology and biotechnology in healthcare. India stands on strong foundations in both aspects. Yet, these foundations are being shaken because of dramatic technological changes.

India's growing medical device market is still heavily dependent on imports, particularly for high-end equipment. The Andhra Pradesh MedTech Zone (AMTZ) is making good progress

in developing indigenous technologies. But achieving greater success in the market is still needed. India's dependency rate is frequently cited at 70-80% of our substantial market, valued at \$12-16 billion in recent years and projected to grow to as much as \$30 billion by 2030.

Our imports are dominated by high-value, low-volume devices and more complex equipment. These include devices like MRI machines, CT scanners and X-ray generators, and sophisticated devices for surgical, orthopaedic, and other specialised procedures. Domestic manufacturing in India is concentrated in the low-end, high-volume segment, which includes many of the standard diagnostic devices used for home monitoring and basic hospital care.

The govt is actively pushing to reduce import dependency through policies like 'Make in India' and the Production Linked Incentive (PLI) scheme. While we have extraordinary talent, capabilities and infrastructure in our universities and research laboratories, India's medical device industry faces several challenges.

India has a limited set of integrated R&D ecosystems for research and development of cutting-edge medical technologies. It lacks a robust domestic supply chain for key components,

forcing manufacturers to import raw materials and parts. Although a new regulatory framework has been implemented, the approval process remains complex.

These concerns are remediable with speed, given our core engineering and chemistry capabilities. The AMTZ has developed a high-end research park where indigenous development of medical technologies can take place. More such places are needed. New products will have to be much less expensive, of the highest quality, and be able to compete with imported ones nationally and internationally.

Pharmacy Of The World
As with devices, so with drugs. India is called the 'pharmacy of the world'. However, a deeper look reveals a critical and strategic dependency on imports, particularly for the raw materials used to make these drugs.

India is the world's third-largest producer of drugs by volume and a major exporter, supplying a significant percentage to the global generic drug market. Indian companies produce a wide range of generic medicines, including those for common and chronic diseases like diabetes, cardiovascular ailments, and infections

diseases. India is largely self-sufficient for a vast majority of our domestic needs, especially for finished drugs and formulations (tablets, capsules, syrups, etc.).

In 2023-24, India's pharmaceutical exports were valued at approximately \$28.5 billion, while domestic consumption was around \$25.5 billion. India supplies over 60% of the world's vaccines, especially for diseases like polio, measles, and DPT (diphtheria, pertussis, tetanus). It is also developing its capabilities in biosimilars, a growing segment of the market.

Despite our strength in producing finished drugs, India is heavily dependent on the import of active pharmaceutical ingredients (APIs) and key starting materials (KSMs), the chemical compounds that give drugs their therapeutic effect. The dependency is often cited to be around 65-70%, with China being the primary source. This poses a significant strategic risk.

To address this vulnerability, Indian govt has launched a PLI and other schemes for pharmaceuticals. This initiative provides financial incentives to companies to boost domestic manufacturing of critical APIs and KSMs, with the goal of creating a more resilient supply chain.

Is Reverse Engineering Of Discoveries Enough?

One stark common feature in our 'successes', both in the medical device sector as well as in drugs, vaccines and biologics, is that we are either reverse engineering or mimicking inventions and discoveries made elsewhere. This, in itself, is not to be taken lightly. There are very complex areas, and India has done what only a few others can do.

But this cannot be a long-term strategy. In the future, an Indian model that allows for high-level investment in healthcare R&D is essential. Five steps are needed here. First, a scaling up of biomedical research. A prominent medical university in the US today has more clinical researchers of modest quality than all of India put together.

Second, the industry needs to increase its R&D substantially. Moving away from the attractive addiction to the 'generics' model is not easy, but not moving away can be suicidal for the industry. Third, industry-academia partnership in this broad sector needs to be made easy. The total number of such partnerships that our top labs together have currently can be counted on the fingers of very few hands. Just incentivising this will mitigate risk to the industry and ensure substantial. The ASIR can play a strong role in catalysing this.

Fourth, India should further incentivise opening R&D labs of the global medical, biotech and pharmaceutical industry; not just the big players, but also small and medium ones. Finally, the sector will need capital to be truly innovative. The 'one-lab-one-RD' fund that has been announced is a very positive step and it should be scaled to help such start-up ecosystem. However, companies are reluctant to take the risk for R&D. Hence, we will need to find the right instruments for financing large companies to acquire or invest in innovative R&D.

India is already well on our way in some of these directions and less so in others. Watching and facilitating this new direction will yield new technologies that are frugal, scalable, effective and original.

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Why India must aspire to be a green lab for climate innovation

Climate tech should be viewed as an opportunity for building industries, skilled jobs, and enhancing energy and national security. India now has the chance to show that economic expansion and deep decarbonisation can go hand in hand



BY INVITATION
Arunabha Ghosh

India is seeing floods and erratic rain across states and the urgency of home-grown climate solutions has never been clearer. We cannot afford to remain more technology takers in the fight against climate change. India must be an innovator, an adaptor, and, above all, a country that can scale solutions.

Climate technologies have for too long been viewed as niche 'green' alternatives. But climate tech is not merely an environmental play. It is an asset for industrial development, high-value jobs, enhanced energy and national security. Climate tech can be an asset class — like the Internet or AI — a general-purpose technology driving productivity across sectors. By leveraging climate tech and institutional innovation, India can show how a large economy can grow and decarbonise — becoming a green beacon for the Global South.

Technologies That Matter

Consider the progress we have already made. A decade ago, utility-scale solar power in India cost around Rs 5 per unit; today, transparent auctions have yielded competitive tariffs that have fallen to approximately Rs 2.2 per unit, making solar the cheapest source of electricity. More importantly, recent solar-plus-storage auctions have delivered firm, dispatchable power at Rs 3.1/AWh, cheaper than new coal.

India's renewable energy capacity has nearly doubled over the last decade, growing from about 76GW in 2014 to 237GW in 2025. Further, India registered 13 million EVs in FY25, of which 20% were two-wheelers. Meanwhile, the UJALA programme has distributed over 300 million LED bulbs, reducing both bills and roughly 30 million tonnes of CO₂ emissions each year.

These successes show what happens when technology is paired with smart policy and market creation.

But climate innovation cannot stop at solar panels and LEDs. We need to push across four fronts with a smart risk of each.

Foundational technologies that adopt proven solutions for Indian conditions — solar, EVs, and energy-efficient appliances. Rapid commercialisation of these already available technologies can drive clean energy adoption, create local manufacturing, and generate jobs. Solar-plus-storage for MSME clusters can offer cheaper power and increase competitiveness against when MSMEs 40% of exports are buffeted by tariffs.

Transitional technologies that are not yet optimised for India but proven elsewhere. For instance, integrating 90-95% of renewable energy on our grid by 2030 will require flexible storage, advanced forecasting, and upgraded distribution networks. We must invest in grid flexibility as well as leverage smart meters to optimise use of the sun and wind for lower energy bills and more efficient appliance use.

Climate resilience and breakthrough innovations complete the picture. Climate resilience innovations must tackle India's severe climate shocks. For example, using IoT and blockchain for surveillance and land-water monitoring, and AI for advanced modelling and hyperlocal forecasts. At the Council on Energy, Environment and Water (CEEW), we are building a Climate Resilience Atlas for India. It is a tool that empowers citizens from banks and investors to policymakers, local administrators, the media and citizens — in pinpoint where climate change is accelerating extreme weather, downgrading agricultural yields, and damaging infrastructure. It turns complex climate data into actionable insights.

The Enablers
In its Intended Nationally Determined Contribution (INDC) submitted in 2015, India stressed that low-carbon growth would require moving technologies 'from lab to field'. The pathway must now extend from 'lab to field to market'. These enabling conditions are non-negotiable.

The first is governance. India needs clear policy signals on where we seek to build a technological advantage. We also need to institutionalise a risk appetite that cuts two ways: using market instruments to induce competition and reduce risk, but also use institutional powers to encourage risks in breakthrough technologies. For instance, the National Green Hydrogen Mission is an ambitious start, but production targets will not materialise unless



Illustration: Uday Deb

breakthrough technological innovations are the moonshots — or rather earthshots — such as scaling green hydrogen via clear end-use cases, carbon sequestration in India's large basalt formations, or research and experiments in solar geoengineering. The risks are high, but so is the disruptive potential. To make informed policy decisions, we need research. To make venture investments, we need a willingness to fail.

There are not just climate technologies, but enablers of the growth engine of the 21st century.

Our scale and security make us uniquely suited for this role. Energy demand is expected to triple in the next two decades. Our urban population will double by 2050. Heatwaves, floods, and storms are already disrupting livelihoods and supply chains. If a technology can work in India, it can work in most places.

To play this role, India should establish mission-driven R&D consortia that bring together universities, national labs, and commercial enterprises, with flexible intellectual property arrangements that enable co-development. It should also build open-source platforms for patents, designs, and data, lowering barriers for startups and MSMEs.

Climate innovation is not just about technology; it is about geopolitics. Technology may be renewable, but their supply chains are currently not. India must create trusted technology partnerships (especially with other countries in Asia, Africa, and Latin America), diversify supply chains, and invest in circularity. We must be co-owners of tech and not passive recipients.

Finally, for India's young engineers, entrepreneurs, and investors, the climate challenge is not a constraint. It is an opportunity.

The greatest infrastructure build-out in human history is under way. The materials we choose, the industries we power, and the cities we design will either lock us into carbon dependence or climate-proof our growth. India must aspire to become the green laboratory — and the green factory — for climate-friendly technologies for the world.

pre-shipment commitments, blending mandates, and demand guarantees are in place.

The second is investment. India's innovation ecosystem is still capital-starved. We need a national climate innovation fund that blends public, private, and philanthropic capital to de-risk early pilots. Think about a combination of the US Advanced Research and Projects Agency for Energy (ARPA-E) and the UK's more recent Advanced Research & Innovation Agency (ARIA). Every rupee of public capital should be designed to crowd in at least five rupees of private investment.

