

# Small Enterprises, Big Impact Trends, Challenges, and the Future of Indian SMEs

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**Abstract**—Small and Medium Enterprises (SMEs), officially classified as Micro, Small, and Medium Enterprises (MSMEs) in India, form the backbone of the national economy, contributing significantly to Gross Value Added (GVA), exports, and employment generation. This research paper provides a comprehensive, data-backed examination of SMEs' multifaceted roles in fostering equitable, resilient, and innovative economic development. Drawing on official data, academic literature, and policy analyses from FY 2020–21 to FY 2024–25, the study investigates SMEs' economic contributions, inclusive and regional development impact, innovation and technology adoption, government support mechanisms, and the sector's key challenges. The discussion integrates a five-year trend analysis of flagship schemes such as Udyam Registration, CGTMSE, SIDBI interventions, PMEGP, ZED certification, and KVIC's grassroots initiatives. Findings highlight SMEs' strategic importance in achieving India's **Viksit Bharat @2047** vision, while underlining the need for sustained policy stability, digital integration, financial inclusion, and ecosystem collaboration. The paper concludes with targeted recommendations to bridge the gap between potential and realized capacity, positioning SMEs as forward-driving agents of India's economic transformation.

**Keywords:** SMEs, MSME Policy, Inclusive Development, Industry 4.0, Viksit Bharat, Innovation, Regional Growth.

## 1. INTRODUCTION

Small and Medium Enterprises (SMEs), classified as Micro, Small, and Medium Enterprises (MSMEs) in India, play a crucial role in the nation's industrial landscape. They are a major source of employment, contributing about 30% to India's GDP and employing over 110 million people. With more than 63 million MSME units, they account for approximately 45% of the country's exports (SIDBI, 2025). The definition of SMEs has evolved, with the MSME Development Act, 2006 focusing initially on investment alone, and a revision in July 2020 incorporating annual turnover. The updated thresholds are:

- Micro: Investment  $\leq$  ₹1 crore and turnover  $\leq$  ₹5 crore
- Small: Investment  $\leq$  ₹10 crore and turnover  $\leq$  ₹50 crore
- Medium: Investment  $\leq$  ₹50 crore and turnover  $\leq$  ₹250 crore

SMEs contributed 30.1% to Gross Value Added (GVA) in FY 2022–23, enhancing their significance in the economy. They supply goods and services to large corporations and integrate into global value chains. Between October 2023 and September 2024, SMEs added 11 million new jobs, mainly in semi-urban and rural areas, addressing unemployment challenges (Reuters, 2024). As of May 2024, MSMEs accounted for

45.79% of India's exports, especially in textiles, handicrafts, and IT (PIB, 2024). They promote regional development by generating employment in rural areas and supporting initiatives like the Khadi and Village Industries Commission (KVIC) and Stand-Up India for marginalized communities. SMEs foster innovation and have embraced Industry 4.0 technologies, facilitated by initiatives like Digital India and the Open Network for Digital Commerce (ONDC) (Wadhvani Foundation, 2024).

## 2. Purpose of the Study

Understanding the role of SMEs in India's development is vital for policymakers and industry stakeholders. This research will examine:

1. The contributions of SMEs to GDP, employment, and exports.
2. Government support and financial inclusion initiatives.
3. Challenges like access to finance and global competition.
4. Opportunities to enhance SME competitiveness.

The study will analyze how SMEs can be empowered to help India become a developed economy by 2047.

## 3. Review of literature

Research on Small and Medium Scale Enterprises (SMEs) from 2020 to 2025 highlights critical areas such as digital transformation and sustainability. Key studies identify nine critical success factors (CSFs) to help SMEs prioritize strategies. There are significant opportunities for SMEs in developing countries to adopt sustainability and green innovation, but further research is needed on socioeconomic disparities. Future studies should focus on longitudinal analyses, sector-specific insights, the impact of socioeconomic factors, and effective government policies, particularly in underrepresented regions regarding sustainability and digitalization.

