



An Analytical Review of India's Startup Ecosystem (2019-2023)

Prof. D. Varalakshmi

Principal Government Degree college for Women, Karimnagar, Telangana, India.

Email ID: elearning.varalakshmid@gmail.com.

Article history

Received: 11 July 2025

Accepted: 26 July 2025

Published: 26 August 2025

Keywords:

Startup ecosystem,
Employment generation,
Gender inclusivity.

Abstract

India's startup ecosystem has witnessed exponential growth over the past decade, positioning the country as the third-largest startup hub globally. As of December 2023, over 1.17 lakh startups have been recognized by the Department for Promotion of Industry and Internal Trade (DPIIT), generating more than 12.4 lakh direct jobs and expanding across 80% of India's districts. This paper analyses DPIIT data from 2019 to 2023 to examine the geographical distribution of startups ecosystem, employment generation and Gender inclusivity initiatives in India. The study explores the policy frameworks of top performing states contribution to the ecosystem maturity in these regions. By drawing comparisons with emerging states, the paper aims to offer actionable insights and policy recommendations to foster inclusive and balanced startup growth across India, aligning with the national vision of Viksit Bharat @2047.

1. Introduction

India hosts the world's third-largest and fastest-growing entrepreneurial ecosystem. In 2015 alone, 10,000 new startups were launched, and over US\$10 billion was raised in funding, reflecting strong growth and investor confidence. [1]. India's startup ecosystem, with 1.57 lakh DPIIT-recognized startups, ranks third globally and is growing rapidly—35% annually across 670+ districts and 57 sectors. Over 51% of startups now emerge from Tier-II/III cities, reflecting inclusive growth. Women-led ventures have risen to 32,000, supported by schemes like Startup India, FFS, and SISFS. As India targets the top global spot by 2047, integrating education, innovation, and entrepreneurship is key to achieving Viksit Bharat.[2] India's startup growth is driven by a large and diverse market, rising incomes, and young, aspirational population. Technological advancements, digital infrastructure like Aadhaar,

and initiatives such as Startup India have improved market access and reduced entry barriers. Government support, corporate collaboration, and shifting societal attitudes toward entrepreneurship have further strengthened the ecosystem, making India a fertile ground for innovation and scalable ventures. [3] Need of the study: This study is crucial for examining the factors driving India's startup boom, particularly the impact of state-level initiatives, funding support, and inclusive policies. With a growing share of startups emerging from Tier-II and Tier-III cities, it aims to uncover regional success patterns and their alignment with national goals like Viksit Bharat 2047. It also fills a critical gap by offering comparative insights to inform future strategies and investments.

2. Objectives

The objectives outlined for the present study are as follows:

- To examine the growth of DPIIT-recognized startups in India (2019–2023) and identify top-performing states based on startup registrations and job creation.
- To assess how policies, infrastructure, and partnerships drive startup success in leading states.
- To assess the inclusivity of startup growth through women-led participation and regional distribution.

3. Methodology

This study employs a mixed-methods approach combining: Quantitative analysis of year-wise and state-wise data on startup numbers, job creation, and growth rates. Qualitative review of policies, incentives, infrastructure, and ecosystem support in leading states.

4. Data Sources & Limitations

This study uses secondary data from the Startup India Portal [4], PIB, Open Government Data Platform (2019–2023) [5], GEM Reports (2022–24) [6] and state-specific policy portals. This study is limited by self-reported data, sectoral gaps, no primary fieldwork, and inconsistent state-level data and policy execution.

