

The Institute of Chartered Accountants of India (Set up by an Act of Parliament)





ICAI Knowledge Series on MSME & Startup

ज्ञान सागर

Issued by:

Committee on MSME & Startup, ICAI

December 2025



UPDATES

Khadi artisans have a key role in PM Modi's vision of "Har Ghar Swadeshi, Ghar Ghar Swadeshi" and "Ek Bharat, Shreshtha Bharat": KVIC Chairman Manoj Kumar

Khadi artisans play a pivotal role in Prime Minister Narendra Modi's vision of "Har Ghar Swadeshi, Ghar Ghar Swadeshi" and "Ek Bharat, Shreshtha Bharat," said KVIC Chairman Manoj Kumar during his visit to the Khadi India Pavilion at the 44th India International Trade Fair (IITF) 2025.

Showcased in Hall No. 6 at Bharat Mandapam, Pragati Maidan, the Pavilion highlighted the New Khadi of New India with a diverse range of Khadi and village industry products. KVIC's participation reflected the spirit of Aatmanirbhar Bharat, featuring 150 stalls from Khadi institutions, PMEGP units, and SFURTI clusters across the country. Shri Manoj Kumar interacted with artisans and entrepreneurs, appreciating their innovation and contributions to India's rural economy. He encouraged them to further strengthen the Government's Vocal for Local and Aatmanirbhar Bharat initiatives.

During the visit, he also witnessed live demonstrations of indigenous charkhas, electric pottery wheels, and traditional ghani-based oil extraction—symbolizing India's sustainable craft heritage. A major attraction this year was "Baat Khadi Ki", a newly launched podcast studio where artisans shared their stories and craft journeys. The Pavilion additionally showcased a wide range of textiles, cosmetics, rural foods, bamboo and cane crafts, and regional specialties from J&K, Rajasthan, Bihar, Uttar Pradesh, and the North East, reflecting the growing strength of Khadi and village industries.

For more information, please visit - https://www.pib.gov.in/PressReleasePage.aspx?PRID=2192500

Union Minister of MSME Shri Jitan Ram Manjhi inaugurates MSME, KVIC, COIR and NSSH Pavilions at the 44th India International Trade Fair

Union Minister of MSME, Shri Jitan Ram Manjhi, inaugurated the MSME, KVIC, COIR and NSSH Pavilions at the 44th India International Trade Fair (IITF) at Bharat Mandapam, New Delhi. The event was attended by Sushri Shobha Karandlaje, Minister of State, Shri Manoj Kumar, Chairman KVIC, and senior officials from the Ministry and allied organisations.

This year's MSME Pavilion, themed <u>"Vibrant MSMEs, Viksit Bharat"</u>, featured 292 stalls from Micro and Small Enterprises and Vishwakarmas representing 29 States/UTs, with significant participation from women (67%), SC/ST entrepreneurs (34%), PwD entrepreneurs, and exhibitors of GI-tagged and ODOP products.

Product categories included textiles, handicrafts, eco-friendly items, Vishwakarma creations, ceramics, leather goods, food products, toys, and other unique regional offerings. The Coir Board Pavilion hosted 31 exhibitors showcasing traditional coir products, handicrafts, toys, carpets, and geo-textiles, promoting market linkages and business opportunities. The Khadi India Pavilion, themed "Viksit Bharat @ 2047", showcased 150 exhibitors, including Khadi Institutions, PMEGP and SFURTI units, with strong representation of SC/ST/OBC and women entrepreneurs. High-quality Khadi fabrics including silk sarees from Southern states of the country, muslin from West Bengal, Madhubani products from Bihar, Phulkari from Punjab, Kalamkari from Andhra Pradesh, herbal & cosmetic products from Uttarakhand and woollen products from J&K and Leh were available for sale at the Pavilion.

The NSSH Pavilion featured 35 stalls from SC-ST entrepreneurs across 10 States, offering footwear, sports goods, handicrafts, bamboo products, food items, machine components, and leather goods.

For more information, please visit - https://www.pib.gov.in/PressReleasePage.aspx?PRID=2190919

Union Ministry of MSME achieves major milestones in institutionalizing cleanliness and minimizing pendency under Special Campaign 5.0

The Ministry of Micro, Small & Medium Enterprises (MSME) achieved significant milestones under **Special Campaign 5.0**, conducted from 2nd to 31st October 2025, with a strong focus on reducing pendency and institutionalizing cleanliness across its offices and field formations. This year's campaign placed special emphasis on field units involved in public service delivery and ensured strict compliance with the **E-Waste Management Rules**, **2022**.

The Ministry achieved **100% of the targets on seven key parameters**, including disposal of PMO references, Cabinet references, State Government references, public grievances, and review of e-files. A total of **23,162 physical files** were reviewed, leading to **4,280 files being weeded out**, while **953 e-office files** were reviewed and **623 closed**, strengthening overall file management.

To promote awareness, the Swachhata Pledge was administered on 8th October 2025, with **over 7,500 pledges** received from officials, entrepreneurs, associations, and citizens. Under the nationwide cleanliness drive, **1,045 campaigns** were conducted, covering **21,046 sq. ft** of cleaned area and generating ₹**22.89 lakh** through disposal of obsolete materials. The campaign also prioritized **scientific e-waste disposal**, installation of sanitary napkin vending machines to support women's hygiene, plantation drives, plastic-free initiatives, and office beautification efforts. Waste-to-wealth activities, such as creating compost pits at CCRI, Kalavoor, further strengthened environmental sustainability.

Citizen engagement was ensured through awareness camps, rallies, and school outreach programmes. Overall, **Special Campaign 5.0 underscores the MSME Ministry's commitment to cleanliness, efficiency, sustainability, and public participation** across the country.

For more information, please visit - https://www.pib.gov.in/PressReleasePage.aspx?PRID=2187637



Jharkhand Startup Policy 2023

Introduction

Jharkhand, endowed with abundant natural resources and a young workforce, has identified innovation and entrepreneurship as key drivers for its next phase of growth. To reduce reliance on extractive industries and foster a diversified, resilient economy, the Jharkhand Startup Policy-2023 was launched by the Department of Information Technology & e-Governance (DoIT&E) through the Atal Bihari Vajpayee Innovation Lab (ABVIL).

The policy provides a comprehensive framework for encouraging entrepreneurship across various sectors, with a particular focus on inclusive growth for women, SC/ST, rural, and tribal entrepreneurs. It creates enabling infrastructure through incubators, Centres of Excellence (CoEs), and virtual platforms, while also offering financial support like SGST reimbursements, patent cost subsidies, certification reimbursements, and access to the Jharkhand Entrepreneurship Development Fund.

Through this policy, Jharkhand targets the creation and support of 1,000 new startups within five years, development of 100,000 sq. ft. of incubation space, and positioning itself among the top ten startup states in India by 2028. By combining fiscal incentives, mentorship, skill development, and market linkages, Jharkhand aims to transform itself into a dynamic hub for sustainable entrepreneurship.

Brief State Profile

- Rich in minerals, agro and forest products, and traditional industries (textiles, handicrafts).
- ♦ Large youth population with potential to be skilled for innovation.
- ♦ Industrial base in steel, mining, manufacturing, complemented by emerging IT/ITeS hubs.
- ♦ Need to diversify into knowledge-driven, technology-enabled, and socially inclusive entrepreneurship.

Why the Policy is Important for Jharkhand

- Promotes self-employment and job creation, reducing out-migration of talent.
- ♦ Diversifies the state economy beyond mining.
- Supports tribal and rural entrepreneurs in bringing local innovations to market.
- Attracts investment and boosts competitiveness in global value chains.

