

EVALUATION OF ACCESS TO FINANCE, TRAINING, AND GOVERNMENT POLICIES ON ENTREPRENEURIAL DEVELOPMENT AND SMALL BUSINESS SUSTAINABILITY

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DOI: <https://doi.org/10.5281/zenodo.20037191>

**Keywords**

Access to Finance, Entrepreneurial Training, Government Policies, SME Sustainability, Small Business Development, Financial Literacy, Fintech, Digital Transformation, Resource-Based View, Triple Bottom Line

**Article History**

Received: 11 March 2026

Accepted: 21 April 2026

Published: 05 May 2026

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**Abstract**

Small and medium-sized enterprises (SMEs) serve as critical drivers of economic growth, employment, and innovation, yet they face persistent challenges in achieving long-term sustainability. This study evaluates the combined impact of three key pillars access to finance, entrepreneurial training, and government policies on entrepreneurial development and small business sustainability, with particular attention to emerging economies. Drawing on theoretical frameworks such as the Resource-Based View (RBV), Human Capital Theory, Pecking Order Theory, and the Triple Bottom Line (TBL) approach, the paper examines institutional barriers including information asymmetry, collateral deficits, and the “missing middle” financing gap. It analyzes innovative financing mechanisms such as Fintech credit scoring, supply chain finance, equity crowdfunding, and sustainability-linked loans. The role of training is explored through psychological resilience programs, action-oriented training, and financial literacy initiatives, which enhance entrepreneurial capacity and risk management. Government policies are assessed with emphasis on tax incentives, regulatory simplification, and enabling ecosystems, using Pakistan as a contextual case study. The analysis highlights the synergistic effects of these pillars, amplified by digital transformation and technologies like AI, blockchain, and e-commerce, which improve resilience and support green transitions. Findings underscore that integrated support systems combining accessible finance, targeted training, and coherent policies are essential for reducing SME failure rates and promoting sustainable development. The study offers practical recommendations for policymakers and practitioners to foster inclusive entrepreneurial ecosystems.

**Introduction**

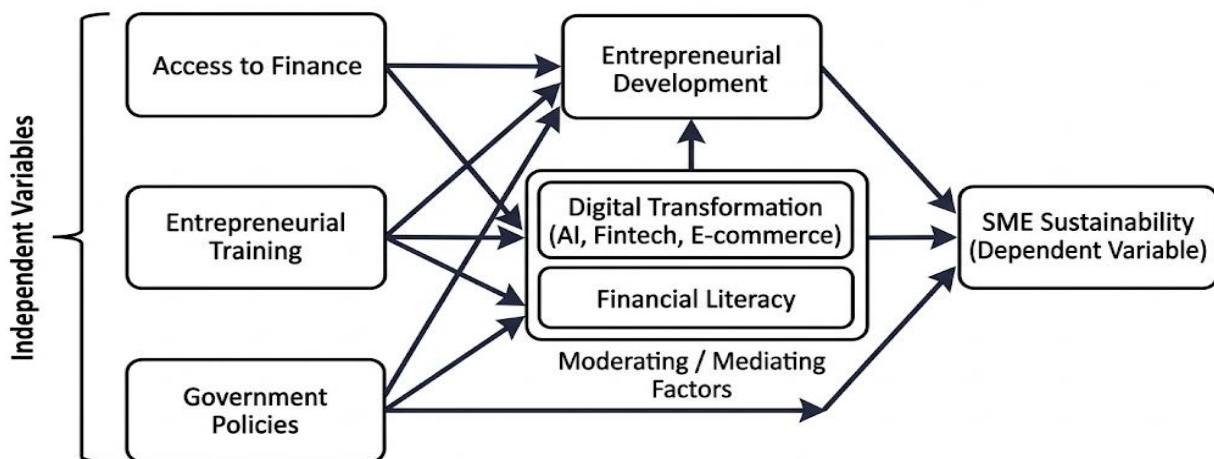
The global economic architecture increasingly relies upon the structural integrity and adaptive capacity of small and medium-sized enterprises (SMEs). These entities are recognized as the primary catalysts for inclusive growth, social stability, and technological innovation (Stacey et al., 2021). However, the transition from simple business survival to long-term sustainability defined as the harmonious integration of economic, social, and environmental performance remains a complex challenge for the majority of entrepreneurs (Chege & Wang, 2020). The efficacy of entrepreneurial development is contingent upon a tripartite foundation: the democratization of access to financial capital, the systematic acquisition of specialized human capital through training, and the implementation of robust, coherent government policies (Singla & Mallik, 2021). While each pillar is significant in isolation, it is their intersection and synergistic interaction that ultimately dictates the resilience