5. Conceptual Framework

India's startup ecosystem accelerated post-1990s, with Flipkart's 2009 rise sparking a surge in startups, incubators, and funding. Between 2013–2018, over 7,000 tech startups emerged, including unicorns like In Mobi and Paytm.[7]. India's startup ecosystem, with 100,000+ ventures, drives economic growth by creating over 2 million direct jobs and boosting sectors like tech, fintech, and e-commerce. It also contributes to GDP, attracts FDI, and strengthens local economies.[8]. Indian startups are reshaping jobs through innovation, flexible roles, and skill-based hiring. Since 2016, they've created 15.5 lakh jobs and may generate up to 50 million more. Focused on sectors like IT and fintech, they prioritize skills, invest in upskilling, and are projected to contribute \$1 trillion to the economy by 2030.[9] Funding is vital for startup success—while unicorns attract major investments, early-stage ventures often struggle. Technological innovation drives growth by meeting market needs and disrupting industries.[10] Growth in fintech, edtech, and health tech is driven by consumer demand and regulatory support, though experts warn of overvaluation risks. Meanwhile, startups

are prioritizing sustainability, aligning with environmental and social expectations. [11]. India ranks high in perceived entrepreneurial opportunities (82.5%) and self-confidence (81.6%), but fear of failure (62.8%) remains a key barrier. With a TEA rate of 12% and intent at 19.5%, motivations include livelihood (87.8%), impact, wealth creation, and legacy. Experts emphasize the need for stronger education and capacity-building alongside government support.[6] India's MSDE is advancing skill development through digital innovation, global partnerships, and inclusive programs. Key efforts include AI and VR-based training, success at WorldSkills 2024, and future-focused institutes like IIS Mumbai. Regional and international collaborations are expanding vocational training, especially for women and rural youth, positioning India as a global skilling hub.[12]

6. Data-Driven Analysis of Leading Startup States

As of December 31, 2023, over 1,17,000 startups have been recognized by DPIIT across India, collectively generating more than 12.42 lakh direct jobs. These startups now span all States and Union Territories, reaching 80% of districts, with over 55,800 led by at least a woman director. Drawing on state- and UT-level data from 2019 to 2023, this paper examines regional startup growth, employment generation, and gender-inclusive entrepreneurship. It further explores the factors contributing to the standout performance of leading states within India's evolving startup ecosystem.

- **Five-Year Growth Trends of Startups in India (2019–2023):** The data from 2019 to 2023 discloses significant trends in startup growth, job creation, and gender inclusion across Indian states and union territories. Key highlights are as follows:
- **Startup Growth in India (2019–2023):** Between 2019 and 2023, India's startup ecosystem has seen impressive growth in scale and reach. The number of recognized startups accelerated from 10,604 in 2019 to 34,779 in 2023 signifying an extraordinary 228% increase. The recognition of 104,882 startups during this five-year period demonstrates the surging momentum and diversification of India's entrepreneurial sector. Startup growth remained steady across consecutive years, with 2021 recording the sharpest annual

increase of over 40%. By 2023, the number of recognized startups had more than tripled relative to 2019 levels. This sustained upward movement has been driven by expanded digital adoption, assertive government initiatives such as the Startup India program, and a widening culture of innovation across diverse states and industry sectors. Table 1 shows Total Number of Recognized Startups and Growth Rate in India (2019–2023)

6.1. Top Performing States in 2023

The table offers a comparative overview of seven leading states—Maharashtra, Uttar Pradesh, Gujarat, Tamil Nadu, Karnataka, Delhi, and Telangana—pertaining to their performance in startup recognition. Key metrics including total number of recognized startups, overall growth rate, and Compound Annual Growth Rate (CAGR) are employed to assess progress and highlight regional

trends and dynamics within India’s evolving startup ecosystem. (Table 2)

Table 1 Total Number of Recognized Startups and Growth Rate in India (2019–2023)

Year	No of Recognized Startups	Growth Rate (%)
2019	10,604	—
2020	13,798	30.13%
2021	19,371	40.33%
2022	26,330	35.92%
2023	34,779	32.09%

Table 2 Startup Growth Performance of Leading Indian States (2019–2023)