Present Highlights

- ♦ Policy Period: 5 years from notification.
- ♦ Target: 1,000 new startups by 2028.
- ♦ Incubation Space: 100,000 sq. ft. with focus on tribal/rural areas.
- ♦ Financial Incentives: SGST reimbursement (100% of net SGST in cash for 5 years), patent & certification reimbursements, student loan interest reimbursements.
- ♦ Infrastructure: Central Incubation Lab, multiple incubators in academia/private sector, CoEs for design, 4IR, agro/forest.
- Inclusion: Dedicated schemes for women, SC/ST, and rural entrepreneurs.

♦ Nodal Agency: ABVIL, Department of IT & e-Governance, Govt. of Jharkhand.

About the Policy

- Policy Name: Jharkhand Startup Policy-2023
- Issued by: Department of Information Technology & e-Governance, Government of Jharkhand
- ♦ Nodal Agency: Atal Bihari Vajpayee Innovation Lab (ABVIL)

Definitions

- ♦ Startup: Entity incorporated in Jharkhand, up to 7 years from incorporation (10 for biotech), turnover below prescribed limits, working on innovation or scalability.
- Incubator: Recognized centre supporting ideation, prototyping, mentorship, or scale-up.
- ♦ SEB (State Evaluation Board): Governing body for evaluation and approval of startups/incubators.
- ♦ Jharkhand Entrepreneurship Development Fund: State corpus fund for grants, incubation support, and student assistance.

Policy Period and Applicability

- ♦ Validity: 5 years from notification (2023–2028).
- ♦ Applicable to: Startups incorporated in Jharkhand and recognized by the State Evaluation Board.

Terms & Conditions for Incentives

- Incentives only for approved startups/incubators.
- ♦ Compliance with state/central laws mandatory.
- Incentives withdrawn in case of fraud, misrepresentation, or shifting operations out of Jharkhand.
- ♦ Startups exit from benefits after exceeding turnover/time thresholds.

Service Enterprises Eligible/Not Eligible

- ♦ Eligible: IT/ITES, agro-tech, renewable energy, healthcare, design, advanced manufacturing, textiles, biotech.
- ♦ Not Eligible: Pure trading firms, liquor/tobacco/firearms, gambling/betting, speculative financial activities.

Policy Features & Incentives

Financial Incentives

- ♦ SGST reimbursement: 100% of net SGST paid in cash for 5 years.
- Patent filing reimbursement: Up to ₹50,000 per patent; up to ₹25,000 per candidate in vocational patent training.
- ♦ Certification reimbursement: Domestic up to ₹50,000/year; International up to ₹1.5 lakh/year.
- ♦ Student loan interest reimbursement: Up to ₹10 lakh/student for 3 years post-graduation (for selected ideas).

♦ Annual awards: ₹1 lakh, ₹75,000, ₹50,000 for best entrepreneurs in business plan competitions.

Non-Financial Support

- ♦ Incubation & mentoring support through ABVIL, academic incubators, and private accelerators.
- ♦ Access to labs, R&D, Centres of Excellence (design, 4IR, agro/forest).
- ♦ Networking, workshops, bootcamps, virtual incubation platform.
- ♦ Dedicated startup bank branches and global collaboration programs.
- ♦ Sector-Specific Schemes
- ♦ Incentives for IT/ITES, agro-forest, textiles, renewable energy, biotech, design and 4IR technologies.

Provisions for Inclusion

• Reserved incubation slots and higher incentives for women, SC/ST, and rural entrepreneurs.

Focused Areas

- ♦ To strengthen the state's innovation capacity, the policy places high emphasis on **skill development and human capital enhancement**. The Government of Jharkhand, through the
 Jharkhand Skill Development Mission (JSDM) in collaboration with **ABVIL**, universities, ITIs, and
 polytechnic institutes, will introduce structured programs in entrepreneurship, digital literacy,
 and Industry 4.0 technologies such as AI, robotics, additive manufacturing, and IoT.
- ♦ Specialized Startup Skill Labs will be established in select academic institutions to train youth in prototyping, business modelling, and financial management.
- ♦ The policy also encourages **faculty development programs**, **bootcamps**, and **student innovation challenges** to promote problem-solving and entrepreneurial thinking.
- ♦ Training modules will be co-developed with industry associations and leading startups to ensure alignment with real-world market needs and emerging technologies. Human capital development through curriculum reform, school STEM kits, tinkering labs.
- ♦ Infrastructure creation (incubators, CoEs, virtual platforms).
- ♦ Financial inclusion via dedicated funds and startup-only bank branches.
- Export promotion through certification reimbursements and trade facilitation.

Procedure for Availing Incentives (MSME/Startup)

- ♦ Register on the Single-Window Portal of Jharkhand Startup Cell.
- Submit application with incorporation certificate, business plan, and required documents.
- Screening by Startup Cell; approval by State Evaluation Board.
- Provisional approval issued; benefits disbursed on milestone achievement.
- ♦ Periodic compliance reporting required.

Grievance Redressal and Appeal Mechanism

♦ To maintain transparency and fairness, the Government of Jharkhand will implement a threetier grievance redressal framework for startups and incubators:

- ♦ Startup Facilitation Officer (ABVIL): First-level redressal of issues related to registration, recognition, or incentive claims within 15 working days.
- ♦ State Startup Grievance Committee: Chaired by the Director, DoIT&E, to review unresolved cases within 30 working days.
- ♦ Appeal to Principal Secretary, DoIT&E: Final administrative authority for appeal and review.
- ♦ All complaints shall be lodged online through the state Startup Portal with tracking IDs and visible status updates. Quarterly grievance dashboards will be published to ensure accountability. (This mechanism is proposed pending formal government notification.)

Industries that Benefit

- ♦ Agro & forest value chain, food processing.
- ♦ IT/ITES, design, and 4IR-based manufacturing.
- ♦ Renewable energy and energy storage.
- ♦ Textiles & handlooms.
- Healthcare and biotech.

How the Policy Helps in Export Promotion

Comprehensive Export Facilitation Strategy

- Beyond certification reimbursements, the policy adopts a comprehensive strategy for export development and international market integration. A State Export Facilitation Cell within ABVIL will assist startups with registration, export documentation, and compliance procedures. Collaboration with Export Promotion Councils, FIEO, and SEZ authorities will enable mentoring on packaging, branding, and logistics for global markets.
- ♦ The government will support participation in international trade fairs and provide export credit linkages through SIDBI and EXIM Bank. Each year, at least ten high-potential startups will be identified for international accelerator programs or trade delegations to enhance visibility and global reach.

Relevant Links & Contacts

- Website: abvil.jharkhand.gov.in
- ♦ Contact: Atal Bihari Vajpayee Innovation Lab, 2nd Floor, New Excise Building, Ranchi 834008.
- ♦ Phone: 0651-2400001
- ♦ Email: it-secretary@jharkhand.gov.in

Who Can Participate / Target Beneficiaries

- Startups incorporated in Jharkhand.
- ♦ Student entrepreneurs with SEB-approved ideas.
- Academic/private incubators selected by SEB.
- ♦ Women, SC/ST, rural entrepreneurs.

Monitoring & Evaluation

Performance Monitoring and Evaluation Metrics

To ensure transparency and outcome-based implementation, the policy establishes a framework for periodic monitoring and performance assessment. Key Performance Indicators (KPIs) shall include the number of startups registered and operational each year, employment generated, total investments mobilized, participation of women and SC/ST founders, export turnover achieved, and startup survival rate after three years.

The State Evaluation Board (SEB) and ABVIL will jointly publish an Annual Startup Progress Report benchmarking these KPIs. Independent third-party evaluations will be conducted at mid-term and at the end of the five-year period to measure impact and recommend policy refinements.

Conclusion

The Jharkhand Startup Policy 2023 reflects the state's commitment to building an inclusive, technology-driven entrepreneurial ecosystem aligned with the goals of Atmanirbhar Bharat and Digital India. By combining robust financial incentives with skill development, export readiness, and institutional support, Jharkhand aims to become one of India's top startup destinations—empowering youth, generating employment, and driving sustainable, innovation-led growth.