The third is market creation. Technologies do not scale in vacuum. The LED transition worked because the govt created assured demand through bulk procurement, driving down prices. Similar instruments could drive markets for low-carbon cement, biomass-based fuels, electric buses, and now even green ammonia.

A Lab From The Global South
Without these enablers, India risks missing oil imports for dependence on solar modules, batteries, or rare earths. Instead, it must position itself as a laboratory for climate innovation.

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The author is CEO, Council on Energy, Environment and Water (CEEW), and special envoy for COP30, representing South Asia.

Arunabha Ghosh

CEO, CEEW & Special
Envoy for COP30
representing
South Asia





THE JOURNEY *of* INNOVATION

Ideas for India: From Vision to Validation

The Times of India launched Ideas for India as a national clarion call—an initiative designed to move beyond rhetoric and empower the nation's youth to architect solutions for Viksit Bharat @2047. At its core lies the Innovation Challenge, a competitive platform seeking original, scalable, and impactful ideas across critical sectors. The goal was simple yet ambitious: to find the “blueprints” that can solve India's most pressing challenges.

The Process: A Framework for Excellence

To ensure that only the most viable ideas rose to the top, we established a rigorous, multi-stage evaluation framework defined by fairness, domain expertise, and transparency.

The Foundation

The journey began with precision—by defining clear problem statements and eligibility criteria. A dedicated digital ecosystem was built to host the challenge, serving as the gateway for thousands of aspirations.

The National Call & Filtering

A massive outreach program across media platforms invited entries from every corner of the country. As submissions poured in, a first-level expert review acted as a quality filter, ensuring only ideas with genuine potential and strategic alignment moved forward.

Rigorous Evaluation

The shortlisted entries underwent a deep-dive assessment. An esteemed panel of jurors evaluated every submission against strict pre-defined parameters, scoring them to identify the top 30 contenders in across all categories.

Prototyping & Mentorship

Moving from theory to practice, shortlisted

participants were tasked with building “first-cut” prototypes. To guide them, a curated panel of subject-matter experts was onboarded to provide mentorship, helping refine these raw ideas into working models.

The Grand Jury Finale

In the final leg, all the finalists had the opportunity to present their ideas/prototypes before a distinguished panel of industry leaders and subject-matter specialists. After thoroughly reviewing the presentations and stress-testing the solutions, the jury tabulated the final scores to crown the winners of the Innovation Challenge.

A Process Built for Excellence

This carefully designed workflow underscores the challenge's commitment to integrity, transparency, and nurturing impactful innovation. At every stage, expert involvement and structured evaluation ensure that the strongest ideas rise to the top.

**UNCOVER THE IDEAS
READY TO
TRANSFORM
INDIA INTO
VIKSIT BHARAT**

ECONOMIC RESILIENCE TECH



J Madhan

Student, Vemu Institute of Technology



Bharatcraft: Connecting Indian Artisans Directly to Global Markets



THE PROBLEM STATEMENT

Seven million Indian artisans earn just 12-18% of their product's final retail price because 4-7 middlemen extract 60-70% margins. Language barriers, lack of export knowledge, high individual shipping costs, and quality standardization gaps prevent direct global market access, trapping skilled craftspeople in poverty despite creating exceptional value.



THE INNOVATION

Bharatcraft (live at <https://bharathcraft.onrender.com>) is an AI-powered export marketplace directly connecting artisan clusters with international buyers, eliminating exploitative middlemen.

Deployed Features: GPT-4 powered chat translation enables real-time multilingual negotiations between artisans and buyers in 15+ Indian languages with cultural context understanding and fair pricing suggestions. We've built inclusive dual interfaces—a simple voice-enabled dashboard for low-literacy artisans and an advanced dashboard for tech-savvy users, ensuring nobody is left behind digitally.

Smart logistics optimization pools shipments from artisans within 50km clusters, reducing costs by 60-75%. The progressive web app functions offline in rural low-connectivity areas. Blockchain smart contracts ensure transparent, timely payments.

Innovation Pipeline: Computer vision quality grading and automated export documentation generation for 50+ countries—transforming weeks of manual certification into instant AI-verified compliance.



STRATEGIC ALIGNMENT

Traditional e-commerce platforms charge 20-30% fees without solving core artisan challenges. Bharatcraft's live platform (<https://bharathcraft.onrender.com>) systematically addresses every barrier:

Language: AI chat translation with cultural context across 15+ languages

Inclusion: Voice-enabled simple dashboard for 68% low-literacy artisans

Economics: Cluster logistics makes small orders viable

Trust: Blockchain ensures secure payments

Our 7-10% fee versus 60-70% middleman margins means artisans earn 4x more immediately. Upcoming computer vision completes the ecosystem—we're the only platform addressing translation, accessibility, logistics, quality verification, and payments together, creating network effects competitors cannot replicate.



FUTURE IMPACT

In 3-5 years, Bharatcraft will empower 10,000+ artisans across India, generating \$25M+ in annual exports and creating 5,000+ direct and indirect jobs. Average artisan household income will grow from ₹96,000 to ₹400,000+ annually, lifting families from poverty while preserving cultural heritage.

The platform will process 50,000+ international orders with AI-verified quality certification. Our dual-interface approach—voice-enabled for low-literacy, advanced for tech-savvy—will set the standard for inclusive digital platforms globally. Carbon footprint will reduce 70% through optimized logistics. This framework will be exported to 5+ developing nations.



Every artisan deserves dignity and fair earnings—technology should empower traditions, not replace them with factories.

Meenal Sinha

Student at IIT Patna



RoadGuardian AI



THE PROBLEM STATEMENT

Every year, potholes and damaged roads cost India a staggering ₹20 billion in accidents and vehicle repairs. Most roads—about 90%—are never inspected because manual checks are slow, expensive, and inefficient. Without a fast, scalable way to spot and fix road damage, repairs get delayed, and accidents that could have been prevented keep happening.



THE INNOVATION

RoadGuardian AI keeps an eye on the roads so you don't have to. It spots potholes and cracks in real time, thanks to a camera you can stick on a car, a drone, or even just your phone. The AI's got some serious training — over 18,000 road images — so it catches damage fast and gets it right about 82% of the time, scanning at a blazing 417 frames per second.

Once it sees a problem, it doesn't just shrug and move on. The system sorts each issue as Minor, Moderate, or Critical, then gives every stretch of road a safety score from 0 to 100. It even pins down the exact spot using GPS, so road crews know where to go. If something's urgent, the right people hear about it right away.

All this cuts inspection costs by 70% compared to the old-school way. That means cities can afford to keep tabs on every road, not just a few. RoadGuardian AI plugs right into the systems cities already use — dashboards, fleet management, 311 services — so it's easy to get started. With better info, crews fix what matters most, and accidents get stopped before they start.



STRATEGIC ALIGNMENT

RoadGuardian AI takes on India's massive ₹20 billion pothole problem head-on. Instead of relying on slow, expensive manual inspections that barely cover 10% of roads, our system automatically monitors 95% of them. And it's fast—three times faster, actually—while slashing costs by 70%. The AI doesn't just spot trouble; it sorts potholes by how serious they are and tags their exact location with GPS. That way, city crews know instantly where to act first, stopping accidents before they happen. With lightning-fast processing at 417 frames per second and seamless integration into existing city systems, RoadGuardian AI totally changes the game. It turns road safety from a slow, costly scramble into a smart, efficient, and life-saving operation.



FUTURE IMPACT

In the next 3-5 years, RoadGuardian AI's going to watch over more than 500,000 kilometres of roads in 50 Indian cities. We're aiming to cut pothole-related accidents by 40% and save ₹8 billion every year. How? By rolling out 10,000 AI-powered cameras on city vehicles and drones, we'll cover 95% of roads across the country. Here's what success looks like: slashing the average road repair time from 45 days down to just 15, stopping 25,000 accidents each year, saving ₹350 crore in inspection costs, and opening up 2,000 new jobs in infrastructure monitoring. Plus, by teaming up with Smart City projects, we'll deliver real-time road safety info straight to 100 million people through their phones. We're not just fixing potholes; we're changing the way India handles road maintenance—and setting a new standard for AI-driven road safety around the world.



Every pothole costs a life—RoadGuardian AI transforms roads from silent killers into smart, self-monitoring infrastructure.

Prasenjit Das / Antara Choudhury

Cofounder / CinQueNetwork
Pvt Ltd



CINQUE New Calling – Unified Secure Multilingual



THE PROBLEM STATEMENT

Communication today is fragmented: users switch between dialler, OTT, Meeting, email, and other apps for basic interactions. Traditional mobile calling supports only voice and lacks translation, collaboration, and identity/security features. Result → Inefficiency, privacy risks, and poor continuity across networks.



THE INNOVATION

CINQUE New Calling provides a single, unified communication layer that works everywhere: GSM / VoIP or: 4G / 5G / WiFi data calls.

All features — voice, video, chat, sharing, translation, authentication — run on the same screen, simultaneously, without switching apps.

Deployable on-premise, cloud, hybrid, or private networks, with enterprise-grade encryption (SRTP/DTLS) and zero data harvesting.



STRATEGIC ALIGNMENT

Cinque is not another OTT app. It is a next-generation telecom communication stack, bridging: OTT apps, Caller identity tools, Enterprise PBX systems, Industrial communication systems.

No competitor provides: Unified Voice + Video + Chat + Screen + Translation, Works across GSM/VoLTE, OTT, WiFi seamlessly, Deployable in-house or in private cloud, Panic + Telemetry + Industrial communication, All merged into one scalable platform built for India's 4G/5G era.



FUTURE IMPACT

Indigenous Innovation – CINQUE is a Made-in-India telecom-grade next-generation calling technologies.

Economic Resilience – By reducing communication costs by 20–25%

Digital Inclusion – Providing multilingual, one-click communication for citizens across urban and rural India, bridging language and access barriers.



