

SASCI SCHEME

In the ongoing effort to strengthen India's economic resilience and catalyze development, the Special Assistance to States for Capital Investment (SASCI) scheme emerges as a strategic initiative. This program, designed to provide financial support to states and union territories for infrastructure projects, underscores the central government's commitment to balanced regional development, employment generation, and long-term economic growth.

Capital investment in infrastructure—roads, bridges, irrigation, water supply, urban amenities, and social infrastructure—serves as a critical engine for development. Recognizing this, the SASCI scheme prioritizes projects with high economic and social impact, ensuring that state governments have the resources to implement transformational initiatives. By providing funds for both ongoing and new projects, the scheme not only accelerates development but also addresses bottlenecks that slow down critical infrastructure creation.

One of the key strengths of this initiative is its flexibility and inclusiveness. It allows states to select projects based on local priorities while ensuring alignment with national developmental goals. This enables targeted investments in underdeveloped regions, promoting equitable growth and reducing regional disparities. For union territories like Jammu and Kashmir, the scheme offers a timely opportunity to modernize infrastructure, boost connectivity, and enhance the quality of public services, thereby improving the living standards of citizens.

Economic analysts also highlight the multiplier effect of capital investment. Infrastructure projects stimulate local economies by creating direct and indirect employment, enhancing demand for construction materials, and facilitating smoother business operations. Improved infrastructure further attracts private investment, strengthens supply chains, and promotes trade and tourism, creating a virtuous cycle of growth.

Moreover, SASCI's focus on capital investment dovetails with broader government initiatives such as the National Infrastructure Pipeline and "Make in India," contributing to the nation's vision of a modern, resilient, and self-reliant economy. By linking financial support to well-conceived projects, the scheme encourages innovation in design, sustainable construction, and adoption of green technologies.

The Special Assistance to States for Capital Investment is more than a funding mechanism—it is a catalyst for transformative development. By empowering states to build critical infrastructure, generate employment, and strengthen regional economies, the scheme not only addresses immediate developmental needs but also lays the foundation for long-term prosperity.

Beyond Chemicals-Embracing the Organic Revolution

■ BAIKAW CHAWALGAMI

India has long been recognized as an agrarian nation where farming is not merely an occupation but a way of life. Over the decades, the country has witnessed several transformative movements such as the Green Revolution, the White (Dairy) Revolution, and broader agricultural modernization. While these revolutions significantly enhanced productivity and food security, they also introduced an intensive dependence on chemical fertilizers, pesticides, and synthetic growth enhancers. Today, the adverse effects of such practices on soil health, environmental balance, and human well-being are becoming increasingly visible. In this context, organic farming emerges as a vital and forward-looking alternative—one that promises sustainability, safety, and ecological harmony. Organic farming is a holistic agricultural system that avoids synthetic fertilizers, chemical pesticides, genetically modified organisms, and artificial additives. Instead, it relies on natural inputs and ecological processes such as composting, crop rotation, biological pest control, green manure, and biodiversity conservation. Its primary objective is not only to grow food but to nurture the entire ecosystem connected with agriculture—soil, water, air, plants, animals, and human beings.

One of the foremost advantages of organic farming is its positive impact on the environment. Conventional agriculture often contributes to soil degradation, water contamination, and air pollution through chemical runoff and excessive fertilizer use. Organic farming, by contrast, is designed to work in harmony with nature. It enhances soil structure, increases organic matter, and promotes beneficial microbial activity. Healthy soils under organic systems also store more carbon, thereby helping to mitigate climate change. Studies suggest that if large-scale farming transitions to organic principles, agricultural greenhouse gas emissions could

be reduced substantially while still feeding growing populations. Organic agriculture also encourages farmers to "close the loop" by minimizing external inputs and maximizing on-farm resources. Composting crop residues, recycling animal manure, and integrating mixed farming systems reduce dependency on imported chemical inputs. This circular approach not only lowers costs over time but also builds long-term farm resilience.