References

- Government of Jharkhand Jharkhand Startup Policy 2023 notification.
- ABVIL official website.
- Startup India portal Jharkhand State Startup Policy page.

Summary

Section	Key Provisions
Validity	5 years from notification
Target	1,000 new startups by 2028
Incubation Space	100,000 sq ft targeting tribal & rural areas
Fiscal Reimbursement	SGST (100% net, 5 yrs), patent, certification costs
Student Support	Interest reimbursement up to INR 10 lakhs for study loans
Awards	₹1,00,000 / ₹75,000 / ₹50,000 for top in competitions
Priority Sectors	Agro-forest, design, core industries with 4IR tech, etc.

FAOs

Q: Are there any special provisions for women entrepreneurs?

Yes. The policy recognizes women as a vital force in driving inclusive entrepreneurship. Dedicated incubation slots are reserved for women-led startups, along with additional financial incentives such as enhanced grants, easier access to seed funds, and priority in reimbursements. The state also encourages networking, mentorship, and training programs specifically designed for women entrepreneurs to strengthen their participation in high-growth sectors.

Q: Does the State offer subsidies/incentives for specific industries?

Yes. Jharkhand has identified priority sectors including IT/ITES, agro-based industries, textiles, renewable energy, biotech, design, and advanced manufacturing. Startups working in these sectors are eligible for higher levels of support, which may include targeted subsidies, easier access to incubation centres, and preferential funding opportunities. This sectoral focus helps the state channel resources where the growth potential and employment generation are highest.

Q: What are the State's export promotion measures?

To strengthen Jharkhand's presence in global markets, the policy offers reimbursement of certification costs to help startups meet international standards. Startups are also encouraged to participate in trade fairs, expos, and buyer-seller meets, with partial support provided for related expenses. Further, linkages with Special Economic Zones (SEZs) and export facilitation cells are being promoted to assist startups in navigating global trade requirements and tapping into international value chains.

Q: What funding or financial assistance is available?

A wide range of funding options is available under the policy. These include seed funding and prototype development grants, reimbursement of SGST for a period of five years, and financial support for patent filing and certification costs. Additionally, students with approved startup ideas are eligible for reimbursement of interest on study loans up to ₹10 lakh. Annual awards also provide monetary incentives and recognition to top-performing entrepreneurs, encouraging a competitive and innovative spirit.

Q: How can startups benefit from incubation and innovation support?

Startups can access a robust incubation ecosystem through ABVIL, Centres of Excellence in design, core industries, and agro/forest products, as well as incubators established in universities and private institutions. These centres provide mentorship, technical resources, networking opportunities, R&D support, and access to labs and prototyping facilities. A virtual incubation platform ensures that startups in remote and rural areas can also benefit from these services without being physically present at incubation hubs.

Q: Are there tax exemptions or financial relaxations?

Yes. The state provides 100% reimbursement of net SGST paid in cash for five years to eligible startups. Additionally, exemptions from stamp duty and electricity duty are available for certain industries, lowering the cost of doing business. These relaxations are designed to reduce the initial financial burden on startups and enable them to reinvest savings into scaling their operations.

Q: What is the process to apply?

The policy has simplified the application process through a single-window online portal managed by the Startup Cell. Startups need to register on the portal, submit incorporation documents, and upload their business plan and supporting materials. Applications are screened by the Startup Cell and evaluated by the State Evaluation Board (SEB). Upon approval, startups receive provisional recognition and can claim incentives upon fulfilling specified milestones.

Q: Which nodal agency implements the policy?

The policy is implemented by the Department of Information Technology & e-Governance (DoIT&E) through its dedicated Atal Bihari Vajpayee Innovation Lab (ABVIL). This agency coordinates all activities related to incubation, funding, reimbursements, and mentoring, ensuring a single point of contact for startups in the state.

Q: Who are key contact persons?

The primary contact point is the Startup Cell housed at ABVIL, Department of IT&E. Entrepreneurs can reach out via the official email ([it-secretary@jharkhand.gov.in] (mailto:it-secretary@jharkhand.gov.in)) or the helpline number (0651-2400001). The official website ([abvil.jharkhand.gov.in] (https://abvil.jharkhand.gov.in)) also provides updates, application links, and guidance materials for startups.

Q: How does this policy align with central initiatives?

The Jharkhand Startup Policy complements national programs such as Startup India, Make in India, Digital India, and MSME development schemes. While the central government provides recognition, tax benefits, and broader funding avenues, the state policy builds on this foundation by offering localized incentives, incubation support, and state-level facilitation. Together, they create a stable and seamless and harmonious ecosystem for startups to grow from ideation to international expansion.





Funding Options Available for MSMEs in India

Introduction

Micro, Small & Medium Enterprises (MSMEs) are a key pillar in India's economy, generating employment, innovation and exports. However, accessing suitable and timely finance remains a challenge for many small businesses. Fortunately, a wide suite of funding options exists — from traditional bank credit and government-schemes to equity/venture capital, angel funding, private equity and alternative financing. Choosing the correct route depends on the firm's scale, growth stage, sector and risk-profile. Below are more details of funding routes, with names of some key investors/schemes to help MSME entrepreneurs.

Equity / Growth Capital: Angel Investors, Venture Capital & Private Equity

Angel Investors

These are high-net-worth individuals or informal networks who invest early in enterprises in exchange for equity and often mentorship. Some examples in India:

- Kunal Shah: Founder of CRED, active angel investor in India.
- ♦ Anupam Mittal: Founder of Shaadi.com, active angel investor in India.
- ♦ Kunal Bahl: Co-founder of Snapdeal, angel investor

Example: Ola received its first round of investment from a group of prominent angel investors, including Kunal Bahl, Anupam Mittal, and Rehan Yar Khan.

Venture Capital Funds

These funds typically invest in high-potential MSMEs and startups, often at the seed, early, or sometimes growth stage, in exchange for equity. They also provide strategic support to help scale the business. Some notable examples in India include:

- ♦ Accel India early-stage VC, notable in India.
- ♦ Blume Ventures Bengaluru-based early-stage VC.
- Matrix Partners India (now Z47) another prominent VC.
- ♦ Kalaari Capital early-stage tech-focused VC in India.

Example: Accel is a venture capital firm that was one of the earliest investors in the e-commerce company Flipkart, providing it with seed capital in 2008.

Private Equity Funds

While VC typically invests earlier, PE funds invest in relatively more mature MSMEs and businesses for growth, expansion, buy-outs etc. Some of the same firms may act in PE mode; others such as Sequoia Capital India (mentioned in VC lists) operate across stages.

When to use this route:

- ♦ When you have a high-growth business with scalable model.
- ♦ You can give up some equity/share of control (or find a partner).
- ♦ You need more than debt (which may be risky).
- ♦ You are comfortable with investor expectations and exit horizons

Key trade-offs: Equity capital may dilute ownership. Investor often expects strong growth and exit (e.g., IPO, acquisition) in 5-10 years.

Example: Paper Boat, owned by Hector Beverages, received private equity funding from Sofina. This investment facilitated the expansion of manufacturing facilities, diversification of product lines, and enhancement of distribution networks across India.