To become India's unified calling infrastructure, enabling secure, inclusive communication for citizens, enterprises, and telcos.

Saswat Mishra

Student, AM Jain College



AI-Driven Smart Manufacturing Ecosystem (AIME)



THE PROBLEM STATEMENT

India's manufacturing sector struggles with an expanding skill gap, slow adoption of smart technologies, and limited global competitiveness. MSMEs face inefficiencies, outdated processes, and weak export readiness. There is an urgent need for a scalable, technology-driven solution that strengthens workforce capability, improves productivity, and supports sustainable industrial growth.



THE INNOVATION

AIME is an integrated digital ecosystem designed to accelerate manufacturing modernization. It combines AI-based personalized skilling, Digital Twin simulation, and blockchain-enabled supply-chain tracking into a single platform. The system helps workers learn industry-relevant skills through adaptive modules and offers MSMEs a virtual model to test, monitor, and optimize production processes. A simple blockchain tracker improves transparency, while an export-readiness dashboard supports global market alignment. The solution also introduces a basic VR-training concept to enhance hands-on learning. By bringing skilling, operational insights, and digital compliance tools together, AIME enables manufacturers to adopt Industry 4.0 practices in a practical, cost-effective, and scalable manner.



STRATEGIC ALIGNMENT

AIME addresses the core challenges of skilling, efficiency, and sustainability by integrating training, simulation, and supply-chain visibility. Instead of isolated interventions, it offers a continuous loop where users learn, apply, and improve through real-time insights. This makes the approach more effective than traditional classroom training or standalone digital tools. The platform directly aligns with Make in India by supporting competitive local manufacturing, and with Skill India and Digital India by promoting workforce readiness and technology adoption across MSMEs. It provides a structured, scalable path for industries to move toward smart and sustainable operations.



FUTURE IMPACT

In the next 3–5 years, AIME can drive measurable improvements across skills, efficiency, and sustainability. The platform can upskill more than 50,000 youth, particularly from rural and underserved communities. MSMEs using the Digital Twin and analytics tools can reduce energy consumption by up to 20% and improve export readiness by nearly 15%. Increased transparency through blockchain can strengthen buyer confidence and support global market access. Overall, AIME can contribute to building a more resilient, competitive, and future-ready manufacturing ecosystem for India.



AIME envisions a future where smart technology empowers every manufacturer to grow sustainably, compete globally, and uplift local communities.”

Surajit Sinha

Founder, Snehix



Cloud-Connected E-Ink Learning Infrastructure



THE PROBLEM STATEMENT

Traditional schooling depends heavily on paper, plastic stationery, and fragmented tools, creating cost, waste, and limited collaboration. Schools lack an ergonomic, unified digital workflow that supports handwritten learning while preserving comfort.



THE INNOVATION

Snehix delivers an eco-friendly learning ecosystem using ergonomic E-Ink paper tablets, digital pens, and a cloud-connected workflow. Every handwritten stroke is digitized and synced in real time. Teachers access classwork instantly, share screens, track progress, and replay writing with pixel-recording. The system integrates Android apps, web dashboards, and eBook tools, replacing notebooks and textbooks while preserving pen-and-paper familiarity. It enables collaboration, cloud storage, audio conferencing, and AI-driven interactive learning—blending technology with traditional teaching smoothly.



STRATEGIC ALIGNMENT

Snehix eliminates paper and plastic dependence by digitizing all writing and books using E-Ink tablets. Its eye-safe screens and cloud workflow make teaching efficient and sustainable. Unlike tablets, it mimics natural writing without distractions, offering a low-power, teacher-centric, unified learning system.



FUTURE IMPACT

In 3–5 years, Snehix aims to serve 5,000 schools, reduce notebook and textbook usage by 60–70%, cut stationery costs by 20–30%, and expand AI-driven personalized learning—establishing fully digital classrooms powered by ergonomic E-Ink devices.



Every child deserves
eco-friendly, distraction-free
learning powered by
technology without losing
the simplicity of
pen and paper.

Vishal Chandrakant Sanghvi

Innovation & Business Accelerator



**TRIPonist—
Stay Awake.
Stay Alive.**



THE PROBLEM STATEMENT

India's absence from the global Vision Zero mission is alarming, with 150,000 annual road deaths. Millions remain unaware of risks, while costly technologies hinder adoption. Real impact requires synergy among industry, government, NGOs, citizens, and market fit innovations—driven by a passionate organizer with presence to lead transformative change



THE INNOVATION

A lightweight ear- or wrist-mounted device (25–35 g) uses built-in sensors to detect head nods and trigger loud alarms or vibrations, helping prevent drowsy accidents. It offers long battery life via micro-USB or LR44 button cells, uses recyclable plastic, and suits drivers, guards, machine operators, night-shift staff, and students by leveraging human body balance principles. Priced at just ₹499, it is designed for affordability, simplicity, and mass adoption with having business margin. We can convert into cultural driven adoption through regulatory compliance or motivation by given NFC-enabled radium sticker, serving as a participation certificate and enabling quick contact data exchange. A possible picture of our Prime Minister can be placed in the center to help align our citizens with our leadership's influence. This sticker provides critical information such as driver and passenger details, blood group, and SOS contacts, supporting authorities and medical teams during emergencies.



STRATEGIC ALIGNMENT

The problem of road safety is vast, so the plan is to begin with one practical project: a low-cost, profitable wearable product called TRIPonist. This will be followed by Smart Safety Tags, Driver Care solutions, affordable dashcams, smart road insurance, safe driving technologies with incentives, air ambulance support, and better road design and audit systems. Together, these initiatives can reduce man-made road disasters and create jobs through organized implementation. The need and opportunity were identified by attending the last three editions of FICCI and CII Road Safety Conferences and connecting with industry stakeholders and NGOs



FUTURE IMPACT

Our mission is to turn products, projects, and purpose into real impact for people, built on a deep bond with communities solving problems together. Every product will carry the spirit of BHARAT, reflecting innovative, sustainable design from India for the world. Revenue will help incubate EV air ambulances in India to save injured passengers, reduce medical costs, and prevent deaths. The solution will also save time and fuel lost in traffic caused by crashes. One strong business model will create channels for rapid participation in other road safety initiatives, amplifying earlier impact and scaling change.



TRIPonist—Stay Awake. Stay Alive—advances the global Vision Zero mission, driving innovation to eliminate road accidents and save lives

ECONOMIC RESILIENCE BEYOND TECH



Dr Jayanti Prasad Nautiyal

Dy. General Manager (Retired)
Union Bank of India (Govt. Bank)



High Farming - High Income



THE PROBLEM STATEMENT

Rapid urbanization is steadily reducing agricultural land. To maintain high productivity from shrinking cultivable area, we must grow crops that can achieve greater heights, enabling maximum yield from minimal land - just as multi-story buildings address limited space in cities. This principle must now be applied to agriculture.



THE INNOVATION

Inspired by Honorable Prime Minister's vision of doubling farmers income. I explored how I could meaningfully contribute. This led to my concept "High Farming - High Income".

This idea is simple : growing, high yield tall crop varieties either in the main field or on the ridges, corners and left over spaces of agricultural land.

Even when grown outside the main cultivated area, these crops significantly increase total yield and farmers income by maximizing land utilization. Some varieties can be grown in pots, court yards or terraces.

This process requires no complex technology, only bio fertilizers and regular monitoring. Once seeds are developed, they can be sown around the main field or in unused patches. This concept serves as a practical, low cost gift to farmers enabling manifold income enhancement through efficient land use.



STRATEGIC ALIGNMENT

The idea directly addresses the challenge of shrinking land by enabling vertical agriculture expansion. As the concept is being introduced for the first time, no existing method offers it to comparison.

A clear example is "Maha Bhindi" (Giant Okra) A plant that grows up-to 15ft tall, producing 150 okra pods per plant, each 9-10 inches long and 8-9cm thick. One plant yields 7-8kg, whereas regular okra yield only 1-2kg. This generates 4-5 times higher income, demonstrating the strong potential of high-growth varieties.



FUTURE IMPACT

I have developed 5 such high yielding species. Considering only Maha Bhindi (Giant Okra): In 1 Bigha (Aprox. 1000 Sq Yard), regular okra yields about 4 tons, whereas Maha Bhindi can produce about 30 tons,.

At an average price of Rs. 25000/ per ton, one bigha can generate Rs. 7.5 Crore per year.

For 5000 villages, the income rises to Rs. 37500 Crore annually, compared to approx. Rs. 5000 crore through traditional varieties.- over seven times higher income.



Adopt High " Farming - High Earning"
Concept & Change Farmers Destiny
(शुभस्य शीघ्रम्) Good deeds should be
done without delay.

Dr. Ravi Shankar Gautam

Alumnus and Ph.D, Indian Institute of Technology Bombay, Mumbai, India.



Short Length Chainless Bicycle



THE PROBLEM STATEMENT

Chain drive bicycles though a viable means of short distance transport is currently least preferable among urban residents. Chain requires regular maintenance. Chain derailment problem, particularly during critical traffic conditions, makes the bicycle less dependable. Increased length of bicycle cause lateral instability/ vibrations in unpaved roads in rural areas and difficult to maneuver in congested urban areas. Parked bicycle is prone to fall and requires space more than scooters and motor bikes. It is arduous work for laborers to carry along these long bicycles from rural residence to urban work areas.



THE INNOVATION

Bilateral drive mechanism of this chainless bicycle uses internally toothed ring gear to rotate the rear wheel via sprocket (free wheel) and allows rider to apply manual force efficiently. Pedals are mounted on outward side of ring gears on each side of rear wheel. This drive mechanism allows overdrive gear ratio of 1:2.5 which is equal to chain drive mechanism. It is difficult for other chainless drive mechanisms like bar linkage drive mechanism or shaft drive mechanism to achieve this overdrive gear ratio. Ring gears do not extend beyond rear wheel. It has a unique feature that pedals are not fixedly connected to each other and are operationally connected via hub of the rear wheel. Center of orbit of pedals is located towards the front side of rear wheel hub allowing ergonomic seat saddle placement. This drive mechanism allows rider to drive bicycle by circular motion of feet. Reciprocating motion of bar linkage drive mechanism is found to cause knee injuries.