Animal welfare is another cornerstone of organic farming systems. Organic standards demand humane and ethical treatment of livestock. Animals raised organically are provided with adequate space, access to fresh air, natural feed, and opportunities to express natural behaviors such as grazing and foraging. Unlike many intensive farming systems, organic livestock management discourages routine use of antibiotics and growth stimulants. Stress-reducing practices and better living conditions reduce disease incidence naturally, eliminating the need for harsh interventions such as unnecessary mutilations or overcrowding. Equally significant is the contribution of organic farming to biodiversity and wildlife protection. Modern intensive agriculture has been a major factor in the decline of pollinators, birds, and beneficial insects due to widespread pesticide use and habitat destruction. Organic farms, on the other hand, often act as biodiversity hotspots. They support richer ecosystems by maintaining hedgerows, planting wildflower margins, preserving wetlands, and encouraging natural predator species that keep pests in check. Research consistently shows that organic farms host higher levels of biodiversity compared to conventional farms. Increased bee-friendly habitats, for example, directly improve pollinator populations, which are essential for a large share of global food crops. Water quality also benefits from organic practices. Synthetic nitrogen fertilizers commonly used in conventional farming can leach into

rivers and oceans, creating oxygen-depleted "dead zones" that harm aquatic life. Because organic standards prohibit these manufactured fertilizers, the risk of water pollution is significantly reduced. Cleaner waterways support healthier ecosystems and safer drinking water sources.

From a consumer perspective, organic food offers several potential health advantages. Organic produce generally contains fewer pesticide residues and avoids many artificial additives, preservatives, and colorings. Organic standards also ban genetically modified ingredients and heavily restrict processing chemicals. Consumers who choose organic foods reduce their exposure to controversial substances such as hydrogenated fats, artificial sweeteners, and certain synthetic dyes. Moreover, organic fruits and vegetables are not treated with chlorine washes or similar post-harvest chemicals. Another critical public health benefit is the reduced use of antibiotics in organic livestock production. Overuse of antibiotics in conventional animal farming contributes to antibiotic resistance, a growing global health threat. Organic systems promote preventive care, better nutrition, and humane living conditions for animals, thereby reducing the need for routine antibiotic administration and helping preserve the effectiveness of these life-saving medicines. Organic farms are also proving to be more resilient in the face of climate variability. Soils rich in organic matter retain more moisture, which helps crops survive drought conditions and reduces flood risks during heavy rainfall. Diverse cropping systems, intercropping, and agroforestry further strengthen resilience by reducing dependence on a single crop. This diversity protects farmers from total crop failure and market volatility, thereby improving long-term economic sustainability. There is also growing scientific interest in the nutritional profile of organic food. Some studies indicate that

organically grown crops may contain higher levels of certain antioxidants and beneficial compounds, though results vary by crop and region. What is clear, however, is that organic farming emphasizes quality, soil vitality, and natural growth cycles—factors closely linked with food integrity.

The necessity of organic farming today arises from multiple converging challenges: soil exhaustion, environmental pollution, climate change, food safety concerns, and rising consumer awareness. As demand for clean and responsibly produced food increases, organic agriculture provides a credible pathway forward. Its guiding principles include closing nutrient cycles, relying on natural pest control, preserving soil fertility, and upholding animal welfare. Rather than treating symptoms with chemicals, organic systems address root causes through ecological balance.

Certification systems ensure the authenticity of organic products. For food to be labeled organic, every stage—from cultivation and processing to packaging and distribution—must comply with established standards verified by accredited certification bodies. This traceability builds consumer trust and maintains the integrity of the organic label. In essence, organic farming is not a return to the past but a refined, science-supported advancement toward sustainable agriculture. It represents a proactive response to the ecological and health crises associated with chemical-intensive farming. By embracing organic methods, farmers protect natural resources, consumers gain safer food choices, and societies move toward a more balanced and resilient food system. As rightly observed by agricultural thinker Sir Albert Howard, the health of soil, plant, animal, and human is one and indivisible. Organic farming honors this unity and offers a practical roadmap for a healthier future.

Why India Must Use AI to Save What It Already Grows

■ RUBAL CHIB



India's conversation on artificial intelligence is maturing. The focus is shifting from abstract capability to applied impact; from what AI can do in theory to what it can solve in practice. Few sectors make this distinction clearer than food and agriculture, where inefficiencies are not marginal but systemic, and where technology must work within deeply local realities of climate, logistics, and markets.

Food systems illustrate the problem starkly. India grows more than enough to feed its population, yet an estimated 68 million tonnes of food are lost every year, with 35-40% of fruits and vegetables perishing after harvest due to breakdowns due to irregular delivery, poor quality assessment, and fragmented supply chains. The crisis is not one of production, but of preventable loss. This loss is not the result of scarcity, but of misalign-

ment-between harvest and consumption, between data and decision-making. For years, the absence of reliable, real-time information about quality and timing have posed a challenge for Indian farmers and regulators. Artificial intelligence, when designed for Indian conditions, offers a way to close this gap.