State	2019	2020	2021	2022	2023	Total Startups	Growth Rate (%)	CAGR (%)
Maharashtra	1,987	2,531	3,552	4,763	5,801	18,634	192%	30.10%
Uttar Pradesh	807	1,290	1,876	2,554	3,426	9,953	324%	42.40%
Gujarat	565	846	1,655	2,262	3,291	8,619	482%	56.50%
Tamil Nadu	556	715	1,067	1,791	2,810	6,939	405%	50.20%
Karnataka	1,566	1,648	2,082	2,546	3,032	10,874	94%	18.40%
Delhi	1,302	1,711	2,129	2,548	3,150	10,840	142%	25.20%
Telangana	559	754	928	1,370	1,757	5,368	214%	33.40%

Source: Source – Ministry of Commerce and Industry, PIB Delhi, 02/02/2024

Gujarat: emerged as a standout performer in India’s startup landscape, growing from 565 to 3,291 recognized startups—a near sixfold increase. With a CAGR of 56.5% and overall growth of 482%, this surge reflects the impact of visionary policies, a robust industrial base, and business-friendly reforms. Gujarat’s success is exemplified by startups like Zero Cow Factory, which produces animal-free dairy proteins using precision fermentation; Charge Zone, a leader in EV charging infrastructure; Optimized Electrotech, which develops indigenous surveillance systems for defense and Petpooja, India’s largest next-gen Pos platform for the F&B sector². These ventures highlight how strategic governance can foster

scalable innovation and offer a blueprint for other states aiming to build thriving startup ecosystems. [13,14]

Uttar Pradesh & Tamil Nadu: Startup Momentum Beyond the Metros: Between 2019 and 2023, Uttar Pradesh and Tamil Nadu emerged as key drivers of India’s startup growth, with impressive CAGRs of 42.4% and 50.2% respectively. Their rise signifies a shift in entrepreneurial momentum fuelled by tier-II and tier-III cities evolving into vibrant innovation clusters. In Uttar Pradesh, cities like Lucknow, Kanpur, Noida, Varanasi, and Prayagraj have gained traction through initiatives such as AI City development [15], IIT-led incubation, and

grassroots funding [16,17]. Tamil Nadu's growth—from 556 to 2,810 startups—is powered by its sectoral diversity and supported by hubs like Coimbatore, Madurai, and Tiruchirappalli, along with Startup TN's district-level accelerators. Together, these states exemplify the democratization of innovation, where regional ecosystems are becoming engines of inclusive and scalable development [18,19,20]. Maharashtra, Karnataka, and Delhi: Scale-Driven Ecosystems with Steady Expansion Maharashtra, Karnataka, and Delhi continue to anchor India's startup ecosystem, not just in terms of absolute numbers but also through their sustained contribution to innovation infrastructure and market readiness. These states, though varied in their growth rates, share a common characteristic: the presence of established urban hubs that attract high volumes of entrepreneurial activity.

Maharashtra: With 18,634 recognized startups between 2019 and 2023, leads India's startup landscape, driven by vibrant hubs like Mumbai and Pune. Its CAGR of 30.1% reflects steady, sustained growth—characteristic of a mature ecosystem built on strong industrial foundations and established networks. Mumbai excels in fintech and media-tech, while Pune anchors deep-tech and engineering innovation, supported by incubators such as Zone Startups India and Venture Centre. State initiatives like the Startup Policy 2018 and MSInS offer funding and mentorship, while emerging clusters in Thane, Navi Mumbai, Aurangabad, and Vidarbha showcase the ecosystem's diversity and depth. [21,22]

Karnataka: anchored by Bengaluru's global reputation as a tech and innovation hub, reported 3,032 recognized startups in 2023. While its CAGR of 18.4% indicates steady growth, the pace is more moderate—reflecting ecosystem saturation in high-density clusters. To reignite momentum, the state is pivoting toward niche verticals and deep-tech innovation, supported by initiatives like INNOVERSE and the Fund of Funds for Deep Tech. Startups such as Alchemyst AI (AI-driven digital employees), SiriNor Technologies (electric jet engines), and GoCodeo AI (autonomous software testing agents) [23,24] exemplify this shift. Karnataka's trajectory shows that while maturity brings stability, diversification into frontier technologies is key to sustaining long-term growth.