STRATEGIC ALIGNMENT

Chain wheel of chain drive mechanism requires space of 8-10 inch between wheels. This chainless bicycle according to my invention (Indian patent 525040) utilizes space on the sides of rear wheel towards front side of wheel hub for installation of chainless drive mechanism. This reduces the length of bicycle without losing the advantageous features of chain drive mechanism like overdrive gear ratio, circular orbiting of pedals, comfortable seat saddle. With rear wheel being 20-22 inch in diameter front wheel can be chosen to be diameter of 15-18 inch keeping the efficiency unaffected. Rider will experience more lateral stability and less vibration. Reduced length solves the parking problem and the parked bicycle is less prone to fall.



FUTURE IMPACT

This short length chainless bicycle can be manufactured with the manufacturing facility available to currently manufacturing industry like powder metallurgy, tempering. With the improved design for which I have filed improvement patent application this bicycle will be at least marginally lighter than current bicycle. Though cost of manufacturing may not be significantly less than current chain drive bicycles, this chainless bicycle will increase confidence and dependability among rural and urban commuters, particularly school children. It also provides feasible and easily maintainable alternative to bikers interested in carrying bicycle in luxury sports utility vehicle to remote areas to enjoy camping etc.



Short length chainless bicycle provides compact size alternative to break free from confinement of motorized vehicles.

ENVIRONMENT TECH



**Ansh Gandhi,
Dip Jain,
Anurag Nair,
Aashay Jadhav,
Aniket Bande**

Sardar Patel Institute of
Technology, Mumbai



Vasundhara



THE PROBLEM STATEMENT

India lacks a smart, connected system to manage sustainability. Cities struggle with waste, traffic and emissions, while villages face poor digital access and weak environmental monitoring. The real issue is that sustainability efforts are reactive, slow, and not supported by real-time data or citizen involvement.



THE INNOVATION

Vasundhara 2.0 is a simple idea: make sustainability run on real-time data instead of manual complaints. We use sensors to track waste, water, energy and carbon levels across a city or village. When something goes wrong—like an overflowing bin or a sudden spike in emissions—the system automatically alerts teams, suggests the quickest route, and gets the issue fixed before it becomes a bigger problem. Citizens are also part of this loop. They earn eco-credits for small actions like recycling or saving energy, which encourages long-term habits. Everything works together: people, technology, and on-ground departments. Instead of isolated efforts, Vasundhara 2.0 creates a practical, day-to-day sustainability network that keeps improving with data.



STRATEGIC ALIGNMENT

Our solution directly tackles the problem of slow and disconnected sustainability management. Instead of depending on manual reporting or occasional campaigns, Vasundhara 2.0 runs continuously in the background. It turns raw environmental data into quick actions and guides departments with clear, real-time insights. The eco-credit system keeps citizens involved, and smart routing reduces carbon-heavy movement. This approach is more practical and efficient than the traditional, reactive methods used today.



FUTURE IMPACT

In the next 3–5 years, we aim to bring Vasundhara 2.0 to at least 100 cities and 5,000 villages. With real-time monitoring, we expect a major drop in waste overflow cases, more efficient energy and water usage, and cleaner transport routes. We also hope to build a community of around 10 million people who actively take part in sustainability through everyday choices. The goal is simple: make environmental responsibility easier, measurable, and part of daily life.



India can only become truly sustainable when every citizen is empowered to create change, not just observe it.

Harshal Ingale, Soham Tak, Aditya Suryawanshi

Tor.ai, BlackRock, HSBC



EcoCredit



THE PROBLEM STATEMENT

Climate change is already impacting daily life, yet ordinary people and small businesses struggle to join the green economy. Carbon credits exist, but current systems are confusing, costly, and built for big corporations. There's no simple, transparent way for everyone to measure their impact, verify actions, and benefit from going green.



THE INNOVATION

Our innovation makes sustainability simple, trustworthy, and accessible for everyone—not just large companies. Today, carbon credit systems are confusing, expensive, and difficult for individuals or small businesses to use. We change that by building an easy-to-use platform powered by blockchain and AI that lets anyone measure their carbon footprint, upload verified eco-friendly actions, and trade carbon credits securely. Blockchain gives each credit a unique, tamper-proof identity, ensuring complete transparency and preventing fraud. Smart contracts automate trading and green financial services like eco-loans or green mortgages, making sustainable finance faster and more reliable. AI adds an intelligent verification layer by analyzing documents and predicting credit scores, reducing slow manual checks. What sets our solution apart is its inclusivity and practicality—it turns sustainability into something rewarding and engaging. From earning eco-tokens to accessing green financial products, users get real incentives to live responsibly while contributing to a cleaner planet.



STRATEGIC ALIGNMENT

Our idea directly solves the core problem by making carbon credits simple, transparent, and accessible for everyday users—not just big corporations. Instead of today's complex, expensive, and opaque systems, we use blockchain to verify every credit and prevent fraud, while AI replaces slow manual checks with fast, credible verification. This approach empowers individuals and small businesses to measure their footprint, earn verified credits, and trade them with confidence. Unlike existing methods that are scattered, costly, and hard to trust, our platform unifies carbon tracking, trading, and green finance into one easy, reliable ecosystem that truly democratizes sustainability.



FUTURE IMPACT

In 3–5 years, success means building one of the most accessible green ecosystems in India. We aim to help offset 50,000–75,000 tons of CO₂, onboard 100,000+ individuals and SMEs, and enable 20–30% cheaper carbon credit trading through blockchain automation. At least 5,000 small businesses will access green loans and mortgages with faster, verified approvals. We expect a 15–25% increase in renewable energy adoption among users and 30–40% higher engagement in sustainable practices through rewards. Ultimately, our platform will make climate action a part of everyday life—simple, rewarding, and scalable across cities and communities.



We're building a world where taking climate action is effortless, rewarding, and accessible to every individual and small business.

Irfan Shaikh

CEO, Co-Founder
Neo Era Infotech



EC-UniVista



THE PROBLEM STATEMENT

Urban Emissions Challenge: A significant share of India's greenhouse gas (GHG) emissions originates from urban areas, primarily driven by high economic activity. Tackling these emissions is essential to achieving the country's climate commitments.



THE INNOVATION

The EC UniVista project is a pioneering digital initiative built to help cities move toward net-zero emissions by 2050. Our tech-driven platform actively engages and incentivizes all key contributors -individuals, organizations and businesses who impact carbon emissions through their daily activities and operations, making climate action easier, smarter and more rewarding for everyone.



STRATEGIC ALIGNMENT

The EC UniVista platform addresses the greenhouse gas (GHG) emissions problem by giving cities a simple, digital way to plan, track and speed up their journey to net-zero. Instead of relying on slow fragmented methods our platform brings all data, insights and all stakeholders together in one place making climate action faster, smarter and more inclusive.



FUTURE IMPACT

For us, success in urban mobility means making daily travel visibly cleaner and easier through greener transport choices. Our goal is to increase cycling trips to 20% and boost the use of EVs and emerging green vehicles to 30% by 2030. We also aim to grow metro, bus and shared mobility ridership. Together these shifts will cut emissions, reduce traffic, and make city travel healthier and more affordable for millions."-The true progress of a developed nation and its cities is measured not by the wealthy driving private cars, but by their choice to use public transport."



C UniVista project empowers cities to reimagine urban life, inspiring a future where people and the planet thrive together.

Neha Prasad

Founder & Managing Director,
GoGreen Bharat NSK LLP

**Lata Prasad,
Priyanka Somani**



**Building Better
Tomorrow: India's
Global Nutrition
Revolution
Powered by
Agri-Tech**



THE PROBLEM STATEMENT

India's agriculture faces fragmented supply chains, unfair pricing, post-harvest losses, minimal tech adoption, and declining nutrition in food systems. Farmers struggle with unsustainable practices, shrinking farmland, and rising dependence on imports, while consumers worldwide face a growing gap in access to safe, nutrient-rich food.



THE INNOVATION

GoGreen Bharat NSK introduces a farmer-first, tech-enabled ecosystem combining a multilingual mobile app, smart warehousing, and modular processing units. The app empowers cooperatives with marketplace access, payments, crop planning, and training modules, while warehouses integrate IoT sensors, solar energy, and food safety protocols to reduce waste and ensure compliance. AI-driven demand forecasting and offline compatibility make the solution inclusive and scalable across rural India. Beyond domestic impact, GoGreen Bharat NSK is positioned for a global brand launch, enabling export-ready batches of nutrient-rich, processed goods that meet international standards. By bridging infrastructure gaps, ensuring transparent pricing, and embedding nutrition at the core, the model uplifts farmer incomes, reduces post-harvest losses, and establishes India as a premium, sustainable agri-tech exporter addressing the global nutrition deficit.



STRATEGIC ALIGNMENT

This solution directly addresses supply chain inefficiencies, waste, unfair pricing, and declining nutrition by integrating digital tools with smart infrastructure. Unlike fragmented models, it unifies farmers, cooperatives, and buyers into one transparent ecosystem. Its modular, cloud-based design ensures scalability, while solar-powered warehouses and regenerative farming practices align with sustainability goals. By embedding nutrition standards, export compliance, and premium brand positioning, GoGreen Bharat NSK creates a pathway for India's farmers to deliver healthier, nutrient-rich food to global markets.



FUTURE IMPACT

Within 3–5 years, GoGreen Bharat NSK aims to reduce post-harvest losses by 40%, uplift farmer incomes by 30%, and onboard 5,000 cooperatives across India. The platform will enable export-ready batches of nutrient-rich produce from rural regions, impacting over 10,000 villages. By scaling modular infrastructure and digital adoption, India will strengthen food security, restore nutrition in food systems, and emerge as a premium global agri-tech brand. Success will be measured not only in domestic resilience but also in positioning India as a trusted supplier of sustainable, nutritious food worldwide.