Government Schemes Supporting MSMEs

The Indian government has many schemes to support MSMEs (credit subsidy, guarantee, technology upgradation, export promotion etc). A few popular ones:

- ♦ Credit Guarantee Fund Trust for Micro & Small Enterprises (CGTMSE) provides credit guarantee for collateral-free loans to MSEs. See scheme list. CGTMSE Success Stories: A small engineering unit in Coimbatore needed machinery but had no collateral. Under the CGTMSE scheme, it received a collateral-free loan of Rs. 10 lakhs. The unit upgraded machinery, increased production by 40% and grew annual revenue by 25%.
- ♦ Prime Minister's Employment Generation Programme (PMEGP) helps set up new enterprises via subsidy. PMEGP Success Stories: Subsidy-Based Unit Setup A woman entrepreneur in Indore started a papad unit costing Rs. 4 lakhs. Under PMEGP, she received a 35% subsidy, reducing loan burden and helping expansion to nearby markets within a year. Credit Linked Capital Subsidy Scheme for Technology Upgradation assists MSMEs in upgrading technology via subsidy.
- ◆ ASPIRE ("A Scheme for Promotion of Innovation, Rural Industries & Entrepreneurship")
 promotes innovation and rural industries. ASPIRE Success Stories: A rural youth received incubation support under ASPIRE through a Livelihood Business Incubator. He started a honey processing & packaging unit, now employing local villagers.

Why these matter:

- ♦ They reduce risk for lender/borrower (via guarantee)
- Provide subsidy or incentives (reducing cost of capital)
- ♦ Enhance access to credit for entrepreneurs with weaker collateral/credit history

Traditional Bank/NBFC Loans & Working Capital

Bank loans (term loans, working capital, overdraft) remain an important route for MSMEs. Government schemes often tie into bank credit (for example guarantee schemes).

Example: A 30-year-old designer who had successfully run a boutique for 10 years wanted to open a second location. She needed Rs. 45 lakhs for rent deposits, interiors, and counters, and with a good credit score and proper documentation, secured a loan after careful financial planning.

Alternative & Fintech-Based Funding

Fintech lenders, invoice discounting (via platforms like M1xchange, RXIL etc), P2P platforms and NBFCs provide more flexible solutions especially for smaller MSMEs or digital-first businesses.

M1exchange Published Success Stories: Faster Payments Example A Pune-based auto-parts MSME supplying to a PSU faced 60–75 day payment delays. After joining the M1xchange TReDS platform, it began receiving payments within 2 days, improving cash flow and reducing dependence on informal credit.

Conclusion

For MSMEs in India today:

There is a wide spectrum of funding options: from traditional bank credit, government backed schemes, to equity/VC/PE, to alternative fintech funds.

The right option depends heavily on your business's stage, scale, growth potential, risk appetite, ownership goals and collateral/credit history.

If you are a growth-oriented business aiming to scale quickly, VC/angel funding may suit you. If you are more stable and need working capital/gear up, then bank credit or scheme-backed loans may fit.

Ensure you carefully evaluate terms (interest rate, collateral, equity dilution, exit expectations) and select a route that aligns with your long-term goal.

Selected References (with Links)

- ♦ List of top VC funds in India: *Top Venture Capital Firms in India: To p 25 Venture Capital Firms in India 20 25 | VC Funds*
- ♦ List of angel investors in India: https://www.ynos.in/top angels- for-s tartups- in-i ndi a
- ♦ MSME Schemes list (Ministry website): MS ME -DO Publi c ati ons India | Sc hem es For
- ♦ MS ME- DO Indi a | MS ME Sc hem es Indi a
- ♦ MSME scheme booklet (official): Sc heme booklet- Eng.pdf
- ♦ Startup India portal Government Schemes: Governm ent Sc hem es for S tartups

By CA Tanu Shree Soni

India's Agritech Revolution: The Digital Transformation Reshaping Rural India

India is experiencing one of the most profound transformations in the history of its agricultural sector. In a country where farming supports 42% of the population, contributes almost \$400 billion to the economy, and forms the backbone of rural livelihoods, agriculture has always been more than an occupation — it's a lifeline.

For decades, this lifeline was strained by unpredictability, inefficiencies, information gaps, fragmented landholdings, and climate risks. Farmers bore the highest risks yet received the lowest rewards.

Today, that story is being rewritten.

Thanks to the spread of smartphones, digital marketplaces, drones, Al-driven advisory tools, IoT sensors, and modern logistics, India is witnessing the rise of a silent yet powerful Agritech revolution.

This is not just about digitizing agriculture — it is the beginning of a new agricultural economy that is data-driven, farmer-first, and digitally integrated end to end.

1. The Historical Burden: Why Indian Farming Was So Unpredictable

Indian agriculture operated in a complex, uncertain environment for decades. Each challenge reinforced the others, making farming one of the riskiest occupations in the country.

1.1. Information Gaps: The Root of Uncertainty

Farmers often made crucial decisions — what to grow, when to sow, when to harvest, where to sell — without accurate, timely information.

Key information gaps:

- **Real-time mandi prices**: Farmers relied on local traders or rumours to know market rates. By the time they reached the mandi, prices often dropped dramatically. A farmer might harvest onions expecting ₹20/kg only to find prices crashed to ₹3/kg.
- ♦ Market demand trends: Without data on urban demand or consumption patterns, farmers often grew the same crops as their neighbours, resulting in periodic gluts (oversupply) or shortages.
- ♦ **Crop profitability estimates**: Farmers didn't know the potential profit of one crop versus another after considering input costs, labour, irrigation, and market cycles.
- ♦ **Local weather patterns**: Weather forecasts were either unavailable, unreliable, or too generic. Sudden rain before harvest or unexpected heat during flowering could destroy output.
- ♦ **Pest or disease warnings**: Infestations like locusts, bollworm, and fungal diseases often spread silently. By the time farmers reacted, large portions of their fields were already lost.

Impact: Agriculture became a gamble — decisions based on guesswork instead of data, resulting in inconsistent yields and unstable incomes.

1.2. Middlemen-Dominated Market Chains

The typical Indian agricultural supply chain had 5–7 intermediaries before produce reached consumers.

The chain included:

- ♦ Commission Agents (Arhtiyas): Took a cut for auctioning produce.
- Wholesalers: Bought in bulk and resold at margins.
- Transporters: Added logistical costs.
- ♦ Semi-wholesalers & Retailers: Further increased prices.

The reality:

- ♦ A farmer selling tomatoes at ₹8/kg had no control once it left their hands.
- ♦ The consumer price of ₹60–₹80/kg reflected inefficiency, not actual value.
- ♦ Opaque pricing meant farmers rarely knew the final consumer price.
- ♦ Poor storage forced them to sell immediately even at low rates.
- ♦ Many farmers were indebted to middlemen, reducing freedom to choose buyers.

Impact: Farmers produced the food, but others captured the profits.

1.3. Massive Post-Harvest Losses

India's food supply system was not just inefficient — it was wasteful at scale.

Major loss factors:

- ♦ **Lack of cold storage**: Only ~10% of perishable produce had access to refrigerated storage. Vegetables like tomatoes, peppers, spinach, and cauliflower rotted within days.
- ♦ **Poor rural logistics**: Transport trucks were often uncovered or unrefrigerated. Long travel times combined with heat meant spoilage before reaching markets.
- ♦ **Minimal food processing**: Developed nations process 40–60% of their produce. India processes less than 10%, leaving most crops vulnerable.
- ♦ **Inefficient mandis**: Congestion, delays, and lack of sorting/grading meant high damage to fresh produce.

Result:

- ♦ 40% losses in vegetables.
- ♦ 20–25% losses in fruits.
- ♦ Annual losses of ₹90,000–₹1,00,000 crore.
- Farmers saw lower incomes while consumers faced higher prices despite excess production.

1.4. Input Inefficiency & Counterfeit Products

Small farmers often lacked access to quality seeds, genuine inputs, and scientific advisory.

Key problems:

- ♦ **Unverified seeds**: Many bought seeds from local shops without certification. Germination rates varied wildly, affecting overall productivity.
- ♦ Counterfeit fertilizers and pesticides: Fake chemicals caused crop damage, soil degradation, or zero effectiveness. In some areas, up to 30% of pesticides sold were estimated to be adulterated.