Delhi's Startup Ecosystem: with 3,150 recognized startups in 2023 and a CAGR of 25.2%, reflects steady growth driven by government support, investor access, and policy incentives[25]. Key sectors include fintech (e.g., StashFin, IndiaLends), edtech (Classplus, Leverage Edu),[26,27]and sustainability (Dharaksha Ecosolutions, Desolenator)[28] As the national capital, Delhi continues to attract diverse ventures, reinforcing its role as a resilient and evolving startup hub.

Telangana–Southern India's Innovation Ascent: Over the past five years Telangana has emerged as one of India's most dynamic startup ecosystems, marked by a compelling mix of growth, policy commitment, and infrastructure development [29,30]. From 559 recognized startups in 2019 to 1,757 in 2023, the state recorded an impressive total growth of 214%, alongside a robust Compound Annual Growth Rate (CAGR) of 33.4%. This upward trajectory is not incidental—it reflects the state's strategic investment in nurturing innovation. Initiatives like T-Hub, WE-Hub, and targeted incubation programs have played a pivotal role in fostering entrepreneurship across sectors [31,32,33], especially in deep-tech, life sciences, and agritech[34]. Moreover, Telangana's emphasis on creating an enabling environment—through supportive policies, digital infrastructure, and access to global networks—has positioned it as a rising innovation cluster in southern India.

6.2. High-Growth States (2019 vs. 2023)

- Bihar: 137 → 811 startups (+492%)
- Gujarat: 565 → 3,291 startups (+482%)
- Tamil Nadu: 556 → 2,810 startups (+405%)
- Uttar Pradesh: 807 → 3,426 startups (+324%)
- Maharashtra: 1,987 → 5,801 startups (+192%)

These figures highlight that while Maharashtra leads in absolute numbers, states like Bihar and Gujarat are emerging as high-growth regions, reflecting rapid ecosystem development in non-traditional markets.

6.3. Expanding Horizons: Startup Growth in India's Emerging States (2019–2023)

Between 2019 and 2023, India's startup growth expanded beyond established hubs like Bengaluru, Mumbai, and Delhi, with emerging regions—including the northeast, Jammu & Kashmir, and

Table 3 Emerging State Startup Growth (2019–2023)

State	2019	2020	2021	2022	2023	Total Growth (%)
Nagaland	2	5	6	7	22	1000%
Mizoram	—	1	2	6	13	—
Arunachal Pradesh	2	—	4	9	17	750%
Meghalaya	5	—	6	10	18	260%
Jammu & Kashmir	30	57	123	167	247	723%
Punjab	86	134	239	294	443	415%
Bihar	137	236	374	517	811	492%
Rajasthan	321	459	591	986	1,443	349%

6.4. Early-Stage Momentum in Northeastern States

Despite modest starting points, Nagaland, Arunachal Pradesh, Meghalaya, and Mizoram have shown remarkable startup growth between 2019 and 2023. Nagaland grew by 1000%, Arunachal by 750%, and Mizoram jumped from 1 to 13 startups post-2021. This surge reflects early adoption, community-driven entrepreneurship, improved digital access, and the growing impact of central initiatives like Startup India [35,36,37]

- **Jammu & Kashmir:** Structural Change Through Innovation With startup numbers increasing from 30 to 247 — a 723% growth — Jammu & Kashmir stands out as a region undergoing policy-led transformation. Improvements in ecosystem infrastructure, access to mentorship, and integration with national innovation platforms have enabled entrepreneurs to engage with frontier sectors and address local socio-economic challenges through startup models [38].
- **Bihar and Punjab** are emerging as promising startup hubs, driven by agritech, education, and youth-led innovation. Between 2019 and 2023, Bihar grew by 492% to 811 startups, fueled by rising digital literacy and student entrepreneurship. Punjab expanded by 415% to 443 startups, with strengths in agro-processing and manufacturing. Proactive incubator development and sectoral alignment have made both states fertile ground for scalable ventures [39,40]