and longevity of small businesses in volatile market environments (Kansheba & Wald, 2020).

**1. Introduction**

Small business development is an essential driver of economic diversification, particularly in emerging economies where they provide up to 78% of non-agricultural employment (Park et al., 2020). Despite their importance, SMEs face a persistently high failure rate, often exceeding 30% within the first three years of operation. This evaluation explores how the strategic alignment of capital, skills, and regulatory support can mitigate these risks and foster sustainable growth (Kumar et al., 2022). Figure 1 illustrates the conceptual framework guiding this study, highlighting the interrelationship between access to finance, entrepreneurial training, and government policies in shaping SME sustainability. The model further integrates digital transformation as a cross-cutting enabler influencing all three pillars.

**Figure 1: Conceptual Framework of SME Sustainability**



**2. Theoretical Frameworks and the Evolution of Business Sustainability**

The evaluation of entrepreneurial development must be anchored in established organizational and economic theories that explain firm behavior and resource management (Jatmiko et al., 2021). The Resource-Based View (RBV) serves as a primary lens, suggesting that a firm’s competitive

advantage resides in its possession of resources that are valuable, rare, inimitable, and non-substitutable (VRIN) (Farinha et al., 2020). Within the SME sector, intangible assets such as financial literacy, cognitive flexibility, and entrepreneurial resilience are increasingly viewed as the definitive VRIN resources that allow founders to navigate crises that would otherwise

lead to insolvency (Beckmann et al., 2023). This is complemented by Human Capital Theory, which posits that investments in education and vocational training enhance the productivity and decision-making capabilities of entrepreneurs, thereby reducing the likelihood of default and increasing the probability of successful innovation (Chen et al., 2021).

The capital structure of these firms is frequently explained by the Pecking Order Theory (POT), which suggests that small business leaders prioritize internal financing retained earnings and personal savings over external debt to mitigate the

risks of losing control and to avoid the high costs associated with information asymmetry (Burchi et al., 2021). However, the limitations of internal funding often lead to the "Missing Middle" phenomenon, where micro-enterprises struggle to scale into medium or large enterprises because they lack the collateral for traditional bank loans yet are too large for microfinance (Barua, 2020). This gap necessitates a transition toward a Triple Bottom Line (TBL) framework, where sustainability is not merely a moral imperative but a strategic necessity encompassing People, Planet, and Profit (Dvouletý et al., 2021).

**Table 1: Theoretical Frameworks Applied to SME Sustainability**

Theoretical Construct	Application in SME Research	Impact on Sustainability
Resource-Based View (RBV)	Intangible asset identification	Enhances long-term competitive positioning via resilience.
Human Capital Theory	Training and education ROI	Improves risk assessment and operational efficiency.
Pecking Order Theory (POT)	Financing preference hierarchies	Explains the persistent credit gap in emerging markets.
Triple Bottom Line (TBL)	Holistic performance metrics	Balances social equity with economic viability.
Entrepreneurial Cognition	Decision-making mechanisms	Links psychological traits to strategic resource allocation.

### 3. The Financial Pillar: Overcoming Barriers to Capital Access

Access to finance is consistently identified as the most significant constraint to the growth and productivity of SMEs globally, particularly in emerging and developing economies where the financing gap often reaches nearly 20% of GDP. This constraint is not merely a lack of liquid capital but is the result of deep-seated institutional failures and market distortions (Etim & Daramola, 2020).