- ♦ **Generic advice from dealers**: Shopkeepers, not agronomists, guided farmers on what fertilizers or sprays to use often overprescribing.
- ♦ **No soil health understanding**: Most farmers didn't know nutrient deficiencies, required NPK levels, pH balance, or organic carbon status. This resulted in imbalanced fertilizer use and poor yields.

Impact: High costs + low yields = low profitability and unhealthy soils.

1.5. Climate & Weather Vulnerability

Indian agriculture has always been monsoon dependent.

The challenges:

- ♦ 55% of farming land is rainfed (no irrigation).
- ♦ A delayed or weak monsoon immediately translates into reduced sowing.
- Extreme events like floods, droughts, hailstorms, and heatwaves are becoming more frequent due to climate change.
- ♦ Unpredictable rainfall, crop losses from droughts, heat stress reducing yields (especially in wheat, rice, and pulses), and sudden storms destroying standing crops.

With no crop insurance penetration and slow compensation systems, farmers often slipped into debt cycles after climate shocks.

1.6. Low Mechanization Due to Small Landholdings

India's average landholding is just 1–1.1 acres, making mechanization unaffordable.

Constraints:

- ♦ Tractors, harvesters, tillers, drones all require scale.
- Even hiring equipment was difficult due to limited availability.
- ♦ Manual labour meant higher costs, slower operations, lower productivity, and inconsistent quality.
- ♦ Small farms also couldn't adopt advanced practices like laser levelling, precision farming, drip irrigation, or sensor-based monitoring.

Impact: India's productivity remained lower than global averages despite having one of the largest farming workforces.

2. The Digital Shift: Five Tech Pillars Powering India's Agritech Boom

A turning point arrived with cheap smartphones, 4G/5G penetration, and digital payment systems.

Suddenly, farmers could:

- ♦ Check market prices.
- Receive weather alerts.
- ♦ Diagnose crop diseases.
- Order inputs online.

- Sell directly to buyers.
- Monitor fields using satellites and drones.

Agritech became the bridge between traditional farming and modern innovation.

2.1. Artificial Intelligence & Machine Learning

Al and ML are becoming the decision-making engine of modern Indian agriculture. By analysing images, weather data, soil information, and historical patterns, Al helps farmers shift from guesswork to scientific, data-backed farming.

Al is used for:

- ♦ **Leaf disease detection**: Farmers click a photo Al instantly identifies the disease suggests the right treatment, preventing crop loss.
- **Pest outbreak prediction**: Al analyses humidity, temperature, and past trends to warn farmers days or weeks before an infestation.
- ♦ **Yield forecasting**: Helps farmers plan harvests and helps buyers and supply chains prepare for procurement.
- **Fertilizer recommendations**: Al gives precise nutrient suggestions based on soil type and crop stage, reducing waste and improving soil health.

Leading startups: CropIn, Fyllo, IntelloLabs

Impact: More informed decisions, higher yields, lower risks, and a major shift toward precision agriculture in India.

2.2. IoT-Based Smart Farming

loT devices placed directly on the farm act like 24/7 digital eyes and ears, continuously monitoring field conditions and sending real-time insights to the farmer's phone.

IoT sensors track:

- ♦ Soil moisture: Prevents over-irrigation and helps save water.
- ♦ Temperature: Crucial for protecting sensitive crops from heat stress.
- Humidity: Helps predict fungal diseases before they spread.
- ♦ Irrigation needs: Alerts farmers exactly when and how much to irrigate.

Platforms: Fyllo, Ecozen

Impact: Lower water wastage, healthier crops, and more consistent yields.

2.3. Drones & Aerial Intelligence

Drones are revolutionizing Indian farms by bringing precision, speed, and safety to operations that were once slow and labour-intensive.

Applications:

- ♦ **Precision spraying**: Uniform chemical application without exposing farmers to toxic sprays.
- ♦ **Drone-based fertilization**: Targeted nutrient delivery with minimal wastage.

- ♦ Aerial crop health monitoring: High-resolution images detect stress, pests, or nutrient deficiencies early.
- ♦ **Large-area mapping**: Helps plan irrigation, sowing patterns, and disease management.

Companies: Garuda Drones, ideaForge,

Impact: Drone spraying alone reduces chemical usage by 20–40%, speeds up operations by several times, and ensures more accurate, timely farm management.

2.4. Satellite Imagery

Satellite imagery gives farmers a bird's-eye view of their fields, enabling insights that are impossible to detect from the ground. These images capture crop conditions over large areas and reveal early warning signs long before they become visible to the naked eye.

Satellite data tracks:

- Vegetation health: Identifies whether crops are growing well or under stress.
- Crop stress patterns: Detects issues like water shortage, nutrient deficiency, or disease early.
- Weather impact: Monitors drought, floods, or heatwaves across regions.
- ♦ Large-scale risk prediction: Helps insurers, banks, and government agencies prepare for potential losses.

Startups: CropIn, SatSure

Impact: Early problem detection reduced crop damage, and better planning at both farm and regional levels.

2.5. Digital Marketplaces & Smart Supply Chains

Digital agri-marketplaces have transformed how farmers buy and sell. Instead of relying on middlemen, farmers now access transparent, efficient, and direct marketplaces through their smartphones.

Platforms: Ninjacart, WayCool, Crofarm, Bijak, BigHaat, AgroStar, DeHaat

Services provided:

- ♦ Sell produce directly to retailers, wholesalers, and processors.
- ♦ Receive instant digital payments through UPI.
- ♦ Compare real-time prices across markets.
- Access verified seeds, fertilizers, and pesticides.
- ♦ Use logistics, cold storage, and grading services.

Impact: Higher farmer incomes, reduced wastage, faster payments, and a more reliable farm-to-market ecosystem.

3. Seven Stages of the New Digital Farming Ecosystem

Agritech now supports farmers from seed to shelf, creating a fully connected, data-driven agricultural cycle. Each stage removes uncertainty and adds transparency, efficiency, and profitability.

Stage 1: Input Supply — Quality, Access & Authenticity

Earlier, farmers bought seeds and fertilizers purely on trust, often receiving counterfeit or poor-quality inputs that ruined entire seasons. Today, digital input platforms ensure verified, science-backed and transparent access to farm essentials.

Startups: AgroStar, BigHaat, DeHaat, WayCool

Services:

- ♦ Al-based seed and crop recommendations.
- Verified, traceable agro-inputs.
- ♦ Transparent pricing and reviews.
- ♦ Doorstep delivery in rural areas.
- ♦ Input advisory linked to soil tests and crop stage.

Impact: Farmers save 10–25% on costs, reduce risks, and start each season with confidence.

Stage 2: Pre-Sowing Advisory — Science Before the Season

Before a single seed is planted, farmers now receive precise guidance about what, when, and how to sow.

Apps and platforms provide:

- Weather probabilities for the coming weeks.
- Soil nutrient profiles and pH levels.
- Expected rainfall patterns.
- ♦ Crop suitability maps for their region.
- Alerts on the optimal sowing window.

Platforms: CropIn, Fyllo, DeHaat

Impact: Better crop selection, reduced risk, and a strong foundation for the season.

Stage 3: Cultivation — Smart Farming on the Ground

This is where the most visible digital transformation takes place. Farmers now manage fields with precision tools once seen only in advanced global farms.

Key innovations include:

- ♦ Al leaf scanning (CropIn, Fyllo) to diagnose diseases instantly.
- ♦ IoT soil sensors (Fyllo, Ecozen) for real-time soil and water data.
- ♦ Drone spraying (Marut Drones, lotechWorld) for faster, safer chemical application.
- Nutrient deficiency detection using imaging and Al.
- Automated or drip irrigation controlled by sensors.

Outcomes:

♦ 20–40% higher yields.