1. Kaur (2024) highlighted that India's legal and institutional framework for MSMEs continues to evolve in the post-liberalization and post-pandemic era to safeguard and empower enterprises.
2. Singh (2022) emphasized MSMEs' vital role in foreign exchange, noting their contribution of nearly half of India's exports.
3. Similarly, Shaikh and Mandviwala (2023) observed that supportive measures such as the MSME Act 2006, targeted training, and tax incentives are crucial for sectoral sustainability.
4. Negi and Kumar (2024) further underscored the role of MSMEs in industrializing rural areas and ensuring balanced regional development and equitable income distribution.
5. Extending the scope globally, Thaha et al. (2025) conducted a bibliometric analysis and identified "digital economy," "e-commerce," and "digital transformation" as core MSME research themes, while societal aspects remain underexplored.
6. Martinravi (2025) explored the distribution of MSMEs across manufacturing, trade, and services sectors and underscored their multifaceted role in the Indian economy.
7. A study (2025) examined how the convergence of MSMEs with agile supply chains—through technology-driven logistics, smart warehousing, and fintech-enabled trade finance—can accelerate economic growth, boost employment, and support India's vision of a \$10 trillion economy.

8. Kakkar et al. (2021) highlighted the transformative impact of digital payment systems on MSMEs, emphasizing enhanced convenience, security, and business expansion potential—particularly in rural and peri-urban contexts.
9. A recent systematic literature review by Panduwinata et al. (2025) assessed digitalization's effects on MSMEs using PRISMA methodology and offered strategic insights on facilitating sustainable digital transformation with policy and infrastructure interventions.
10. Recent research (2025) investigated the role of stakeholder involvement in the digital transformation of Indian food-sector MSMEs, using structural equation modeling to illustrate how organizational, financial, technological, and political practices shape digital adoption outcomes.

#### 4. Methodology

This study adopts a **systematic literature review (SLR)** approach to examine the trends, challenges, and prospects of Indian SMEs. Relevant publications from 2020–2025 were identified using databases such as *Google Scholar*, *ResearchGate*, *Springer*, and *SSRN* with keywords including “MSMEs,” “digital transformation,” and “Indian economy.” Out of 100 records screened, 85 remained after removing duplicates, 30 were assessed for eligibility, and 10 met the inclusion criteria.

#### 5. The contributions of SMEs to GDP, employment, and exports

##### 5.1 Economic Contributions of SMEs in India

Small and Medium Enterprises (SMEs), formally recognized under the Micro, Small, and Medium Enterprises (MSME) framework, are widely acknowledged as the “**engine of growth**” in the Indian economy. Their importance extends beyond statistics, shaping industrial diversity, employment generation, export competitiveness, and inclusive development. According to the Ministry of MSME and SIDBI's 2025 Sector Report, India hosts over **63 million MSMEs**, contributing about **30.1% to Gross Value Added (GVA)**, employing over **120 million people**, and accounting for nearly **46% of total exports** (SIDBI, 2025; PIB, 2024).

##### 5.2 Contribution to GDP and Output

In FY 2022–23, MSMEs generated ₹36 trillion in gross output, representing 30.1% of India's GVA (PIB, 2024). Their contributions span manufacturing (textiles, auto components, leather), services (IT, healthcare, logistics), and trade, ensuring diversification that cushions against sector-specific shocks.

##### 5.3 Employment Generation

As the **second-largest employer after agriculture**, SMEs provided jobs to 120.6 million people in 2024, an increase of 11 million from the previous year (Reuters, 2024). Notably, 65% of employment is concentrated in **rural and semi-urban areas**, reducing migration pressures.

##### 5.4 Export Competitiveness

MSMEs drive India's exports, contributing 45.79% by 2024 (PIB, 2024). Textile hubs like Tiruppur, leather clusters in Kanpur and Vellore, and pharmaceutical SMEs in Gujarat exemplify their global integration.

##### 5.5 Regional Development and Resilience

Over 51% of MSMEs operate in rural India, supporting livelihoods through clusters like Morbi ceramics and Ludhiana auto components. Their adaptability during COVID-19—such as pivots to PPE, sanitizers, and e-learning—underscored their resilience and innovative capacity.

## 5.6 Innovation, Technology, and Resilience in Indian SMEs

Innovation and technology adoption have become survival imperatives for Indian SMEs. Post-COVID disruptions, global competition, and shifting consumer expectations have accelerated digital transformation, Industry 4.0 integration, and sustainable practices, reshaping how small firms compete and build resilience.