- **Rajasthan** has demonstrated sustained startup growth, expanding from 321 to 1,443 startups between 2019 and 2023—a 349% increase. This reflects a mature ecosystem supported by initiatives like iStart Rajasthan, strong government-industry collaboration, and enhanced digital outreach, showcasing how consistent public-private partnerships can drive long-term innovation [41]

6.5. Union Territories Highlights

Between 2019 and 2023, India's Union Territories showed varied startup growth. Delhi led with 3,150 startups, driven by strong institutional and investor networks. Chandigarh and Puducherry saw over 240% growth, fuelled by student ventures and tourism-tech. Coastal UTs like Andaman & Nicobar and Dadra & Nagar Haveli & Daman and Diu made steady gains, while Ladakh and Lakshadweep remain nascent but promising in sustainable tourism and clean energy. Targeted support can unlock broader entrepreneurial potential across these regions.

Key Insights: India's startup boom is becoming increasingly inclusive and decentralized, extending beyond metro cities into low-base states like Nagaland, Arunachal Pradesh, and Mizoram, and mid-level performers such as Jammu & Kashmir, Bihar, and Punjab. Rajasthan's steady rise underscores the impact of sustained investment. With expanding digital access, policy support, and local innovation hubs, entrepreneurship is thriving across urban and rural landscapes, fostering balanced development and a resilient, future-ready

ecosystem.

7. Startup-Driven Job Creation in India (2019–2023)

7.1. National Overview

Startup-Driven Job Creation in India (2019–2023): The data reflects overall growth. Startup-led job creation surged from 1.23 lakh in 2019 to 3.90 lakh in 2023, marking a 217% increase over five years. This reflects the expanding impact of startups on employment across the country.

7.2. Year-on-Year Momentum

There is Consistent annual growth as 2020: +23%; 2021: +29%; 2022: +37%; 2023: +47%. The sharp rise in 2023 signals a strong post-pandemic rebound and a maturing startup ecosystem.

7.3. Top Job-Creating States in 2023

- Maharashtra: 64,974 jobs – led by Mumbai and Pune’s startup density.
- Delhi: 38,280 jobs – a thriving innovation hub.
- Karnataka: 35,066 jobs – driven by Bengaluru’s tech ecosystem.
- Uttar Pradesh: 33,831 jobs – reflecting Tier-II city growth.
- Tamil Nadu: 30,536 jobs – showcasing regional startup expansion.

7.4. High-Growth States (2019–2023)

Bihar: +739% (1,079 → 9,057 jobs), Gujarat: +692% (6,077 → 48,138 jobs), Tamil Nadu: +345%, Uttar Pradesh: +283%, Rajasthan: +259%. These states demonstrate how policy support and local entrepreneurship are transforming regional economies.

7.5. Emerging Regions & Union Territories

- Northeast: Assam (3,350 jobs) and Nagaland (268) are gaining traction.
- Union Territories: Ladakh, Lakshadweep, and Dadra & Nagar Haveli

reported startup-led employment.

- Smaller States: Jharkhand, Chhattisgarh, and Odisha showed steady job growth, reflecting broader ecosystem inclusivity.

Key Insights: India’s startup growth is now geographically widespread, with startups present in every State and Union Territory, covering over 80% of districts. Fueled by supportive policies, digital infrastructure, and local innovation hubs, the ecosystem is expanding across both metro and non-metro regions. Over 13,000 DPIIT-recognized startups are driving deep-tech innovation in fields like AI, IoT, robotics, and nanotechnology. In 2023 alone, startups created nearly 4 lakh jobs, contributing to over 12.42 lakh direct jobs—cementing their role as a key driver of formal employment and economic impact.

8. Gender Inclusivity

As of December 2023, 55,816 startups had at least one-woman director. This reflects growing gender diversity and the impact of targeted government schemes for women entrepreneurs. The government has reserved 10% of the Fund of Funds for Startups (FFS) for women-led ventures and launched virtual incubation programs to support women entrepreneurs.