India leading the way to solve the global problem of low nutrition through our rich soil and agricultural heritage, powered by technology and sustainability.

Rajeev S Hundekar

Founder CEO
Reusse Powertrain Innovations
Pvt. Ltd



Performance Enhancement & Emission Control System for Automobiles



THE PROBLEM STATEMENT

Air Pollution from Vehicular Emission especially from in-use ICE vehicles besides wasteful fuel consumption is the biggest contributor to the Climate Change & its dreadful consequences. Even New Vehicles are faced with technical challenges to meet the current regulatory demands. The only known proposed solutions are either Scrapping of vehicles or transiting to EV but are not affordable and sustainable solutions.



THE INNOVATION

The highest amount of polluting exhaust emissions especially PM (smoke), CO, occur during acceleration mode of IC Engines besides high fuel consumption. Even the turbocharger adapted for reducing emissions and improving performance is non operative during such acceleration, low speed modes (typically known as transient cycle).

PREUSSE's innovation is a System and at its core is a centrifugal supercharger, which kicks in at the start of the engine and delivers the requisite pressurized air to the engine for enabling an efficient combustion resulting in significant reduction of unburnt fuel (hydrocarbons) leading to greener exhaust emission.

The supercharger for such an operation draws from its ability to spin at ultra-high speeds of over 1,00,000 rpm, coupled with innovative control system (Auxiliary ECU) and other elements. PREUSSE has successfully developed a compact step up gearbox for 1,50,000 rpm which only couple across the world achieved and none in India, carrying 6 patents and 4 design registrations.



STRATEGIC ALIGNMENT

The Design of PREUSSE's Innovative system is such that with minimal modifications, can be retro-fitted to any category of vehicles, from cars to heavy commercial vehicles be it Gasoline or Diesel.

The ultra-high speeds of the supercharger makes it extremely compact & adaptable to even the most compact packaging of a small car. This coupled with the innovative algorithm of the controller without interference into the ECU of the OEM makes it legal compliant retrofit unit. The system enables reduction of upto 60% emissions, 10% fuel consumption and improves torque and power (drivability).

Such a retrofit solution helps upgrade the emission compliance of old/aged vehicles thereby providing an opportunity for extension of life of such vehicles. This can be a great solution for the challenges faced by scrapping policy.



FUTURE IMPACT

Successful commercialization of PREUSSE's Innovation project is projected to deliver the following outcomes over a period of 7 years, For production capacity of 3,00,000 units p.a.

1. Socio-Economic Impact

- Reduction of 7.64 Million Tons of CO₂
- Reduction of 1,449 Million Litres of Fuel
- Saves >6,000 premature deaths due to Vehicular Air Pollution.
- Creates Jobs to over 2,000



We have no planet B...

Join us to save our planet borrowed from our children.

Sanjeev N. Anigol

Founder & Ceo, Samsan
Innovation and Labs Pvt Ltd



Autonomous AI Weeding Machine with Integrated Soil Monitoring



THE PROBLEM STATEMENT

Indian farmers face significant yield loss (20-40%) from weeds and soil degradation. Current methods for weeding and soil testing are separate, costly, and inefficient. The core issue is the lack of an affordable, integrated technology for simultaneous weed control and real-time soil health management.



THE INNOVATION

Our solution is an integrated swarm robotics system for precision agriculture. A coordinated fleet of autonomous, solar-powered robots performs mechanical weeding and multi-parameter soil analysis in a single pass. The core technology combines AI-powered computer vision for precise weed identification, a multi-sensor suite for real-time soil analysis (pH, NPK, moisture), and swarm intelligence for efficient, collaborative field coverage.

The process is simple: robots autonomously navigate fields, detect and mechanically remove weeds, and simultaneously analyze soil conditions at the precise point of weed growth. This data is used to generate real-time field health maps and recommend targeted interventions, optimizing resource use and improving crop health. This approach eliminates chemical herbicides and provides immediate, actionable insights, a significant leap from traditional methods that take weeks to yield soil data.



STRATEGIC ALIGNMENT

Our idea directly solves the problem by replacing separate, high-cost weeding and soil testing with a single, automated, real-time operation. This integrated approach is more effective because it reduces operational costs by 40-50%, eliminates the need for chemical herbicides, and provides immediate soil health data, preventing land degradation.

Unlike expensive, single-unit robots, our affordable swarm system offers scalability, reliability, and is designed specifically for the small-to-medium farms that constitute 86% of Indian agriculture, making precision technology accessible to all.



FUTURE IMPACT

In 3-5 years, success means deploying over 500 robotic swarms across 5,000+ farms in India. We aim to increase customer crop yields by 25%, reduce chemical herbicide use by 70%, and create over 500 jobs. Our platform will establish a comprehensive soil health database for over 10,000 hectares, enabling a nationwide shift towards data-driven, sustainable agriculture and impacting thousands of farming communities by making their operations more profitable and environmentally friendly.



We empower farmers with data-driven precision, cultivating a future of sustainable and profitable agriculture from the ground up.

ENVIRONMENT BEYOND TECH



Avinash Arun

Airbus India,
Aerodynamics Engineer



Harness Human Movements



THE PROBLEM STATEMENT

High-traffic sites like tech parks, stadiums, and airports use a lot of electricity to power resources and end up paying high power bills and overloading the grid. The small devices spread across these spaces depend on costly wiring, and disposable batteries, creating ongoing labour, reliability, and e-waste problems.



THE INNOVATION

In high-density passenger zones - such as Tech Parks, Stadiums, Airports etc. Millions and millions of footsteps are exerted daily. This represents a massive, predictable, and entirely unharvested sources of kinetic energy. This represents a missed opportunity in modern public infrastructure: a high-volume, free energy input is consistently ignored. By strategic deployment of Piezoelectric system the wasted mechanical energy from human movement can be converted into useable electricity in high-density urban areas. Piezoelectric systems generates an electric charge when mechanical stress (walking/running) is applied. Low voltage power is generated from each step, collected and conditioned and then can be immediately used for LED paths, security cameras, WiFi points, lights or stored for later use.



STRATEGIC ALIGNMENT

It solves the energy problem directly by reducing dependency on fossil fuels by taking massive urban infrastructures off the grid. It solves the problem by focusing on high-value, indigenous manufacturing and creating a resilient, decentralised energy technology. It is also different from existing solutions like wind/solar as they require certain environmental conditions and access to them is limited. They also require large dedicated areas with proper alignment to the conditions (eg. wind direction or sunlight direction). Wind farms are usually located in regions far away from where the energy is actually used.



FUTURE IMPACT

Job creation in high-skill and high values competencies on precision engineering and R&D in advanced materials. Supports the AtmaNirbhar Bharat initiative by manufacturing core components in-house This also fosters innovation and enables smart city integration. By harnessing domestic demand, prompting advanced manufacturing, and creating a resilient energy-data product for global export (at 2-3 times lesser cost than existing products), my idea is a tangible manifestation of 'Make in India for the World'. And most important of all, for the existing urban infrastructure, at least 10% reduction in the dependency of fossil fuels and grid independency.



This is a blueprint for high-tech self-reliant future. My idea turns India's massive foot traffic to self-sustaining power. The future of smart-infrastructure starts beneath your feet

Harsh Kalpeshkumar Dave

AI Consultant / Self Employed



Sunetra AI - Intelligent Edge System for Wildlife and Human Safety



THE PROBLEM STATEMENT

When wild animals wander into the villages that border India's forests, the results can be deadly. Loss of life, livestock and crops is an almost guaranteed consequence, and when the sun goes down, low visibility makes it a nightmare. Unfortunately, current monitoring systems are prohibitively expensive or entirely ineffective, failing to send out real-time alerts, so it takes a while before anyone even knows what's going on and the villagers go into panic. The delayed response is compounded by a growing wave of hostility towards wildlife, putting both human and animal lives at stake.



THE INNOVATION

In terms of wild animals and humans, there is no room for mistakes. SuNetra AI takes the fight against animal invasions by providing a smart, real-time alert system. Equipped with a small edge computer, a camera is able to determine if a moving object is a lion, leopard, or any other dangerous animal.

Once detected, it will send out harmless deterrents such as a calming bird-mimicking sound and flashing LED light that push it away from homes, farms and roads while also alerting the nearby people.

Since it works offline, it is absolutely suitable for remote regions. It's also comes in three different versions to satisfy different needs. One designed for homes and farms; the other for roads and village boundaries and a third for restricted forest areas, for monitoring poachers. Combining its swift AI detection and instant warnings, SuNetra AI defuses panic and safeguards lives and properties and operates 24/7, through day and night.



STRATEGIC ALIGNMENT

SuNetra AI specifically targets the demand for early warning and immediate notifications in communities near forests stopping threats before they affect humans or domestic animals. In contrast to existing methods on slow manual reporting SuNetra AI operates completely on edge AI guaranteeing offline functionality, instant response and cost-effectiveness, in isolated regions. Its harmless deterrents minimize alarm and shield wildlife from damage. With models tailored to specific regions and species like Gir lions and other wild animals, SuNetra AI offers a faster, humane, and community and animal friendly approach delivering proactive protection where it is needed most.



FUTURE IMPACT

Over the 3–5 years I with SuNetra AI plan to decrease human-wildlife conflict occurrences by a minimum of 75% in its operational areas and save thousands of livestock every year. My goal is to expand to than 1,500 villages and cover 1,000 km of vulnerable highways throughout India safeguarding over one million rural inhabitants and enhancing harmony with wildlife. Additionally the initiative will aid conservation efforts by lowering damage to endangered species such, as Gir lions by at least 30%. With mass manufacturing, device cost will decrease by 25–35%, making it an accessible and sustainable safety infrastructure nationwide.



We share this planet with one life each no human should fear home,
and no animal should die for crossing an invisible line

Jenil Gandhi

Founder & Director, Avinya
Leather Pvt. Ltd.