### 1. Digitalization and Industry 4.0

Industry 4.0 technologies — including IoT, AI, and cloud-based automation — are gradually entering the SME sector. Even basic sensor integration can cut wastage by 15% and energy use by up to 10% (arXiv, 2023). In Tiruppur, IoT-enabled dyeing units save water and chemicals, while predictive maintenance tools help engineering SMEs in Pune and Rajkot reduce downtime. Adoption remains uneven, however, with resource and skill gaps limiting uptake among domestic-facing firms.

### 2. Circular Economy and Sustainability

Sustainability is now a market requirement. SMEs in textiles are adopting circular practices such as recycling waste fabric, upcycling in Panipat, and closed loop dyeing in Tamil Nadu. These reduce costs by 20–30% and comply with EU import standards, positioning Indian SMEs in the global green supply chain (arXiv, 2023).

3. Digital Platforms and Market Access: Platforms like eSamudaay and ONDC are democratising digital commerce for small producers and women entrepreneurs. By lowering onboarding costs by 60% and enabling nationwide reach (Financial Times, 2024), these platforms allow rural and semi-urban SMEs to bypass intermediaries, improve margins, and build brands.

### 4. Credit flow and Policy support

Innovation depends on finance. RBI's mid-2024 rate cuts, combined with new SME-focused credit lines, boosted technology upgrades. By Q4 2024, SIDBI reported a 14% increase in loans for plant and machinery, showing how policy-driven liquidity directly supports modernisation.

5. Resilience strategies: COVID-19 catalysed strategies that remain relevant: supply-chain diversification, omnichannel sales, and collaborative clusters. In Kanpur, leather SMEs jointly invested in automated stitching facilities, enabling bulk exports while retaining individual identities — an example of shared infrastructure for competitiveness.

### 6. The road ahead

SME competitiveness will hinge on:

1. Affordable access to advanced technologies.
2. Targeted skilling and re-skilling in digital and green domains.
3. Sustained credit and subsidy support for innovation.

Innovation, technology adoption, and resilience are now interdependent pillars of SME growth, while export-oriented clusters advance quickly, micro and rural firms risk exclusion without targeted support.

Closing these gaps will ensure that India's entire SME base — not just a select few — is ready for a digital, sustainable, and shock-resilient economy.

**Table No 1: SMEs Economic Impact (2023–24)**

Parameter	Value / Share	Source
GDP / GVA Contribution	30.1%	PIB (2024)
Employment	120.6 million	Reuters (2024)
Export Share	45.79%	PIB (2024)
Number of MSMEs	63 million+	SIDBI (2025)
Rural Share of MSMEs	51%	SIDBI (2025)
Annual Output Value	₹36 trillion+	Ministry of MSME (2024)

SMEs are key enablers of India's economic growth. They serve as:

- Economic stabilizers through diversity.
- Employment engines for rural and urban livelihoods.
- Export accelerators in global trade.
- Innovation hubs adapting to market changes.

## 6. Government support and financial inclusion initiatives.

### 6.1 Government Support Mechanisms for SMEs in India (2019–2024)

Over the past five years, government support for MSMEs has expanded through credit facilitation, digital transformation, cluster development, and export promotion. The policy trajectory shows a steady rise in institutional finance, coupled with structural reforms to enhance competitiveness. For instance, allocations under the Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) increased from Rs. 45,000 crores in FY 2019–20 to Rs. 75,000 crores in FY 2023–24, reflecting a strong policy push toward collateral-free lending (CGTMSE, 2025).

**Udyam Registration Portal:** Launched in 2020, Udyam provides free, paperless MSME registration. By March 2025, over 4.9 crore units were registered, 53% in rural India (MSME Ministry, 2025). This has streamlined policy targeting and broadened access to subsidies and loans.

**CGTMSE:** The scheme expanded its credit guarantee coverage to Rs.5 crore in 2024–25, integrating AI-based risk tools. Between April–December 2024, Rs. 68,500 crore was sanctioned to 13.2 lakh units, significantly reducing dependence on informal lending. **SIDBI Programmes:** SIDBI strengthened SME financing through the MSME Credit Card (Rs. 25 lakhs working capital), cluster financing, and green credit lines. In 2024 alone, disbursements reached Rs. 1.35 lakh crore, with 18% directed to sustainable projects (SIDBI, 2025).