8.1. Women Entrepreneurship Support Across Leading States

Summary Insight: These initiatives reflect a strong commitment to inclusive entrepreneurship, ensuring that women across regions have access to funding, mentorship, incubation, and policy support. Together, they form a layered foundation for a more equitable and innovation-driven startup ecosystem in India. Table 4 shows State-Level Initiatives Supporting Women Entrepreneurs

Table 4 State-Level Initiatives Supporting Women Entrepreneurs





State	Key Initiatives for Women Entrepreneurs
Maharashtra	Offers grants under the Punyashlok Ahilya Devi Holkar Scheme (₹1–25 lakh) and operates a Women Entrepreneurship Cell across all districts.
Gujarat	Runs WEstart (i-Hub) and herSTART (GUSEC), providing incubation, funding, and national exposure to women-led ventures.
Uttar Pradesh	Integrates Mission Shakti and Nirbhaya–Ek Pahal, offering 50% additional incentives and access to subsidized loans under PM Mudra Yojana.

Karnataka	Promotes inclusivity through WEscalate and Elevate Women, supported by the AWAKE Foundation for training and mentorship in Tier II/III cities.
Delhi	Supports women entrepreneurs via Saheli Samanvay Kendras, the Startup Policy 2022, and Rozgar Budget initiatives focused on manufacturing and employment.
Telangana	Empowers women through WE Hub, offering targeted grants, mentorship, and access to inclusive innovation platforms.

Source: Ministry of Commerce and Industry, PIB Delhi, 02/02/2024

9. Initiatives of State Governments

Table 4 Startup Support: Funding, Financial Assistance & Tax Incentives

 State	 Access to Funding	 Financial Support	 Tax Incentives
Maharashtra	MITDF grants, targeted funding for women-led ventures	SGST refunds, stamp duty exemptions, subsidies for patent and quality testing	SGST reimbursements, stamp duty waivers
Karnataka	Elevate Seed Fund (up to ₹50 lakh), VC access via KITVEN	Seed funding up to ₹50 lakh, support for marketing and IP filings	SGST reimbursements, patent funding up to ₹10 lakh
Uttar Pradesh	₹1,000 crore UP Startup Fund managed by SIDBI	₹15,000 monthly sustenance grants, seed capital up to ₹5 lakh	Tax-linked benefits, SGST support, patent reimbursements
Delhi	SISFS, angel investor networks, FITT-IIT commercialization support	Grants and convertible debt up to ₹70 lakh	Section 80-IAC tax holiday, angel tax exemption under Section 56
Gujarat	Up to ₹30 lakh under Gujarat Innovators Scheme, SSIP 2.0 student funding	₹10,000 monthly stipends for innovators, marketing grants up to ₹10 lakh	SGST refunds, interest subsidies under Industrial Policy
Telangana	T-Fund, T-Spark grants, SGST reimbursements, seed funding up to ₹15 lakh	₹15 lakh seed grants, performance-based incentives	SGST refunds for startups with turnover < ₹1 crore, patent reimbursements

Source: Ministry of Commerce and Industry, PIB Delhi, 02/02/2024

Table 5 State-Level Startup Ecosystem Support: Sectoral Focus, Incubation & Mentorship

State	Sectoral Focus	Incubation Infrastructure	Mentorship Programs
Maharashtra	Fintech, biotechnology, AVGC (animation, VFX, gaming)	Co-working spaces and regulatory facilitation via MSINS	MSINS mentoring, Startup Mahakumbh, AIC Mahindra acceleration
Karnataka	Deep-tech, AI/ML, biotech, AVGC/XR, ESG	Deep-tech incubation via Derbi Foundation and C-CAMP	Elevate, BIO50 (C-CAMP), sector-specific mentoring
Uttar Pradesh	Medtech, AI, additive manufacturing, agritech, sports tech	63+ incubators, six months free incubation, AKTU & IIT BHU support	StartInUP mentor portal, RISE Jhansi, AKTU Hub & Spoke model
Delhi	SaaS, mobility, healthtech, fintech, edtech	FITT-IIT Delhi, AI & robotics-focused centers	FITT-IIT, Startup Nexus, NASSCOM deep-tech mentoring
Gujarat	Electronics, agritech, biotechnology, renewable energy, student innovation	210+ incubators, GUSEC, i-Hub, SSIP 2.0 academic integration	i-Hub's Startup Sathi, GUSEC, SSIP 2.0 academic mentoring
Telangana	Cybersecurity, AI, drones, agritech, medtech, women-led innovation	T-Hub 2.0, WE Hub, T-Works, Startup Telangana platform	T-Hub, WE Hub, T-Works, TSIC domain expert mentoring