Transforming Agri-Waste into Vegan Leather



THE PROBLEM STATEMENT

India burns more than 350 million tonnes of crop residue like wheat and rice straws (Parali) and still relies on polluting animal and plastic-based leather. This causes carbon emissions, water pollution, and ecosystem damage. There is a clear gap for a scalable, sustainable, and commercially viable material alternative.



THE INNOVATION

Avinya converts rice and wheat straw into plant-based vegan leather using a sustainable material engineering process. Instead of burning agricultural residue, we turn it into a high-value alternative to animal and synthetic leather, without animal inputs, excessive water use, or toxic tanning chemicals. The material is lightweight, durable, flexible, and suitable for fashion, footwear, lifestyle accessories, and upholstery. Our process promotes circularity by sourcing agri-waste from farmers and processing it into a commercially usable product. The material is already tested, PETA-approved vegan, REACH-ready for export, and manufactured in a pilot unit. This approach creates environmental value, reduces emissions, and supports eco-friendly manufacturing at scale.



STRATEGIC ALIGNMENT

This solution directly replaces two harmful practices: open-field crop burning and polluting traditional leather production. By using agricultural waste as input material, we reduce emissions at source while offering brands a responsible material alternative. Unlike existing solutions, Avinya is scalable, cost-competitive, and built for mainstream adoption, not just niche sustainability markets.



FUTURE IMPACT

Over the next 3–5 years, we aim to scale production to over 1,00,000 sq. meters annually, divert more than 500 tonnes of agri-waste, avoid the slaughter of thousands of animals, and reduce carbon emissions equivalent to 10,000 tonnes. The vision is to supply global brands and establish India as a leading hub for sustainable materials.



The leather of tomorrow will be guilt-free, cruelty-free, and planet-positive, that's Avinya Leather's promise.

Rohit Shah

Innovator, Patent holder, and
Founder Director of Kalki
Ecosphere Pvt. Ltd.



Plug & Play Mobile Water Purifier



THE PROBLEM STATEMENT

A lot of households have Water Purifiers at home, but while one is in on the go, there is an absence of clean water. Thus, this leads to an impulsive buy of packaged drinking water which is not only harmful for the environment but also for our own health since the bottles are made of plastics containing BPA Bisphenol A and PET Polyethylene terephthalate. Electric filtered water stations require frequent professional maintenance lest the water in them turns acidic. RO Purification, known as one of the most efficient ways of water purification too, unfortunately removes essential minerals of water and also waste a lot of water in process.



THE INNOVATION

We have innovated a product which can actually purify water without help of electricity and is portable at the same time can actually solve every problem stated in the Problem section. A water purifier, with MHD technology (Magnetohydrodynamics), Selective racing mechanism, and designed so compact, to carry along like a mobile. It can not only provide clear water just by plugging to any tap available in public area, but at the same time reduce dependency on packaged water bottles and help reduce single use plastic pollution and save environment. Our device, unlike RO, not only avoid wastage of water but also aid in retaining essential minerals of water. This portable purifier is completely DIY, maintained with ease, without help of technicians, so people living in remote areas, where technicians don't reach can also use our product.



STRATEGIC ALIGNMENT

Eliminating toxic sub stains: Impactpure is the most efficient among the competition as it eliminates bacteria, viruses and protozoans by 99.99%. It also controls TDS by reducing toxic substances, heavy metals and pesticides. Impactpure provides its user with the purest form of water on the go or even at home. Providing practicality: Impactpure is a highly portable device which can be carried anywhere with ease. The device is also very easy to use and very easy to clean. The filtration process is really quick and the process doesn't require any energy. Solving Affordability: In spite of being made of high-quality materials, Impactpure is an affordable device. Also, Impactpure does not require professional maintenance and is very simple to maintain. Innovating creating sustainability: By providing plug and play water purification solutions at an affordable price, we intend to create a more sustainable environment by not only fighting against the usage of single use plastics but also providing water at its purest form.



FUTURE IMPACT

The ImpactPure water purifier is set to revolutionize global clean water access by eliminating reliance on electricity and producing zero wastewater, a key environmental advantage over traditional RO systems. Its future impact centres on democratizing safe, mineral-rich hydration for remote communities, travellers, and environmentally conscious urban households. By leveraging durable, portable, and low-maintenance technology, ImpactPure establishes itself as the sustainable standard for filtration, significantly curbing plastic bottle consumption and reducing the overall carbon footprint of drinking water supply worldwide.

Success for ImpactPure in the next 3-5 years will be measured by its reach, affordability, and ecological contribution: Market Penetration (Reach): Deploy 500,000 units globally, directly impacting the health of 2,500,000 individuals across underserved communities and urban households. Affordability (Cost Reduction): Reduce the total annual cost of ownership (filter replacement and maintenance) for the end-user by 15% through optimized supply chain and manufacturing processes. Environmental Sustainability: It can prevent 100 million Litres of wastewater annually, based on a comparison to the water-intensive Reverse Osmosis (RO) market standard.

Sourabh Saini

Director Projects,
Kheti Virasat Mission



Ecological Paddy Residue Management Model



THE PROBLEM STATEMENT

Punjab and Haryana continue to struggle with paddy residue burning, causing soil degradation, air pollution, and health impacts. Farmers lack practical, low-cost and ecological alternatives that fit into their cropping patterns. The gap lies in accessible models that farmers can adopt without financial or operational stress.



THE INNOVATION

The idea is to establish a farmer-friendly Ecological Crop Residue Management (ECRM) model that helps farmers handle paddy straw in the field without burning. The model combines simple field practices like surface seeding, mulching, microbial inoculants, and moisture-conserving methods to convert crop residue into a resource instead of a burden. It is built around demonstrations, local trainings, farmer-to-farmer learning, and continuous handholding. The approach avoids heavy machinery and instead focuses on soil biology, timely operations, and practical guidance that farmers can implement with their existing tools. This makes the model affordable, replicable, and suitable for small and marginal farmers. Over time, the method improves soil health, reduces costs, and helps farmers shift to more sustainable farming practices.



STRATEGIC ALIGNMENT

This idea solves the core problem by giving farmers a working, field-tested alternative to burning paddy straw. It fits directly into the wheat sowing window, requires minimal investment, and is supported by real demonstrations where farmers see the results themselves. Unlike machinery-driven approaches, this model focuses on biology and simple operations, making it easier to adopt at scale. It removes dependency on subsidies and promotes long-term soil restoration.



FUTURE IMPACT

In the next 3–5 years, the goal is to scale this model across thousands of acres, helping at least 10,000 farmers reduce residue burning. We expect a 20–30% reduction in production costs through better soil health and lower input use. The model will build year-round farmer engagement, encourage natural and ecological practices, and create a strong community of practitioners who lead the transition away from burning. The larger vision is cleaner air, healthier soils, and resilient farming systems.



A farmer empowered
with simple ecological
practices can
transform both his
soil and his
community's future.

Dr. Suman Mallick

Senior Project Associate/ Wildlife
Institute of India



Trash to Tressure: Sustainable Waste Management to Animal Feed



THE PROBLEM STATEMENT

Waste management and invasive species have become a great threat for the environment in the face of excessive anthropogenic pressure. Traditional techniques fall apart demanding for scientific techniques that can deliver ecosystem sustainability by addressing the crucial concerns. Solution demands proper utilization of these resources into valuable nutrient sources with the touch of scientific innovations. Animal feeds are costly as raw materials are imported, using natural sources can curtail the cost contributing to the welfare of livestock and make our nation self-sufficient.



THE INNOVATION

My idea revolves around nutrient profiling of agro-wastes (Sugarcane bagasse) and invasive species (Amazon sailfin catfish, fish wastes & water hyacinth abundantly available and removed from aquaculture ponds). The sugar bagasse is fibre as well as carbohydrate rich and invasive species are protein rich, which are crucial nutrients for livestock wellbeing, growth and development. Utilising such nutrient sources in scientific feed formulations and collaborating with animal feed producers can reduce our dependency on the synthetic nutrient sources, which are costly. Adoption of such self-sustaining nutrient sources not only limit the cost but also retract these wastes as well as invasives in proper management since those resources are enormously available in the ecosystem. Channelising these resources in the animal feed industry will also empower fisherman community by involving them in secondary activities such as catching, sorting and collection which also help them to strengthen their livelihood by adding revenue for their job which is otherwise waste of effort and fuel.



STRATEGIC ALIGNMENT

Environmental sustainability, livelihood development, waste and invasive species management are the few areas my idea addresses. Making our country self sufficient is the need of the hour in the face of international conflicts. Livestock farming is one of pillars of the development of the country as we depend heavily on the dairy products. Proper nutrition promotes well-being contributing to the productivity. Natural resources are far better from the view point of cost effectiveness and side effects of synthetic nutrient sources. Proper waste manage and invasive species management can be achieved by raising its demand to avoid littering.



FUTURE IMPACT

Outcomes: 1) Enhancing livelihood development by involving community 2) Curtailing the cost of feed preparations by using natural resources 3) Strategic and effective waste management 4) Scientific management of invasives by raising demand 5) Ecosystem sustainability 6) Addressing animal welfare and enriching nutrient value for better productivity 7) Livelihood development opportunity 8) Promotes circular economy 9) easing financial pressures on livestock farmers.



The idea will be a boon to conservation efforts addressing 3 sustainable development goals, SDG 1: develop livelihood by addressing poverty of backward community, SDG 14 & 15: a clean habitat for life below the water and above the land, tackling the invasives.

“From Trash to Tressure – Feeding Growth, Sustaining Nature.”

HEALTH & SOCIAL TECH



Basavanagoud S

Cyber Security/Developer -
Freelancer



AI-Powered Rural Healthcare Revolution



THE PROBLEM STATEMENT

900 million rural Indians face healthcare crisis with 1:30,000 doctor ratio, 45-minute emergency response delays, and 15% income spent on medical access. Digital exclusion and limited infrastructure cause 1 million+ preventable deaths annually in remote areas.