- ♦ 15–25% lower irrigation costs.
- ♦ 30–40% reduced pesticide use.
- Decisions shift from reactive to predictive and preventive.

Stage 4: Harvest & Post-Harvest — Reducing Food Loss

India's historically high post-harvest wastage is decreasing thanks to smarter storage, logistics, and quality control solutions.

Innovators: Ecozen, Tessol, S4S Technologies, IntelloLabs

Solutions provided:

- ♦ Solar-powered cold rooms for farmers without electricity.
- ♦ Reefer trucks to maintain cold-chain integrity.
- ♦ Al-based digital grading for quality and sorting.
- ♦ Cold-storage logistics and inventory monitoring.
- ♦ Solar dehydration units for value-added products.
- ♦ Shelf-life extension technologies.

Impact: Sharp reduction in spoilage, better quality produce, and predictable income even for perishables.

Stage 5: FPO Empowerment — Farmers Become Entrepreneurs

Farmer Producer Organizations (FPOs) are becoming rural agribusiness hubs, thanks to digital tools that improve their management and bargaining power.

Platforms: Samunnati, DeHaat, BigHaat

Support provided:

- ♦ Digital bookkeeping & transaction records.
- ♦ Bulk input procurement at lower rates.
- Market intelligence dashboards.
- ♦ Credit facilitation and loans based on digital history.
- Quality testing kits and procurement insights.

Impact: FPOs negotiate better prices, operate professionally, and create economic strength at the village level.

Stage 6: Market Linkages — Selling Beyond the Village

Farmers are no longer confined to local mandis. Digital market platforms connect them directly to national and even export buyers.

Platforms: Ninjacart, Bijak, Crofarm, WayCool

Services:

- ♦ Price access across thousands of mandis.
- Direct sale to large retailers, processors, and wholesalers.

- Instant or same-day digital payments.
- Nationwide logistics and reach.
- ♦ Transparent bidding and quality checks.

Impact: Faster sales, better prices, and significantly lower dependence on middlemen.

Stage 7: Consumer Transparency — A Trust-Based Food System

Digital traceability allows consumers to know exactly where their food comes from — creating accountability across the entire supply chain.

QR-based traceability reveals:

- ♦ Farm location and farmer details.
- Exact harvest date.
- ♦ Pesticide and fertilizer usage.
- Storage temperature and cold-chain data.
- ♦ Transport route from farm to store.

Al-driven grading from IntelloLabs ensures quality consistency and builds consumer trust.

Impact: A transparent, traceable, and trustworthy food ecosystem where both farmers and consumers benefit.

4. What Is Fueling India's Agritech Revolution?

India's agritech boom is not accidental — it is driven by a powerful mix of policy support, startup innovation, rural digital adoption, and rising farmer expectations. Together, these forces are reshaping the country's agricultural landscape.

4.1. Government Support

The Indian government has become a major catalyst in modernizing agriculture. Several national missions and digital initiatives are helping accelerate agritech adoption at scale.

Key programs include:

- ♦ **Digital Agriculture Mission (DAM)**: Encourages the use of drones, Al, IoT, and remote sensing.
- ♦ **AgriStack**: A unified digital database to give farmers personalized advisory, credit access, and crop insights.
- ♦ **Soil Health Card Scheme**: Provides farmers with detailed soil nutrient information.
- e-NAM (National Agriculture Market): Integrates mandis across states for transparent trading.
- ♦ **Kisan Drone Yojana**: Promotes drone use for spraying, monitoring, and mapping with subsidies

Impact: Improved transparency, better advisory services, faster technology adoption, and nationwide digital integration.

4.2. Startup Innovation

India now has 1,500+ Agritech startups, making it one of the world's fastest-growing agritech ecosystems. These startups are solving real-life problems across the entire value chain:

Focus areas:

- ♦ High-quality inputs.
- ♦ Weather and crop advisory.
- ♦ IoT sensors and automation.
- ♦ Drone services.
- ♦ Digital marketplaces.
- Supply-chain and logistics.
- ♦ Lending and crop insurance.
- Post-harvest solutions.

Impact: Startups bring speed, innovation, and farmer-first solutions — pushing agriculture into a new era of efficiency.

4.3. Affordable Rural Technology

Rural India today is more connected and tech-enabled than ever.

Key enablers:

- Smartphones are affordable and widely used in villages.
- ♦ UPI and digital payments have replaced cash dependence.
- ♦ Cloud computing helps apps deliver real-time intelligence.
- ♦ Sensors, drones, and storage tech are becoming cheaper.

Impact: Technology that was once urban or high-end is now within the reach of small farmers.

4.4. Rising Farmer Aspirations

Indian farmers are no longer satisfied with survival — they want growth, security, and independence.

They increasingly seek:

- Predictable and steady incomes.
- Safer, healthier crops.
- Reduced dependence on middlemen.
- Better prices and fair markets.
- ♦ Scientific guidance instead of guesswork.

This shift in mindset fuels demand for digital tools, advisory platforms, and modern services.

5. Real Ground Challenges Farmers Still Face

Despite the rapid growth of Agritech, many structural barriers continue to limit adoption and impact.

These challenges highlight why India's agricultural transformation must be inclusive, scalable, and long-term.

5.1. Tiny Landholdings

Most Indian farmers cultivate very small plots (1–1.1 acres on average). This makes it difficult to use tractors, drones, and modern equipment, achieve economies of scale, grow high-value crops profitably, or implement advanced irrigation systems. Small plots mean high labour dependence and low productivity, limiting income potential.

5.2. Low Digital Literacy

While smartphone penetration is high, many farmers still struggle with navigating apps, understanding dashboards, interpreting data and alerts, and using digital payment systems. Digital tools must be simple, local-language, and voice-first to ensure widespread use.

5.3. Dependence on Local Traders for Credit

Local traders often act as both buyers and moneylenders. Farmers depend on them for quick loans, input purchases on credit, and guaranteed crop buyback. This dependence traps farmers in informal credit cycles, reducing their bargaining power and limiting their ability to use digital marketplaces.

5.4. Patchy Connectivity in Many Districts

Although 4G/5G is expanding, many rural regions still face weak signals, slow data speeds, and network dropouts. This disrupts real-time advisory, sensor-based farming, drone operations, and digital payments. Connectivity gaps reduce the effectiveness of agritech tools, especially during critical farm stages.

5.5. Climate Risks Increasing Each Year

Farmers now face more frequent droughts, floods, heatwaves, unexpected rainfall, and shifting pest patterns. Climate change has made agriculture high-risk and unpredictable, increasing the need for climate-smart technologies and insurance.

5.6. Limited Access to Affordable Agricultural Loans

Many farmers lack credit history, collateral, and formal documentation. As a result, they struggle to secure low-interest loans, crop insurance, and working capital for inputs. High interest from informal lenders eats into their already thin margins.

5.7. High Cost of Mechanization for Small Farmers

Modern tools — tractors, harvesters, drones, sensors — remain expensive. For small farmers, buying such equipment is rarely economical unless they have access to rental platforms, shared equipment centers, or FPO machinery banks. Mechanization remains out of reach, affecting productivity and efficiency.

6. Challenges Agritech Startups Still Face

Even as India's agritech ecosystem grows rapidly, startups encounter unique operational, financial, and regulatory hurdles. These challenges make scaling solutions in rural India complex and capital-intensive.

6.1. High Farmer Acquisition Cost

Reaching millions of small farmers is expensive due to diverse languages and literacy levels, remote locations and scattered villages, and the need for on-ground agents, demonstrations, and training. Customer acquisition can consume a large share of a startup's early resources.

6.2. Slow Monetization Cycles

Agritech startups often take time to generate revenue because farmers pay seasonally, not monthly; margins on inputs, advisory, or marketplaces are thin; and adoption of paid services depends on demonstrated ROI. This leads to long cash flow cycles and delays breakeven.