#### Institutional Constraints and Market Failures

The primary barrier to SME financing is information asymmetry, which manifests in two distinct principal-agent problems: adverse selection and moral hazard (Mashapure et al., 2022). Adverse selection occurs when lenders cannot accurately distinguish between high-quality

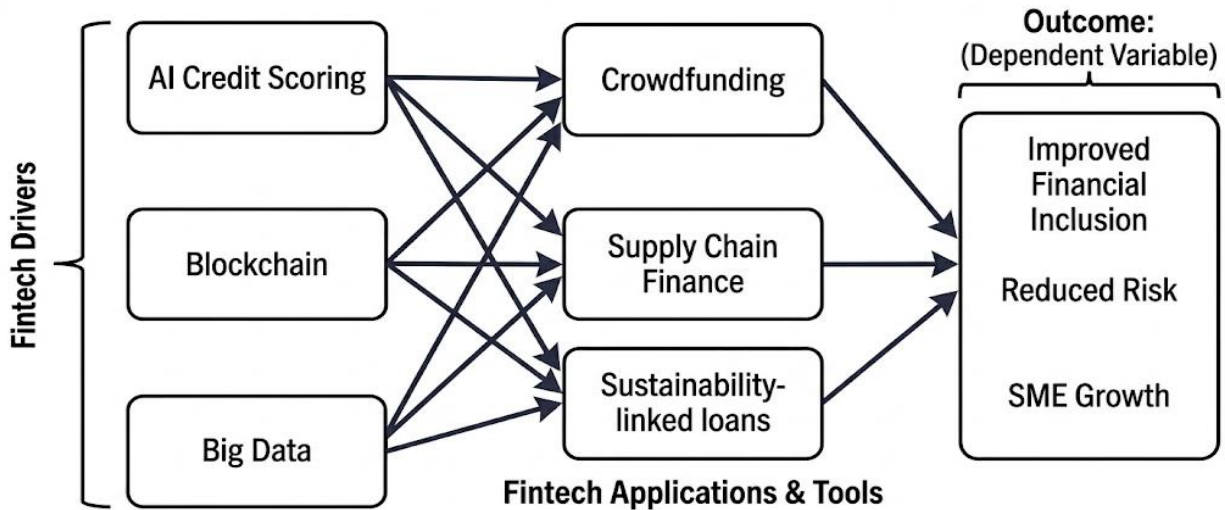
and low-quality borrowers due to a lack of formal credit histories or reliable financial documentation. Moral hazard arises from the lender's inability to monitor the borrower's activities ex-post, leading to concerns that funds may be diverted to riskier ventures than initially agreed upon (Bradley et al., 2021). These issues are compounded by high transaction costs; the fixed costs of processing, monitoring, and enforcing small loans are often as high as those for large corporate loans, driving a wedge between bank funding costs and the interest rates offered to SMEs (Yasin et al., 2020).

Furthermore, weak legal institutions in many developing nations inhibit the use of movable assets as collateral. In the absence of strong contract enforcement mechanisms, banks rely heavily on traditional land and building titles, which many entrepreneurs do not possess. This

"collateral deficit" remains a pervasive hurdle even for profitable firms with strong cash flows (Cao & Shi, 2021). Figure 2 demonstrates how emerging financial technologies are reshaping SME

financing ecosystems. These innovations enable more inclusive, efficient, and data-driven lending mechanisms.

**Figure 2: Fintech and Innovative Financing Ecosystem**



**The Emergence of Sustainable Finance and Fintech**

To bridge these gaps, a new landscape of sustainable finance has emerged, integrating environmental, social, and governance (ESG) considerations into investment decisions (Guerrero et al., 2021). Socially responsible entrepreneurs are increasingly leveraging green financing, social impact investing, and sustainability-linked loans, where interest rates are tied to the achievement of predefined environmental or social outcomes. Microfinance institutions continue to play a vital role for marginalized groups by providing microloans and

support networks that bypass traditional banking requirements (Rosário et al., 2022).