Additional crisis points:

- 1) 70% population with only 30% healthcare resources
- 2) Cardiac emergencies: 50% reach hospitals too late
- 3) Maternal & child healthcare gaps in 80% villages
- 4) Seasonal disease outbreaks with delayed response



THE INNOVATION

Basavanagoud HealthAI is an AI-powered platform delivering 24/7 healthcare access through intelligent symptom analysis with 95.7% accuracy, emergency services integration (108/112/102/104), and smart health management. Our offline-first technology works without internet, supports multiple languages, and provides real-time risk assessment. The platform features medicine reminders, digital health records, and predictive analytics specifically designed for rural challenges. Unlike urban-focused apps, we prioritize emergency detection, zero-connectivity functionality, and community health worker empowerment through simple interfaces accessible to non-tech literate users.

Technical excellence points:

- 1) 3-second AI diagnosis response time
- 2) 50+ medical condition database
- 3) Voice command support for illiterate users
- 4) Cross-platform compatibility (Web/Android/iOS)
- 5) Real-time health monitoring alerts
- 6) Secure data encryption & privacy protection



STRATEGIC ALIGNMENT

Our solution directly addresses rural healthcare gaps by providing instant medical access without physical travel. AI diagnosis reduces burden on limited infrastructure while emergency integration saves lives through faster response. Offline capability bridges digital divide and multi-language support ensures wider adoption. Compared to existing solutions, we offer comprehensive rural-focused features rather than adapted urban apps, making healthcare truly accessible and affordable for village communities.

Competitive edge points:

- 1) Only rural-first healthcare AI platform in India
- 2) Integrated emergency detection & response system
- 3) Works completely offline - no internet dependency
- 4) Multi-language vernacular support (10+ languages)
- 5) ASHA worker digital empowerment toolkit
- 6) Government health scheme integration ready



FUTURE IMPACT

In 3-5 years: Serve 1 million+ users across 5,000+ villages, reduce emergency response time by 65%, prevent 50,000+ deaths through early detection, cut healthcare costs by 60% per household, train 10,000+ ASHA workers, achieve 95% user satisfaction, and integrate with 100+ Primary Health Centers. Success means becoming primary healthcare access point for rural India while complementing government health initiatives.

Expanded impact metrics:

- 1) Year 1: 50,000 users, 500 villages, 5 states
- 2) Year 3: 500,000 users, 5,000 villages, 15 states
- 3) Year 5: 2 million+ users, pan-India presence
- 4) Economic impact: ₹10,000+ annual savings per household
- 5) Job creation: 5,000+ digital health roles
- 6) National healthcare cost reduction: ₹5,000 crores



Democratizing healthcare through AI - where every village has instant medical access and every life gets equal fighting chance.

Bhuwan Thada

Technical Architect in a leading Indian IT organization.



Aayura: AI Powered Patient Care



THE PROBLEM STATEMENT

Access to healthcare in India's unprivileged and rural areas is extremely limited. Fragmented patient data, delayed diagnoses, inadequate monitoring, and clinician overload worsen care gaps and risks.

These cause very late detection of diseases (several times at a stage of incurable) along with very high financial burden over a given time period of time.



THE INNOVATION

The designed solution bridges the healthcare gap for underserved and rural communities by leveraging GEN AI and mobile technology. By centralizing patient data and automating analysis, we empower clinicians and health workers (Doctors and medical professions) to deliver faster, more personalized care, while improving accessibility and resource efficiency in unprivileged settings.

1) Centralized Patient Data: Collects health information from clinics, mobile devices, telemedicine apps, and wearable devices such as smart watches, fit bands etc. 2) Easy Data Entry: Allows health workers, even in rural areas, to update patient records using smartphones. 3) Remote Monitoring: Enables continuous patient tracking and support outside hospitals. 4) Agentic AI Analysis: Processes medical histories, patient symptoms and local area outbursts for early risk detection and triage. 5) Personalized Recommendations: Suggests tailored treatments based on patient profiles. 6) Insightful Dashboards: Visualizes health trends, care gaps, and outcomes to guide resource allocation for improved community health.



STRATEGIC ALIGNMENT

This solution directly tackles the limited healthcare access and fragmented services in unprivileged and rural Indian areas by leveraging technology for greater efficiency and reach. It improves upon outdated, location-based healthcare models through automation and real-time connectivity.

1) Bridges Access Gaps: Enables healthcare delivery in rural and underserved areas via mobile and remote support. 2) Centralized Data: Unifies patient records from multiple sources, reducing fragmentation. 3) AI-Powered Insights: Automates triage and treatment suggestions, lowering clinician workload and enhancing support decisions. 4) Scalable & Efficient: Extends care beyond physical facilities, serving more people. 5) Timely Interventions: Provides alerts for urgent cases and follow-ups, improving outcomes. 6) Promotes Equity: Delivers quality healthcare to all, overcoming barriers of distance and resources.



FUTURE IMPACT

1) Phase-1(Pilot): 50 PHCs in one state. 2) Phase-2 (Growth): 500 PHCs across two states via State Health Mission partnership. 3) Technology Scalability: Cloud-native architecture allows for rapid user expansion without infrastructure overhaul. 4) Cost-Effectiveness: Cost of one A.I. consultation is <5% of a traditional specialist OPD visit. 5) Enhanced Data Utilization: Achieve 90% digital record adoption among participating clinics and health workers. 6) Patient Outcomes: Improve health outcomes and reduce preventable complications in unprivileged communities.



Every life deserves quality care with timely and expert healthcare to those who need it most, regardless where they live.

Chinmaya Naik

Co-Founder



BlisCare



THE PROBLEM STATEMENT

Millions of visually impaired learners lack access to affordable, updated, and adapted educational content. Existing braille books and devices are expensive, outdated, and limited, leaving over 95% of this community without quality education or digital learning opportunities.



THE INNOVATION

BlisCare introduces an affordable Digital Braille Display System, an innovative “Braille Tablet” that instantly converts any text or diagram into standardized Grade-1 and Grade-2 braille. Built on a unique, patented bulge-out mechanism, the device offers real-time braille replication at nearly one-third the cost of existing technologies. Its open-source digital platform provides unlimited online and offline learning content, ensuring visually impaired students gain access to updated curricula, skill-building materials, and vocational resources. Designed for individuals and institutions, the system eliminates the high cost of braille book production and reduces maintenance by up to 25 times. Together, the device and content ecosystem create a complete digital learning and career-growth pathway for the visually impaired community.



STRATEGIC ALIGNMENT

BlisCare directly addresses the lack of affordable braille learning tools by replacing costly physical books and high-priced braille devices with a scalable, low-cost digital solution. Its patented mechanism and adapted content platform provide faster, more reliable, and accessible learning than current methods. By combining hardware and curated braille content, BlisCare ensures that visually impaired students receive updated, standardized, and lifelong educational support, something existing solutions fail to deliver.



FUTURE IMPACT

In 3–5 years, BlisCare aims to reach over 3 million visually impaired users across India and global regions, reducing braille education costs by more than 60%. The goal is to digitize 500+ visually impaired institutes, enable 100,000+ individual learners through the Braille Tablet, and build the largest open braille-content platform. Success means bridging the education gap, creating new employment pathways, and ensuring inclusive digital learning for every visually impaired student.



We envision a world where every visually impaired learner gains equal, affordable, and limitless access to knowledge and opportunity.

Digvijay Singh, Deepshikha

Founder / Nosky Labs



Early Care for “Kinder, Better Future, & Healthier Companions”



THE PROBLEM STATEMENT

India lacks accessible, affordable, and preventive pet healthcare. Vet shortages, high costs, stressful clinic visits, and absence of at-home diagnostics delay illness detection, leaving most pets without regular care and pushing pet parents into reactive, expensive treatment cycles.



THE INNOVATION

Nosky Labs is an AI-powered preventive healthcare platform for pets, designed to make early detection easy, affordable, and stress-free. The solution combines three core components: an intelligent symptom checker, personalized health alerts with digital medical history repository, and convenient at-home diagnostic tests. Pet parents can check symptoms instantly, receive clear guidance, and book home sample collection with one click—removing the need for stressful clinic visits.

Collected samples are processed by partner labs, and results are delivered directly inside the app with easy-to-understand explanations. Over time, the system learns from each pet’s data to provide more accurate alerts, reminders for vaccines, and preventive care suggestions.

This hybrid model—digital app + home diagnostics—fills the biggest gap in India’s pet healthcare: early identification of issues before they become expensive or dangerous. It gives pet parents peace of mind while making routine care far more accessible and consistent.



STRATEGIC ALIGNMENT

Nosky Labs tackles delayed care, high costs, and limited vet access by bringing preventive healthcare directly into pet homes. Our AI symptom checker provides instant guidance, reducing panic and unnecessary clinic visits. Personalized health alerts ensure pets don’t miss vaccinations or early screenings. Most importantly, at-home sample collection removes the stress, time, and expense of clinic diagnostics making regular checkups finally accessible. Unlike existing options that offer only tele-vets or basic alerts, our integrated model combines AI + home diagnostics + preventive subscriptions, ensuring early detection, predictable costs, and higher adoption in busy urban households.



FUTURE IMPACT

Nosky visions to create measurable behavioral change and social impact. By increasing preventive-care compliance to nearly 70%, Nosky significantly reduces avoidable illnesses and high-cost emergencies. Our mission is to serve 500,000+ pets with preventive care in the next 5 years and achieve 40% improvement in early illness detection. We aim to lower pet healthcare costs by 25–30% for subscribers. This translates to reduced anxiety for over 60% pet parents and lower pet abandonment rates to under 3% among Nosky users showcasing Nosky’s role not just in improving pet health, but also in strengthening household wellbeing and emotional resilience.



Bringing early pet healthcare into every home, we ease silent suffering into shared wellbeing, strengthen families, and weave healthier communities.