Source: Ministry of Commerce and Industry, PIB Delhi, 02/02/2024

Conclusion

Thematic Insights from State-Level Startup Ecosystems:

This study highlights the transformative shift in India's startup ecosystem—from a metro-centric model to a diverse, decentralized, and inclusive innovation economy. By analyzing growth patterns, sectoral focus, funding mechanisms, and policy support across states and Union Territories, it reveals:

- **Geographic Expansion:** Startups now span every State and UT, covering over 80% of districts, signaling a truly pan-India entrepreneurial movement.
- **Policy Impact:** Strategic initiatives, such as state-specific funds, incubation programs, and tax incentives, are driving growth even in low-base and mid-tier regions.
- **Sectoral Alignment:** States are leveraging regional strengths to foster innovation in areas like agritech, deep-tech, medtech, fintech, and sustainability.
- **Inclusive Growth:** Support for student-led, women-led, and grassroots ventures ensures that entrepreneurship is accessible across demographics and geographies.
- **Economic Contribution:** With over 12.42 lakh direct jobs created and thousands of startups in cutting-edge fields, the ecosystem is not only growing in scale but also in national impact.
- **In essence,** the study underscores how targeted state strategies, institutional maturity, and community-driven innovation are collectively shaping India's startup ecosystem into a resilient, future-ready

References

- [1]. Jha, S. K. (2018). Entrepreneurial ecosystem in India: Taking stock and looking ahead. *IIMB Management Review*, 30(3), 179–188.
- [2]. Press Information Bureau. (2025, February 1). India's startup revolution.
- [3]. Arora, R. (2023). Indian start-ups ecosystem: Growth drivers and challenges. *International Journal of Novel Research and Development (IJNRD)*, 8(5), 45–50
- [4]. Startup India. (n.d.). Startup India Portal. Department for Promotion of Industry and Internal Trade, Government of India. Retrieved from
- [5]. Press Information Bureau. (2024, February 2). DPIIT recognises 1,17,254 startups as on 31st Dec 2023. Ministry of Commerce & Industry, Government of India.
- [6]. GEM Consortium. (2025). Global Entrepreneurship Monitor: APS and NES datasets.
- [7]. Korreck, S. (2019, September). The Indian startup ecosystem: Drivers, challenges and pillars of support (ORF Occasional Paper No. 210). Observer Research Foundation.
- [8]. Masters' Union. (2025, February 11). India's startup ecosystem: Job creation and economic impact.
- [9]. Narayan, K. (2025, January 16). Startups redefining work culture & job growth: A blueprint for India's future workforce. *The Economic Times*.
- [10]. Yadav, S. (2024). Government initiatives for start-ups in India. *International Journal of Creative Research Thoughts (IJCRT)*, 12(3), 1–10. Retrieved from
- [11]. Sehrawat, K., & Kumar, K. (2023). The Indian startup ecosystem for sustainable 'Bharat': A critical review. *SKIREC Publications, ECONSPEAK*, 13(7). Retrieved from
- [12]. Ministry of Skill Development and Entrepreneurship (MSDE). (2024). MSDE launches revamped DBIM 3.0-compliant website. <https://www.msde.gov.in>
- [13]. Optimized Electrotech. (n.d.). Innovating indigenous surveillance solutions. Retrieved July 12, 2025, from <https://optimizedelectrotech.in>
- [14]. Petpooja. (n.d.). India's leading restaurant POS platform. Retrieved July 12, 2025, from <https://www.petpooja.com>
- [15]. IndiaAI. (2024, January 3). UP to build India's first AI city in Lucknow. <https://indiaai.gov.in/news/up-to-build-india-s-first-ai-city-in-lucknow>
- [16]. Invest UP. (n.d.). Startup Sector | Official Website of Invest UP, Government of Uttar Pradesh. Retrieved July 12, 2025, from <https://invest.up.gov.in/startup-sector/>
- [17]. Startup India. (2020, July 26). Uttar Pradesh State Report. https://www.startupindia.gov.in/srf/portal/reports/Uttar_Pradesh_State_Report_26072020.pdf
- [18]. StartupTN. (n.d.). StartupTN Catalyst. Retrieved July 12, 2025, from <https://catalyst.startuptn.in/>
- [19]. Times of India. (2024, February 21). More regional startup hubs planned in TN's tier 2 and 3 cities. <https://timesofindia.indiatimes.com/city/chennai/more-regional-startup-hubs-planned-in-tns-tier-2-and-3-cities/articleshow/108122970.cms>
- [20]. Startup Genome. (2024). Tamil Nadu Ecosystem Report. <https://startupgenome.com/ecosystems/tamil-nadu>
- [21]. KPMG India & TiE Mumbai. (2019). Maharashtra and the exciting growth of its startup ecosystem.
- [22]. Startup India. (2022). States' Startup Ranking 2021: Maharashtra State Report. Department for Promotion of Industry and Internal Trade, Government of India. https://www.startupindia.gov.in/srf/portal/reports1/Maharashtra_State_Report_10_05_2022.pdf
- [23]. Startup Genome. (2025). Bengaluru–Karnataka's impressive leap: How India's tech capital became a global innovation powerhouse.
- [24]. F6S. (2025, March 1). 17 top deep tech companies in Karnataka.
- [25]. Sartup India. (2020). Delhi UT Report: States' Startup Ranking 2020. Department for Promotion of Industry and Internal Trade, Government of India.
- [26]. Best Startup India. (2022). 96 Delhi based FinTech companies – the most innovative FinTech companies.