**PMEGP:** Through this credit-linked subsidy programme, Rs. 80,000 new projects were supported in 2024–25, generating 6.4 lakh jobs with an outlay of Rs. 3,200 crore (KVIC, 2025).



**Market Access & Export Promotion:** Schemes such as ZED Certification (28,500 units certified in 2024–25) and the International Cooperation Scheme (420 plus delegations supported) enhanced SME competitiveness in global value chains.

**Digital & Cluster Development:** The Digital MSME Scheme onboarded 2.1 lakh SMEs to cloud platforms in 2024–25, while SFURTI supported 75 new traditional industry clusters, benefiting 38,000 artisans.

**State-Level Initiatives:** States complemented national efforts with targeted policies: Telangana’s MSME industrial parks (1,500 acres), Tamil Nadu’s SME Digital Marketplace, and Maharashtra’s Green MSME subsidies.

The Government of India has progressively expanded its support architecture for SMEs, targeting credit access, market integration, technology adoption, and inclusivity. Between FY 2020–21 and FY 2024–25, flagship schemes and institutional interventions have not only scaled in reach but also diversified in function. The major initiatives are presented in Table No. 2, and a five-year trend analysis is made to capture their growth trajectories and impact. This table integrates year-wise performance data from multiple schemes to illustrate scale, growth, and impact.

**Table No.2: MSME Support Mechanisms (2020-21 to 2024-25)**

Scheme / Indicator	FY 2020–21	FY 2021–22	FY 2022–23	FY 2023–24	FY 2024–25*
Udyam Registrations (Annual)	28.38 lakh	51.36 lakh	85.65 lakh	249.13 lakh	63.41 lakh (till Jul 2024)
Cumulative Udyam Registrations	—	—	—	4.78 crore	6.2 crore (incl. UAP)
CGTMSE Guarantees (No.)	—	—	11.66 lakh	17.24 lakh	Est. >19 lakh
CGTMSE Guarantees (₹ crore)	—	—	₹1,04,781	₹2,02,807	Est. >₹2,44,000
SIDBI Microfinance (₹ crore)	—	—	—	₹33,443	Ongoing
PMEGP Units Assisted	—	—	—	~80,000	Ongoing
KVIC Sales (₹ crore)	₹31,154 (2013–14 baseline)	—	—	₹1,55,673	₹1,70,000 (proj.)
KVIC Rural Jobs (000)	—	—	—	1,017	Ongoing

\*FY 2024–25 figures are partial or projected based on mid-year data.

Analysis of Table No.2 (2020–2025)

- **Formalization:** Udyam registrations jumped to 6.2 crore by mid-2024, with 53% rural coverage.

- **Credit Access:** **Credit Guarantee Fund Trust for Micro & Small Enterprises** CGTMSE guarantees more than doubled from Rs1.04 lakh cr (2022–23) to Rs. 2.44 lakh cr (2024–25 est.), reaching 19 lakh units.
- **Finance & Jobs:** SIDBI disbursed ₹33,443 cr (2023–24), while PMEGP created 80,000 units and 6.4 lakh jobs annually.
- **Rural Growth:** KVIC sales rose five-fold since 2013–14 to a projected Rs.1.7 lakh cr (2024–25), generating 1plus million rural jobs.

Thus, the Policy support has focused on formalisation, credit deepening, rural development, and green/digital growth, making MSMEs central to India's inclusive and competitive economy.

**Table No.3 Government Schemes Impact Analysis – 2024–25 Snapshot**

Scheme / Initiative	2024–25 Achievements	Key Impact
Udyam Registration	4.9 crore MSMEs registered	Streamlined access to benefits & verified data pool
CGTMSE	₹68,500 crore loans, 13.2 lakh units	Boosted credit flow, reduced collateral issues
SIDBI Credit Lines	₹1.35 lakh crore disbursed	Green financing & cluster growth
PMEGP	80,000 units, 6.4 lakh jobs	Rural entrepreneurship & self-employment
ZED Certification	28,500 SMEs certified	Improved export readiness
Digital MSME Scheme	2.1 lakh SMEs digitized	Cost efficiency & market expansion
SFURTI	Seventy-five clusters, 38,000 artisans	Strengthened traditional industry clusters

### Policy Shift in 2024–25

The 2024–25 framework moves beyond subsidies toward **targeted enablers**. Larger **CGTMSE limits** ease credit, **Zero Defect Zero Effect (ZED) and export support** boost global competitiveness, **digital schemes and ONDC** expand markets, and **green financing** aligns SMEs with sustainability goals. These measures ensure SMEs are not just surviving but **thriving as partners in India's 2047 development vision**.