6.3. Difficult Rural Logistics & Cold-Chain Operations

Transporting perishable produce and inputs in rural India remains challenging due to poor road infrastructure, limited cold storage in remote areas, and high fuel and maintenance costs for refrigerated vehicles. These factors increase costs and limit scalability.

6.4. Poor-Quality Local Weather & Soil Data

Accurate advisory depends on reliable local data, which is often unavailable. Many districts lack precise weather stations, soil nutrient data may be outdated or sparse, and localized microclimate effects are hard to predict. Startups often have to invest in building their own sensors and data networks, increasing costs.

6.5. Long Gestation Periods Before Profitability

Agritech solutions often require months or years of adoption before generating significant revenue due to the seasonal nature of farming, time needed to build trust and demonstrate ROI, and slow scaling across diverse geographies. Investors must have patience and long-term vision.

6.6. Evolving Regulations

Startups must navigate changing legal and policy landscapes, including drone operations for spraying and mapping, certification for seeds, fertilizers, and pesticides, and data privacy rules for farmer and farm information. Compliance adds complexity and operational overhead.

7. Why Agritech Still Matters — And Will Shape India's Future...

Even with persistent challenges, Agritech is already transforming Indian agriculture and creating measurable impact across the country.

Visible Results Today

- ♦ **50+ million farmers** are using digital tools for advisory, inputs, and markets.
- ♦ Digitally assisted farmers earn **30–70% higher incomes** compared to peers relying on traditional practices.
- **Rural youth** are finding new careers, becoming drone pilots, data analysts, or logistics operators, earning ₹20,000–₹40,000 per month.
- Food wastage is decreasing through smart storage, cold chains, and Al-based quality checks.
- ♦ **Supply chains** are becoming transparent, efficient, and fair, benefiting both farmers and consumers.

The Next Decade of Agritech

The future promises even deeper transformation:

- ♦ Autonomous tractors and farm machinery reducing labour dependency.
- ♦ Satellite-driven soil and crop mapping enabling hyper-precise interventions.
- ♦ Climate-smart seeds resistant to drought, heat, and pests.
- ♦ Weather-based crop insurance providing financial protection for unpredictable seasons.
- ♦ Hyper-local advisories tailored to each farm and micro-climate.
- ♦ Al-driven financial scoring for farmers, unlocking better access to credit and loans.

8. The Big Picture: India's Digital Green Revolution

Agritech is more than technology — it is **India's Digital Green Revolution**, connecting millions of farmers to knowledge, markets, and sustainable growth. It is **reshaping rural livelihoods**, boosting incomes, reducing waste, and creating the next generation of **Agri-entrepreneurs**.

The future of Indian agriculture will no longer be defined by uncertainty, inefficiency, or risk. Instead, it will be shaped by **intelligence**, **connectivity**, **and innovation**. With the integration of **AI**, **IoT**, **drones**, **digital marketplaces**, **and modern supply chains**, India is building a **fully connected agricultural ecosystem** where:

- Farmers make smarter, data-driven decisions that increase productivity and reduce losses
- ♦ **Consumers** access safer, higher-quality food with full traceability
- ♦ **Businesses** enjoy reliable supply chains with predictable inventory and pricing
- ♦ **Food wastage** declines thanks to modern storage and logistics solutions
- Rural youth discover new livelihood opportunities, from drone operations to data analysis
- Farmer incomes become more predictable, supporting sustainable rural growth

The coming decade will define how India balances **food security**, **climate resilience**, **and rural prosperity**, and Agritech will be at the heart of that transformation.

The **Green Revolution once fed India**. The **Digital Agriculture Revolution** will now **empower it, transform rural economies, and unlock prosperity for millions**.

India's quiet digital harvest has already begun — and it will shape the nation's next century.

Sources & References:

- ♦ Department of Agriculture & Farmers Welfare: https://agriwelfare.gov.in/
- ♦ Digital India Agriculture: https://www.digitalindia.gov.in/agriculture/
- e-NAM (National Agriculture Market): https://www.enam.gov.in/
- ♦ Startup India: https://www.startupindia.gov.in/
- ♦ IMARC Group: India Agritech Market Size, Growth and Forecast 2033
- ♦ EY-Assocham Report: The new Agritech paradigm: From innovation to integration

- ♦ NITI Aayog: Annual Reports on Agriculture & Digital Transformation
- ♦ Ministry of Agriculture & Farmers Welfare: Digital Agriculture Mission reports (2021–2025)
- ♦ Inc42: "State of Indian Agritech 2025"
- ♦ NASSCOM: "Agritech: Transforming Indian Agriculture 2025"
- ♦ World Bank: "Digital Agriculture Profile: India 2025"

—By CA. Mohit Gangwal



Nurturing Innovation: A Deep dive Into Startup India Seed Fund Scheme

As per data available on the website of Startup India, more than 1,36,000 startups have been registered as on May 16, 2024. However, the biggest problem being faced by the startups is availability of financial assistance at their initial stage especially for proof of concept, prototype development and product trials.

The early stage startups are neither able to get the funds from angel investors and venture capital unless the proof of concept has been provided nor from the banks as they provide loans only to asset-backed applicants.

Early stage startups need seed funding for their innovative idea to conduct proof of concept trials. Government is also aware of this issue. Hence, a Startup India Seed Fund Scheme was launched. The key aim of the Startup India Seed Fund Scheme (SISFS) is to provide financial assistance to startups for proof of concept, prototype development, product trials, market entry and commercialization. With the support of seed funding under SISFS, the startups are able to graduate to a level where they will be able to raise investments from angel investors or venture capitalists.

Many innovative idea are not able to take off due to lack of funding at the initial stage itself. At the initial stage of the startups, there is no capital, loan, cash flow or profitability to meet out the initial cost of proof of concept, prototype development, product trials, market entry and commercialization. Hence, many innovative idea suffers due to non-availability of any financial support. Many of these startups with innovative idea can be the good source of employment generation.

Such promising startups with innovative idea may have a multiplier effect in validation of business ideas, leading to employment generation.

Considering the future of such startups with innovative idea, financial assistance to startups for proof of concept, prototype development, product trials, market-entry, and commercialization is provided under Startup India Seed Fund Scheme (SISFS).

The government has also launched a Credit Guarantee Scheme for Startups where unsecured loans are provided to the startups through banks after one year of their successful operations. Thus, these startups will be able to avail loans from commercial banks or financial institutions. Such unsecured loans are provided to the tune of up to Rs. 10 crores under Credit Guarantee Scheme for Startups.

Eligible Startups for availing SISFS

Following types of startups are eligible to avail funds under Startup India Seed Fund Scheme:

- ♦ The startup need to be recognized by DPIIT.
- ♦ The incorporation of the startup should be not more than 2 years ago at the time of application.
- ♦ There should be solution of any problem being targeted using technology in its core product or service, or business model, or distribution model, or methodology being adopted by the startup.
- ♦ Startup should not have received more than Rs 10 lakh of monetary support under any other Central or State Government scheme, excluding any prize money from competitions and grand

- challenges, subsidized working space, founder monthly allowance, access to labs, or access to prototyping facility.
- ♦ The shareholding by the Indian promoters in the startup should be at least 51% at the time of application for the scheme.

Eligibility Criteria for Startup Recognition

To get the recognition from DPIIT as a startup, following conditions need to be complied:

- Constitution of the startup should be Private Limited Company, Registered Partnership Firm or a Limited Liability Partnership as only these are eligible to get Startup registration. A sole proprietorship or a Public Limited Company is not eligible as startup.
- ♦ Turnover should be less than Rs. 100 Crores in any of the previous financial years.
- ♦ An entity only up to 10 years from the date of its incorporation may be recognised as startup.
- The entity should be working towards innovation and improvement of existing products, services and processes

or

should have the potential to generate employment

or

should create wealth.