- [27]. Built In Delhi. (2025, February 26). 10 top edtech companies in Delhi.
- [28]. F6S. (2025, July 1). 9 top sustainability companies in Delhi.
- [29]. Startup India. (2022). States' Startup Ranking 2021: Telangana State Report. Department for Promotion of Industry and Internal Trade, Government of India.
- [30]. Telangana Today. (2025, July 11). Over Rs.50,000 crore investments secured in just 18 months in life sciences sector, says Sridhar Babu
- [31]. Startup Genome. (2025). Telangana Ecosystem Report.
- [32]. Hybiz TV. (2024). T-Hub 9-Year Journey: Telangana's Innovation Vision.
- [33]. WE Hub. (n.d.). Women Entrepreneurs Hub by Government of Telangana.
- [34]. RICH. (2024). Compendium of Agri-Tech Startups.
- [35]. Startup India. (2022). States' Startup Ranking 2021: Northeast Region Report. Department for Promotion of Industry and Internal Trade, Government of India.
- [36]. Ministry of Development of North Eastern Region. (2023). Annual Report 2022–23. Government of India. <https://mdoner.gov.in/contentreport/annual-report-2022-23>
- [37]. Press Information Bureau. (2023, August 14). Startup India initiative boosts entrepreneurship in Northeast India.
- [38]. Startup India. (2022). Jammu & Kashmir UT Report: States' Startup Ranking 2021. Department for Promotion of Industry and Internal Trade, Government of India.
- [39]. Startup India. (2022). States' Startup Ranking 2021: Bihar State Report. Department for Promotion of Industry and Internal Trade, Government of India.
- [40]. Startup India. (2022). States' Startup Ranking 2021: Punjab State Report. Department for Promotion of Industry and Internal Trade, Government of India.
- [41]. Startup India. (2022). States' Startup Ranking 2021: Rajasthan State Report. Department for Promotion of Industry and Internal Trade, Government of India.