### Inclusive and Regional Development through MSMEs

India's Micro, Small, and Medium Enterprises (MSMEs) are powerful instruments of inclusive growth, advancing rural upliftment, poverty reduction, regional balance, and women's entrepreneurship. Over 50% of MSMEs operate in rural areas, linking agriculture with non-farm activities like processing, logistics, and retail. This reduces migration pressures and provides resilience to village incomes (SIDBI, 2025). The Khadi and Village Industries Commission (KVIC) exemplifies this impact: in FY 2023–24 it created over 1

million rural jobs, while khadi sales surged nearly fivefold in a decade, channeling earnings directly to artisan households (PIB, 2024).

MSMEs also drive balanced regional growth. Their modest capital requirements allow industries to emerge in less-served areas—from handloom clusters in the Northeast to auto ancillaries in Tier-2 cities. Initiatives like cluster finance and MSME Pulse are expanding formal credit access in smaller towns, diffusing industrialization and improving local infrastructure (NITI Aayog; TransUnion CIBIL, 2024).

Women-led MSMEs are a critical lever for innovation and equity. The *She Innovates* study (arXiv, 2023) finds female-owned firms more likely to innovate, particularly where finance, mentorship, and safety conditions are strong. Stand-Up India reinforces this by mandating loans for women and SC/ST entrepreneurs, while platforms like ONDC extend market reach for small, women-led brands.

Ultimately, MSMEs translate macro growth into local welfare by anchoring jobs in rural and semi-urban areas, empowering excluded groups, and valorising cultural industries. They are central to India’s vision of equitable, regionally balanced development (SIDBI; PIB; NITI Aayog).

## **6. Challenges and Constraints Faced by Indian SMEs**

Despite being a vital growth engine, Indian SMEs (MSMEs) face persistent structural and operational barriers that hinder their competitiveness, scalability, and sustainability. Unless systematically addressed, these challenges risk diluting the impact of supportive government policies.

### **1. Limited Access to Finance**

Formal credit penetration remains low. As per SIDBI–TransUnion MSME Pulse (2025), only 18–20% of MSMEs access institutional finance, with the rest dependent on internal funds or informal lenders. Even with schemes like CGTMSE, banks often demand collateral, while NBFC interest rates are 3–5 percentage points higher than for corporates. This restricts investment in technology, marketing, and R&D.

### **2. Technology Gaps and Low Productivity**

A 2024 Federation of Indian MSMEs survey revealed that 57% of units still use machinery over 10 years old, limiting efficiency and quality. High costs, skill shortages, and low awareness slow adoption of Industry 4.0 tools, leaving SMEs vulnerable to competition from lower-cost imports.

### **3. Infrastructure Deficits**

Unreliable electricity, inadequate warehousing, and weak last-mile logistics constrain productivity. The Ludhiana MSME Association (2024) cited tooling and infrastructure shortages as key reasons for losing market share to imports.

### **4. Regulatory and Compliance Burden**

SMEs face overlapping requirements across taxation, labor, and environmental laws. Frequent policy changes create uncertainty, with the World Bank noting persistent challenges in “paying taxes” and “construction permits” for small firms.

### **5. Skilled Manpower Shortages**

The NSDC 2024 report shows that 40% of SMEs struggle to recruit skilled labor. High attrition, coupled with mismatches between training and industry needs, further weakens operational capacity.



## 6. Market Access and Branding Barriers

Many SMEs lack digital marketing capabilities, branding expertise, and packaging quality. Despite ONDC's rise, onboarding gaps persist due to low digital literacy and language barriers.