This gap between biological reality and economic decision-making is where applied AI can deliver disproportionate impact. At qZense Labs, our work began with a simple observation: while India's digital infrastructure has transformed payments, identity and service delivery, the food economy remains largely analogue in how it assesses quality. QScan, the AI-powered sensing system we developed, uses infrared spectroscopy and artificial olfaction to capture internal quality signals in fruits and vegetables and translate them into usable insights at the point of decision. The intent was not to introduce automation for its own sake, but to reduce uncertainty for consumers, farm-

ers, and retailers operating on thin margins.

What this experience has underscored is that AI's effectiveness depends fundamentally on context. Models trained on foreign datasets or standardised supply chains struggle in India's heterogeneous conditions, where crop varieties, climates, storage practices and market structures vary sharply across regions. In food systems especially, accuracy cannot be separated from locality. AI that does not understand Indian produce, Indian logistics and Indian behavioural norms risks being irrelevant at best, and misleading at worst.

This is why the current policy emphasis on sovereign, domestically grounded AI is both timely and necessary. The India AI Mission signals a clear shift in how the state is approaching artificial intelligence—not as a frontier technology divorced from everyday realities, but as developmental infrastructure. Through targeted funding for indigenous AI applications, invest-

ments in national compute capacity, support for Indian datasets, and programmes to incubate sector-specific solutions, the Mission is actively building an ecosystem where innovation is anchored in local needs. By backing homegrown models, startups and public-interest deployments, it is creating space for AI systems designed for Indian conditions rather than retrofitted from other geographies.

Food and agriculture illustrate why this matters. Reducing post-harvest losses has a direct bearing on farmer incomes, food prices and environmental outcomes. Every unit of produce saved reduces pressure on land, water and energy resources, aligning naturally with India's commitments on climate action and responsible consumption. Unlike yield-enhancing interventions, which often require behavioural change or new inputs, better quality assessment improves outcomes by improving coordination—helping the system act at the right time.

Equally important is the question of

inclusion. For AI to serve the public good, it must be usable by small actors, not just large enterprises. In India's agricultural economy, that means tools that work within informal markets, support local languages, and complement human judgement rather than override it. Technologies that impose opaque recommendations will struggle to earn trust. Those that augment decision-making, by making invisible information visible, are more likely to scale organically.

The India AI Impact Summit, which will take place from 16-20th February 2026 in our capital city, arrives at a moment when these distinctions are becoming clearer. Globally, AI discourse is grappling with concentration of power; data asymmetries and environmental costs. India's opportunity lies in demonstrating a different pathway, one where intelligence is decentralised, context-aware and embedded within real economic systems. Agriculture, food logistics and climate adaptation are not edge cases in

this story; they are central to it.

It is worthwhile to consider that AI does not automatically create impact. It demands deep domain understanding, patience with complex policy realities and close alignment with public institutions. When these conditions are met, however, AI can quietly transform sectors that have long resisted reform. Not through disruption, but through better decisions made earlier.

As the Impact Summit approaches, the task before policymakers, technologists and entrepreneurs is not to accelerate AI adoption indiscriminately, but to deepen it thoughtfully. Success should be measured not by model benchmarks, but by whether intelligence helps reduce waste, stabilise incomes and strengthen resilience. In food systems, as in many areas of India's development journey, AI's greatest contribution may simply be helping us act in time.

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The Grid as Strategy: Powering India's 2047 Transformation

■ VARUN BHATIA

As India approaches its centenary in 2047, the idea of a Viksit Bharat has shifted decisively from aspiration to obligation. A 30 trillion dollar economy, globally competitive manufacturing, integrated logistics, and digital universality are no longer distant goals. They are policy commitments.

Yet beneath every ambition lies a foundational truth. Development runs on dependable power. No country has crossed into developed-nation status on unreliable electricity. In India's case, the transmission grid is not a supporting actor in this transformation. It is the stage itself.

The Grid That Holds the Nation Together

This transition from access to assurance has been enabled by a quiet but extraordinary expansion of India's transmission network. India's national power transmission system has crossed 5 lakh circuit kilometres, supported by 1,407 GVA of transformation capacity. Since 2014, the network has grown by 71.6 percent, with the addition of 2.09 lakh circuit kilometres of transmission lines and 876 GVA of transformation capacity. Integration at this scale has reshaped the energy landscape. The inter-regional power transfer capacity now stands at 1,20,340 megawatts, enabling electricity to move seamlessly across regions. This has successfully realised the vision of One Nation, One Grid, One Frequency and created one of the largest synchronized grids in the world. This architecture is not merely technical. It is economic infrastructure. It allows energy to flow from resource-rich states to industrial corridors without friction, strengthening productivity, investment confidence, and national competitiveness.