♦ However, an entity formed by splitting up or reconstruction of an existing business shall not be eligible to be registered as a Startup.

Funding under Startup India Seed Fund

A startup is eligible to get an amount upto Rs. 70 lakhs in the following form:

Type of Fund	Amount	Purpose
Grant	Up to Rs. 20 Lakhs	For validation of Proof of Concept, or prototype development, or product trials
Convertible debentures or debt or debt-linked instruments	Up to Rs. 50 Lakhs	For market entry, commercialization, or scaling up

It is important that the grant shall be disbursed in milestone-based instalments related to development of prototype, product testing, building a product ready for market launch, etc.

The interest on convertible debentures, or debt, or debt-linked instruments, funds shall be of not more than prevailing repo rate. The tenure for convertible debentures, or debt, or debt-linked instruments shall be not more than 60 months wherein a moratorium of up to 12 months may be provided. However, funds under convertible debentures, or debt, or debt-linked instruments shall be unsecured and no guarantee from promoter or third-party will be required to be provided by the startups.

The Startup India Seed Fund Scheme can be availed by any startup in the form of grant and debt/convertible debentures each only once as per the guidelines of the scheme.

Specific Sectors under SISFS

The scheme is a sector agnostic scheme. Thus, startups from any sector may apply for the SISFS scheme. Still some preference sectors for SISFS are where the startups create innovative solutions in the following sectors, which are indicative and not exhaustive:

Social impact	Waste management	Water management	Financial inclusion	
Railways	Food processing	Healthcare	Mobility	
Biotechnology	Space	Education	Oil and gas	
Energy	Defence	Agriculture	Textile	

Application Process for SISFS

The application submission is completely online, and no physical submission of documents is required. There are no application fees for this scheme. Even the incubator may not charge any fee in cash or in kind from the startup under the scheme for any process of selection, disbursement, incubation, or monitoring. The startup interested to apply for funds under Startup India Seed Fund scheme need to apply at https://seedfund.startupindia.gov.in

All applicants will be able to track the progress of their application on the Startup India portal on a real-time basis. The application so received will be shared online with respective incubators for further evaluation.

Role of Incubators

The startup may select up to three incubators according to their preference while applying for the seed fund. The startups may choose the incubators based on their sector, stage, business needs, and strategic goals. The startup can apply for seed fund to any three incubators selected as disbursing partners for this scheme.

Parameters for evaluation of startup applicants

Following are the criteria for evaluation of the startups by the incubator:

- ♦ Whether there is a need of the idea based on the market size.
- ♦ What is the market gap which will be filled up by the idea of the startup.
- ♦ Whether the idea of the startup will solve a real world problem.
- ♦ Whether the technical claims are feasible and reasonable.
- ♦ What is the methodology used or to be used for Proof of Concept and its validation.
- ♦ What is the roadmap for product development.

- Potential impact on the national importance.
- ♦ Whether the idea is a novel idea associated with IP.
- What is USP of the technology.
- Whether the startup has a strong team both technical and for business development.
- ♦ What is roadmap for fund utilisation.
- Overall assessment and any other parameter considered appropriate by the incubator.

Time for first instalment of the seed fund

For grants, the first instalment to any selected startup shall be released not more than 60 days from receipt of application from the startup. Thereafter, the interim progress update and utilization certificate need to be submitted by the startups to initiate the release of subsequent instalment of grant.

For debt or convertible debentures, though more due diligence and documentation need to be undertaken which need more time still a similar timeline as in case of grant is aimed.

Reporting of Progress after receiving seed fund

Each startup will be required to be constant touch with the incubator team. They are also required to share updates with the incubator at least once in 15 days. These updates are required to be shared on the scheme dashboard at least on a monthly basis.

Startups will also be required to submit the interim progress update and utilisation certificate to initiate the release of instalment of grant at every stage. At the end of the project duration, the startups are required to submit final report and audited utilisation certificate.

Liability of promoter in case of failure of startup

The success rate of the startups is very low. The same has been considered while drafting this scheme. However, the reason of failure may be a learning to the other startups. The startups are required to read the provisions related to failure of startups under the agreement to be signed with the incubator. For failed ventures, the startups are normally required to share their learnings and the reasons for failure in the report. This report will be a learning for both other startups and the incubators.

Re-application after rejection of application

In case of rejection of any application by all the three incubators, the startup can apply for the funds under SISFS again after 3 months of receiving a rejection. The three moths gap is to ensure that the startup work on the feedback received from incubators.

Challenges and the Way Forward

While the Startup India Seed Fund Scheme has been instrumental in fostering innovation, it is not without challenges. Ensuring timely disbursement of funds, maintaining transparency in the selection process, and providing adequate mentorship to startups are areas that require continuous improvement.

Conclusion

The Startup India Seed Fund Scheme is a testament to the government's commitment to fostering a vibrant startup ecosystem. By providing early-stage funding, the scheme not only nurtures innovation but also empowers entrepreneurs to turn their dreams into reality. As India continues its journey towards becoming a global startup hub, initiatives like the SISFS will play a pivotal role in shaping the future of entrepreneurship in the country.

By Ms. Arima Aron



QUIZ

Q1.	Whi	hich platform enables MSMEs to discount invoices digitally and improve liquidity?					
	A.	ONDC	B.	TReDS			
	C.	GeM	D.	Udyam Portal			
Q2.	Rev	enue-Based Financing (RBF) is typi	cally s	uitable for businesses with:			
	A.	Unpredictable revenues					
	B.	Fixed-asset heavy operations					
	C.	Recurring or subscription-based case	sh flow	S			
	D.	No revenue model					
Q3.	Ven	Venture debt is best described as:					
	A.	Long-term bank overdraft					
	B.	Equity-linked financing for profitable firms					
	C.	Short-term working capital for startups with equity backing					
	D.	Non-repayable government grant					
Q4.	The Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) provides:						
	A.	Interest subsidies	B.	Collateral-free loan guarantees			
	C.	Tax holidays	D.	Startup equity investments			
Q5.	. Which government scheme promotes innovation-driven entrepreneurship incubation and seed funding?						
	A.	PMEGP	B.	ASPIRE			
	C.	RAMP	D.	SAMARTH			
Q6.	6. Tokenized debt and asset-backed microbonds use which technology?						
	A.	Blockchain	B.	IoT			
	C.	ERP	D.	Cloud telephony			
Q7.	Und	Under GST 2.0, MSMEs benefit primarily through:					
	A.	More tax slabs					
	B.	Increased compliance complexity					
	C.	Simplified rate structure and faster	refund	S			
	D.	Higher tax on raw materials					
Q8.	"VCFO services" for MSMEs aim to:						
	A.	File GST returns					

- B. Offer strategic financial insights and decision intelligence
- C. Replace statutory auditors
- D. Manage HR functions

Q9. Royalty-based financing links repayment to:

- A. Inventory valuation B. Future sales or revenue
- C. Collateral value D. Asset depreciation

Q10. A DPIIT-recognised startup can enjoy tax exemption under Section 80-IAC of the Income Tax Act for:

- A. 3 consecutive financial years out of first 10 years
- B. 5 consecutive years out of first 15 years
- C. 7 consecutive years from incorporation
- D. 10 consecutive financial years from incorporation

Answers: 1. b 2. c 3. c 4. b 5. b 6. a 7. c 8. b 9. b 10. a





Committee on MSME & Startup, ICAI

ICAI Bhawan, P.B. No.7100, Indraprastha Marg, New Delhi- 110 002, India
Phone 011-30110569 • Email: msme@icai.in/ startup@icai.in

MSME Website https://msme.icai.org/ • Startup Website: https://startup.icai.org/