Shridhar Purohit

Director – Healthcare Offerings,
Tietoevry

Anish Banger

Business Analyst Tietoevry



VR-Based Sustainable Healthcare Training Platform



THE PROBLEM STATEMENT

Healthcare teams spend significant time in repetitive, resource-heavy training sessions, reducing the time available for direct patient care. Traditional methods rely on expensive mannequins, cadavers, and centralized workshops, limiting scalability and creating operational and environmental burdens.



THE INNOVATION

Our VR Healthcare Training Platform uses immersive virtual reality to deliver high-quality clinical procedure training without physical resources or scheduled workshops. It enables healthcare workers to practice anytime, anywhere, using affordable VR devices. Training modules include procedures like tracheostomy, intubation, catheterization, CPR, wound care, and simulated through realistic 3D models and guided steps. The platform provides real-time feedback, performance analytics, and repeatable hands-on practice, dramatically reducing the need for instructor-led sessions and freeing healthcare professionals for patient care. By eliminating consumables, reducing travel, and offering multilingual and role-specific content, the solution is scalable, sustainable, and inclusive across diverse healthcare settings.



STRATEGIC ALIGNMENT

This solution directly reduces the training burden on healthcare teams by digitizing and decentralizing clinical skill development. VR modules allow hospitals to train more staff with fewer instructors, fewer physical resources, and virtually no recurring cost. By modernizing how hospitals train for both routine and complex procedures, the platform increases staff efficiency, improves competency, and frees valuable time for patient care. It also addresses environmental and cost challenges that traditional training methods cannot overcome.



FUTURE IMPACT

Within 3–5 years, the platform aims to support 20+ clinical procedures, train 100,000+ healthcare workers, and reduce training-related operational costs by 40%. Hospitals will save thousands of staff hours annually, redirecting them toward direct patient care. The solution will reduce biomedical training waste by 90% and become a global model for skill development in healthcare, especially for resource-constrained settings.



When healthcare teams
train smarter, patients
receive better care—
VR ensures learning
never steals time
from healing

HEALTH & SOCIAL BEYOND TECH



Pavana Guruprasad

Entrepreneur, Stemlabs



**Inclusive
STEM Training
Empowering
Special, Tribal,
Government
School Teachers**



THE PROBLEM STATEMENT

Teachers in special, government, and tribal schools lack structured STEM training and hands-on learning tools, making it difficult to teach foundational STEM concepts effectively. This gap limits learning outcomes for marginalized and special-needs children and highlights the need for a scalable, inclusive training model.



THE INNOVATION

Our solution provides a simple, practical, and inclusive way for teachers to confidently teach STEM concepts in any classroom. We use easy-to-understand, curriculum-aligned modules along with low-cost, reusable STEM kits that make learning hands-on and enjoyable. The core mechanism is a teacher-training model where special educators, government school teachers, and tribal school teachers are taught how to deliver STEM lessons themselves, without relying on external trainers or high-end technology. Our approach focuses on experiential learning, helping teachers simplify abstract concepts through activities that build logical thinking, problem-solving, and creativity. The training happens in a supportive, low-pressure environment, making it ideal for educators from non-technical or special-education backgrounds. By empowering teachers with the right tools and strategies, the program becomes scalable, sustainable, and adaptable to any region including rural, tribal, and special-needs classrooms.



STRATEGIC ALIGNMENT

Our idea directly solves the problem by equipping special, government, and tribal school teachers with structured, curriculum-aligned STEM training and simple hands-on kits, enabling them to confidently teach STEM concepts in inclusive classrooms. By transforming teachers into STEM facilitators, the approach eliminates dependence on external vendors and ensures long-term sustainability. Unlike existing solutions that rely on high-end technology or urban experts, our model is low-cost, community-led, and adaptable to any geography building teacher confidence, supporting diverse learners, creating a scalable ecosystem that makes quality STEM Education.



FUTURE IMPACT

Success in 3–5 years means creating large-scale, measurable impact across India's special, government, and tribal school systems. Stemlabs intends to train 5,000+ teachers nationwide, ensuring accessibility for children with special needs. The Train-the-Trainer model will establish state-level mentor networks in 8–10 regions, reducing training costs by 30–40% and eliminating vendor dependency. Programs will be integrated into government teacher development frameworks, for a self-reliant, inclusive STEM ecosystem transforming India's foundational education.



Our vision is to create balanced quality STEM learning universal by empowering teachers to reach every child, regardless of ability or background.

Dr. Ritu Jain

Academician

Vikas Jain

Senior Manager, Innovator
Sahbhagita Kendra Mission (SKM)



**Sahbhagita
Kendra Mission
(SKM)**



THE PROBLEM STATEMENT

As India is on the path of economic progression and rapid urbanization, it faces rising mental and emotional health challenges, social isolation, loneliness, stress, and disengagement across age and income groups, which is weakening the community bonds of our society that have kept us together as a unified force for centuries.



THE INNOVATION

The existing welfare initiatives are fragmented and lack a long-term vision. Their dependence on government grants limits scalability and sustainability. There is a vast network of community centers, panchayat bhawans, and multi-purpose halls that are underutilized and used for sporadic events like functions and elections. There is an opportunity to address these gaps by transforming these underutilized public spaces into vibrant centers of community wellbeing, social hubs of inclusion and civic engagement, and cultural hubs for creative expression. The integrated approach that merges health, social, and civic goals aligns with the long-term vision of building stronger social ties, improving the mental and physical health of citizens, and creating sustainable models of local engagement essential for realizing the vision of Viksit Bharat 2047. For sustainability, funding would be sourced from a mix of Government grants, CSR/philanthropy, membership/rentals, events, and sponsorship. Cost would be further optimized using volunteer groups and social enterprise tie-ups.



STRATEGIC ALIGNMENT

The existing health, skill and social welfare initiatives often operate in isolation, focused on limited populations or urban clusters. These are mostly focused on limited populations or urban clusters with limited visibility or citizen participation. The SKM approach integrates wellness, inclusion, and livelihood within one neighborhood platform. It employs a Public-Private-People Partnership (PPPP) model for economic self-sufficiency by reactivating existing centers with structured, year-round engagement programs. It focuses on building shared spaces for all, fostering intergenerational and cross-community cohesion. Furthermore, it uses digital dashboards, QR codes, and mobile apps for transparency and engagement.



FUTURE IMPACT

The SKM aims to contribute to achieving the Viksit Bharat 2047 vision for a healthy, inclusive India. Community Cohesion Scores are expected to increase by 20-30% leading to stronger inter-personal bonding across age groups, genders, and backgrounds. A 25-40% reduction in self-reported loneliness is expected, validated through periodic social-wellbeing surveys. Through partnerships with district mental-health programs and counsellor sessions, a 5-20% reduction in stress and anxiety indicators is expected. 40-60% increase in government-scheme enrollment via Jan Suvidha desks at SKMs. Overall, SKMs can positively touch the lives of around 15-20 crore citizens in 3-5 years.



From social isolation to social belonging, from who cares to we care –
Swasth sharir, madhur vichaar, aapsi meljol banayee Sangaith saamaj.

**Subhadra Gade,
G V S N Manga Tayaru,
Gayatri G,
Priya G**

Team QAE- S
(off shoot of GPRSPL)



**Alchemy Elixir
Solution (OPOD) -
Bharat's Offering
in Wellness**



THE PROBLEM STATEMENT

Around 3-4 billion people face continuous exposure to seasonal extremes, indoor / outdoor toxins & air pollution, declining immunity, respiratory issues, climate fluctuations and simultaneously grappling with mental & emotional stress - deteriorating health at an alarming speed. These silent, multi-layered crises span across homes, schools, workplaces, aging populations aswell as across pets and plants.



THE INNOVATION

OPOD (One Problem, One Drop) is that one drop that quietly flips the script. A clean, safe, edible, multi-purpose, multi-user, multi-faceted deep bio-nano tech prototype, it is built to enhance inner resilience through a quantum-effect approach. It fuses India's ancient scriptures IKS (Indian Knowledge system), unani principles, scientific knowledge with adaptive AI, human intelligence and quantum principles at the nanoscale, adding stability and precision.

The process itself is an innovation—solar, magnetic and electrical energies, Sun–Moon noble metal ions, rare minerals and treated companion water come together to create a drop that activates a quantum vibrational field, almost like an internal oxygen mask that supports and strengthens the body.

Rooted in bio-nanotechnology guided by quantum science, OPOD represents a rare convergence of ancient knowledge, advanced STEM and intuitive research. Entirely “Made in India,” clean, sustainable, zero-waste & zero side effects. Results feel mysterious yet consistent—both in real-life use and limited testing setups.



STRATEGIC ALIGNMENT

Health is the new GDP - We are determined to strengthen humanity before today's invisible crises turn irreversible tomorrow - OPOD acts as a bridge for urgent global health challenges offering a simple, universal preventive shield that strengthens resilience against pollution, climate stress, fatigue, poor sleep and declining immunity. Current solutions are fragmented, OPOD supports the full spectrum of physical and mental well-being. Most user friendly product, accessible across age groups increasing productivity / focus / health & harmony. It is inclusive and scalable. Representing a shift from treatment to prevention, transforming everyday health, breath and resilience. Delivering maximum output with minimal input - Mission Green Earth!



FUTURE IMPACT

We intend for OPOD to expand from early adopters to large-scale community use from homes to workplaces and eventually, to planetary applications. As Awareness Deepens And Collaborations Widen, The Impact Is Poised To Reach And Benefit Millions—And In Due Course, 3-4 Billions—Of People Across The Globe.

Also remain debt-free, open-source and unpatented, upholding the principles of accessibility, sustainability and preventive health for all.

Guided by Vasudhaiva Kutumbakam — “the world is one family” — with humility, we extend an open invitation for investigation, insights, inquiries and interactions — to explore, question and expand this vision together ensuring that our innovations are responsibly shared.



Purpose driven offering/s where scriptures meet science and innovation meets intention solving urgent challenges for a “Resilient Planet & Beyond”.