From Electrification to Excellence

India's first power-sector revolution was about access, and that mission is largely complete. Saubhagya connected 2.86 crore households, while DDUGJY achieved universal village electrification by 2018. These were historic milestones.

However, access is only the starting point. Developed economies operate on a higher standard where power is always available, always stable, and always scalable. In a Viksit Bharat, outages must be exceptions rather than expectations. Voltage fluctua-

tions cannot be built into business models. An industrial unit in rural Assam must receive the same quality of supply as one operating in an export hub in Southeast Asia. Reliability has now become the true benchmark of progress.

Rural India: From Load Centre to Growth Partner

The impact of a strong transmission backbone is most visible in rural India. Average rural power supply has increased from 12.5 hours per day in 2014 to 22.6 hours in FY 2025. This improvement has fundamentally altered the economic potential of villages and small towns. Reliability is being reinforced by systemic reforms. Under the Revamped Distribution Sector Scheme, grid modernization has reduced national AT&C losses to 15.37 percent, improving the financial sustainability of electricity supply.

Digital tools are accelerating this shift. More than 4.76 crore smart meters have been installed nationwide, bringing transparency, efficiency, and real-time control to energy consumption. Targeted interventions continue to close the remaining gaps. The PM-JANMAN initiative is electrifying remote habitations of Particularly Vulnerable Tribal Groups, while PM-KUSUM is reshaping agricultural power by enabling reliable daytime electricity through solarization. With states tendering over 20 gigawatts of feeder-level solar capacity, farmers are increasingly becoming urjadatas, contributing power back to the grid. Reliable transmission makes this participation possible. The tower standing in a farmer's field is no longer just infrastructure. It is a direct connection to the national economy. With assured round-the-clock power, industries no longer need to cluster around congested urban centres. Cold chains, food processing units, automated MSMEs, and digital services can operate efficiently in Tier-2 and Tier-3 towns. This rural transformation creates local employment, strengthens regional economies, and reduces migration pressures. In this model, rural India is no longer a subsidised consumer of power. It becomes a productive contributor to national growth.

Green Ambitions Need Grid Muscle

A Viksit Bharat must also be a sustainable Bharat. India's commitment to achiev-

ing 500 gigawatts of non-fossil fuel capacity by 2030 reflects both climate responsibility and strategic foresight. Renewable energy, however, is geographically dispersed. Solar potential lies in deserts, wind along coastlines, and hydro resources in mountainous regions. Without a strong transmission backbone, clean energy remains stranded. The expanded grid, supported by investments under the Green Energy Corridor programme, has become the central enabler of renewable integration. Strengthened inter-regional links ensure that clean power generated in remote areas can reach demand centres efficiently. This capability allows India to pursue growth without compromising its environmental commitments.

Resilience as National Security

Recent global energy shocks and climate-induced disruptions have reinforced one reality. Energy security is inseparable from national security. The grid of a developed India must therefore be resilient, intelligent, and adaptive. Smart Grids capable of self-healing, predictive maintenance, and advanced demand-response management are no longer optional. They are essential. Equally important is social resilience. Right-of-Way challenges require a partnership-driven approach. Landowners must be treated as stakeholders in national progress, with fair compensation and transparent processes that build trust and cooperation.

The Backbone of a Developed India

As India moves steadily toward 2047, development will be measured not only by economic output or industrial capacity, but by the consistency and quality of its power supply. Every kilometre of transmission line laid becomes a conduit for productivity. Every additional GVA of capacity strengthens energy security. The quiet hum of high-voltage lines signals a nation growing with confidence. Connecting Bharat is no longer about lighting homes. It is about powering aspirations, enabling enterprise, and securing India's place as a self-reliant global force.

The transmission grid is not merely supporting the vision of Viksit Bharat. It is sustaining it.

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Pariksha Pe Charcha: Beating Exam Blues with Guru Modi

■ ER. PRABHAT KISHORE

Examinations are often a source of stress for students and their families. This is a common challenge faced by students of all ages, especially teenagers who are preparing for significant milestones such as board exams or competitive exams. The intense focus on academic performance, coupled with expectations from society and family, often leads to stress, anxiety, and depression, which impact mental health.

To transform the narrative of exam-related stress, "Pariksha Pe Charcha (PPC)" has been initiated by Hon. Prime Minister on 16th February 2018 at Talkatora Stadium, New Delhi. This is the PM's annual interactive event, in which students, teachers, and parents from across the country and abroad join him to discuss exam stress and celebrate examinations as an Utsav and an integral part of life. The Prime Minister shares valuable tips on various topics like how to take board and entrance exams, stress management, students' personal growth, career ambitions etc.