The rise of Financial Technology (Fintech) has been particularly transformative. Fintech solutions utilize artificial intelligence (AI), machine learning, and big data to analyze alternative data sources such as utility payments, social media behavior, and supply chain records to generate more accurate credit scores (Setyaningsih et al., 2024). Technologies like blockchain enhance transparency and trust in transaction histories, while equity crowdfunding platforms democratize funding by allowing entrepreneurs to raise capital from a broad base of small investors who share their values (Harahap et al., 2023).

**Table 2: Innovative Financing Mechanisms and Their Strategic Advantages**

Financing Mechanism	Key Features	Advantage for SMEs
Fintech Credit Scoring	AI and alternative data analysis	Bypasses traditional collateral requirements.
Supply Chain Finance (SCF)	Leveraging core enterprise credit	Alleviates liquidity constraints via receivables.
Equity Crowdfunding	Collective small investments	Builds a community of brand advocates.
Sustainability-Linked Loans	Outcome-driven interest rates	Incentivizes green transitions.

Public-Private Partnerships	Government-backed guarantees	De-risks lending for commercial banks.
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**4. The Training Pillar: Cultivating Human Capital and Resilience**

While access to capital is necessary, it is insufficient without the human capital required to manage it effectively. Entrepreneurial training programs are the primary mechanism for bridging the "skills gap" that often prevents small businesses from scaling or surviving external shocks (Islam et al., 2023).

**Psychological Resilience and Action-Oriented Training**

The traditional approach to training focusing solely on technical business skills like accounting and marketing is increasingly being replaced or augmented by Action-Oriented Psychological Training Programs (AOTP) (Mapanje et al., 2023). Research in Pakistan has highlighted the efficacy of Individual Entrepreneurial Orientation (IEO) training, which focuses on developing psychological traits such as proactivity, risk-taking, autonomy, and competitive aggressiveness (Li et al., 2023). Longitudinal field experiments involving over 500 small business owners in Lahore demonstrated that AOTPs lead to significant improvements in career resilience and subjective success measures compared to control groups (Aljuwaiber, 2021).

This shift toward the psychological foundations of entrepreneurship is grounded in the understanding that resilience is a strategic capability (Graña-Alvarez et al., 2024). Resilient entrepreneurs do not merely survive crises; they use cognitive flexibility and emotional regulation to identify new market opportunities created by disruption. This is particularly relevant in the post-COVID-19 environment, where business model adaptation became a prerequisite for survival (Tuffour et al., 2022).

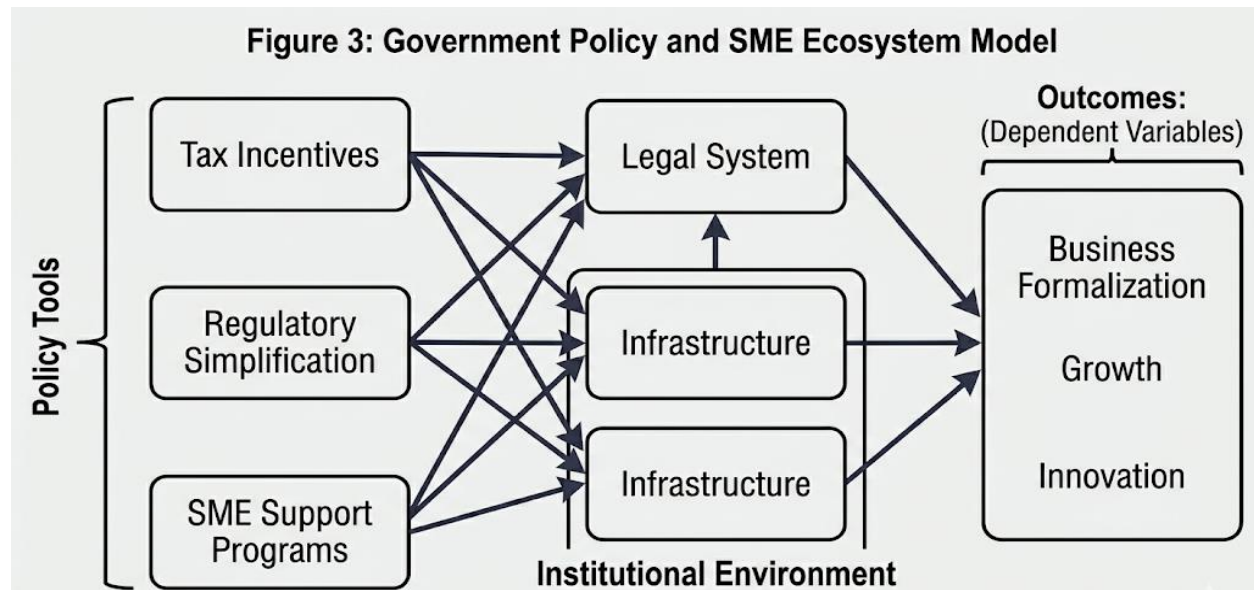
**Financial Literacy as a Determinant of Sustainability**