## 7. Export and Global Compliance Issues

SMEs struggle with international certifications, sustainability norms (e.g., EU Green Deal), and high logistics costs (13–14% of product value, compared to 8–9% globally).

## 8. Informality and Fragmentation

Over 85% of MSMEs remain unregistered under Udyam, limiting access to finance and formal supply chains.

## 9. Vulnerability to External Shocks

SMEs remain highly exposed to supply chain disruptions, price volatility, and global crises. A FISME 2024 survey reported that 62% of SMEs faced raw material price shocks in the past year, eroding margins.

**Table No. 3 – Significant Challenges and impact on SMEs in India (2024–25)**

Challenge	Current Status (2024–25)	Direct Impact on SMEs
Access to Finance	Only 20% SMEs have formal credit penetration	Limits expansion & tech adoption
Technology Gaps	Fifty-seven percent using >10-year-old machinery	Low productivity & competitiveness
Infrastructure	Poor tooling/coordination in clusters	High costs & delays
Regulatory Burden	Complex, overlapping compliance	Higher admin costs
Market Access	Weak branding & export readiness	Limited sales channels
Skilled Manpower	Forty percent report hiring difficulties	Quality & delivery issues
Export Barriers	High compliance/organization costs	Lost global market share
Informality	Eighty-five percent unregistered	No access to schemes, finance
External Shocks	High vulnerability to crises	Disrupted operations

If India aims to make SMEs the backbone of **Viksit Bharat@2047**, these constraints must be systematically reduced. Bridging finance gaps, enabling affordable tech adoption, improving infrastructure, and aligning skilling programs to industry needs can multiply SME contributions to GDP, exports, and job creation.

## 7. Future Opportunities and Recommendations:

The next decade offers unprecedented growth potential for India's SMEs, driven by capital market reforms, emerging clean-energy ecosystems, sustainability imperatives, and the national *Viksit Bharat @2047* agenda. Aligning these opportunities with targeted policy and capacity building can unlock transformative outcomes.

**1. Expanding Capital Access through SME Exchanges:** Platforms such as BSE SME and NSE Emerge provide equity-based financing routes for smaller firms, reducing dependence on costly debt. Listing also enforces governance standards, boosting credibility with lenders and customers.

Recommendations:

- Promote investor awareness campaigns to attract retail and institutional participation.

- Offer listing support subsidies for promising SMEs.
- Encourage market-making mechanisms to maintain liquidity post-listing.

**2. Leveraging the Hydrogen Economy:** India's clean-energy transition opens supply chain opportunities for SMEs in precision components, sensors, storage systems, and valves. Engineering hubs such as Coimbatore, Rajkot, and Pune are well-placed to evolve into hydrogen clusters.

Recommendations:

- Facilitate technology transfer partnerships between IITs/CSIR labs and SMEs.
- Extend PLI-style incentives to offset initial investment costs.
- Introduce hydrogen-skilling programs in ITIs and engineering colleges.

**3. Driving Innovation, Sustainability, and Inclusivity:** SMEs can achieve global competitiveness by embedding innovation and ESG practices into operations. Circular economy models in textiles and packaging already demonstrate 20–30% cost savings while meeting global compliance norms.

Recommendations:

- Launch innovation voucher schemes for R&D and design prototyping.
- Expand green credit lines for eco-machinery, renewable adoption, and waste reduction.
- Provide digital onboarding support for rural and women entrepreneurs through platforms like ONDC and eSamudaay.

**4. Capacity Building for Viksit Bharat @** Long-term SME readiness requires systemic upgrades in skills infrastructure, and global linkages.

Recommendations:

- Modernize clusters with shared testing, logistics, and design facilities.
- Align skilling initiatives (PMKVY, Skill India) to high-demand domains like AI-enabled manufacturing and green tech
- Ensure policy stability to encourage multi-year investment decisions.
- Strengthen international SME linkages for technology exchange and overseas market access.

**Conclusion:** SMEs are positioned to be the backbone of India's developed-economy aspiration. By scaling equity access, integrating into emerging clean-energy supply chains, embedding sustainability, and building future-ready capabilities, Indian SMEs can evolve from survival-driven units into globally competitive enterprises that anchor inclusive growth under *Viksit Bharat @2047*.

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