Pariksha Pe Charcha (PPC) is the PM Modi's Master class on acting exams. It opens space for honest talk on preparation, pressure, and purpose. The event emphasizes innovative approaches to tackle exam-related anxiety, fostering a celebratory attitude towards learning and life. Society, teachers, and parents must collaborate to create an environment where students can thrive without undue stress. With the right approach, students can beat exam pressure and unleash their full potential.

The PPC programme has witnessed extraordinary growth since its launch in 2018. The 1st edition of PPC (on 16th February, 2018 with 22000 participants), the 2nd edition (on 29th January, 2019 with 1.03 lakh participants), the 3rd edition (on 20th January, 2020 with 2.63 lakh registrations), the 4th edition (on 7th April 2021 through virtual connection during COVID19 pandemic-14.02 lakh registrations, including 10.5 lakh students, 2.6 lakh teachers and 92 thousand par-

ents), the 5th edition (on 1st April, 2022 with 15.73 lakh registrations, including 12.12 students, 2.71 lakh teachers and 90 thousand parents/1203553 participants, including 969836 students, 47200 teachers and 186517 parents), the 6th edition (on 27th January, 2023 with 38.79 lakh registrations, including 31.24 lakh students, 5.60 lakh teachers, 1.95 lakh patents /848991 participants or viewers, including 718110 students, 42337 teachers, 88544 parents), the 7th edition (on 29th January, 2024 with 2.2624 Crore registrations including 2.0562 Crore students, 14.93 lakh teachers and 5.69 lakh parents), and the 8th edition (on 10th February, 2025 with 35668817 registrations) has created history in the education sector across the world.

In 2025, PPC 8.0 has set a remarkable Guinness World Record as students from 245 countries, teachers from 153 countries and parents from 149 countries participated in the event. It reflects the event's immense popularity and relevance.

Over the years, PPC has evolved into an opportunity that aims to transform exam-related stress into positive energy. By offering real questions and offering actionable solutions, the PM has bridged the gap between policy and practice, empowering students to thrive under pressure. The event's inclusivity, digital reach, and innovative approach ensure its continued success as a cornerstone of student engagement in Bharat. With each passing year, PPC reinforces the message that exams are not the end but a beginning.

The 9th edition of the PPC was scheduled to be held in January 2026. To select participants, an online Multiple-Choice Question (MCQ) competition was conducted on the MyGov Portal from 1st December 2025 to 11th January 2026 for students of classes 6 to 12, teachers and parents. Students from all types of management schools i.e. Govt schools, Kendriya Vidyalayas, Sainik schools, Eklavya Model Residential schools, CBSE schools will participate in the event.

The competition was the mode

through which students, teachers and parents has been invited to take part in the PPC programme. The themes of the event include "Make Exams a Celebration", "Contribution of Our Freedom Fighters", "Save the Environment", and "Clean India". Selected questions of participants, shortlisted by NCERT, will feature in the programme. Selected students will get an opportunity to directly participate in the PPC event with PM and interact with him. Each participant will get a specially designed certificate of Participation. 2500 participants will get PPC Kit by the Education Ministry, Government of India. 10 Exam-Warriors will get chance to visit PM house.

High enrolment States tried for registration of at least 50% of the class 6 to 12 enrolment, whereas other States/UTs & AJs set target of 100% registration of class 6-12 students. All teachers of class 6 to 12 were to be reached out.

The event has expanded steadily from around 22,000 in PPC 1.0 in 2018 to 3,56,68,817 registrations in PPC 8.0 in 2025. PPC 8.0 edition in 2025 was recognized by Guinness World Records for recording 3,56,68,817 registrations. PPC 9.0 edition in 2026 has surpassed last year's Record with 4,49,24,465 online participant registrations. Altogether 36 Students have been selected, one each from every State/UTs, to interact with Prime Minister on 22 January 2026 at New Delhi. Prime Minister's interaction with students on Pariksha Pe Charcha is scheduled to be on AIR on 6th February 2026 at 10.00 AM.

People must join hands in celebrating the Utsav of examination "Pariksha Pe Charcha" as envisioned by our Honorable Prime Minister in order to make learning more joyful and meaningful for our future nation builders. Along with students, society, family, and teachers must put exam in right perspective rather than making it a life and death situation punctuated by undue stress and pressure.

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