Financial literacy serves as a critical mediator between access to finance and firm performance. Entrepreneurs with high financial literacy are more likely to maintain accurate records, understand the ramifications of debt structures, and avoid "negative financing decisions" that lead to insolvency (Portuguez Castro & Gómez Zermeno, 2021). Moreover, financial literacy facilitates credit access by reducing information asymmetry; literate managers can present more robust business plans and financial statements to lenders, thereby increasing their bankability (Ali et al., 2021).

In the digital era, this has evolved into "e-financial literacy," which encompasses the ability to safely and effectively use digital financial services. Digital literacy acts as a powerful equalizer, bridging the divide for rural and underserved entrepreneurs by providing access to mobile banking, digital dashboards, and predictive financial analytics (Ha et al., 2025).

**5. The Policy Pillar: Building an Enabling Ecosystem**

Government policies and the broader regulatory environment constitute the external framework within which SMEs operate. Policy coherence the alignment of trade, fiscal, and labor regulations with the objective of SME development is essential for fostering a resilient sector (Wagner et al., 2021). Figure 3 presents the role of government policies in shaping the SME ecosystem. Effective policy design reduces barriers and fosters an enabling environment for entrepreneurship.



**Tax Policy and the "Threshold Trap"**

Taxation is a primary touchpoint between the state and the entrepreneur. High effective tax rates and the administrative complexity of compliance are significant deterrents to firm growth and formalization (Díaz-Arancibia et al., 2024). In many developing countries, Value-Added Tax (VAT) structures create a "threshold trap," where small businesses intentionally limit their turnover or under-report profits to remain below the threshold for registration, thereby avoiding the heavy compliance burden (Singh & Chudasama, 2020). This intentional stagnation deprives the economy of the productivity gains that would otherwise come from firm scaling.

Conversely, well-designed tax incentives such as tax holidays, investment allowances, and accelerated depreciation can provide the necessary fiscal space for SMEs to reinvest in technology and human capital (Nugroho, 2020). Fiscal Exchange Theory suggests that SMEs are more willing to participate in the formal economy and comply with tax regulations when they perceive that the quality of public services (infrastructure, legal protection, transparency) justifies the cost of taxation (Khoshmaram et al., 2020).

**Case Study: The Policy Landscape in Pakistan**

Pakistan provides a compelling case of an economy with high SME potential but significant structural hurdles. SMEs contribute approximately 30% to the GDP and 25% to exports, yet they face a complex regulatory environment characterized by 12 different procedures and an average of 155 days for full registration (Zada et al., 2021). The National SME Policy 2021 represents a strategic shift toward easing these constraints by introducing simplified registration, turnover-based definitions for small and medium enterprises (PKR 150 million and PKR 800 million respectively), and incentives for integration into Global Value Chains (GVCs) (Cardella et al., 2020).

Despite these policy initiatives, the actual expenditure on SME facilitation in Pakistan remains low estimated at only \$1.74 million compared to \$109 million in India and \$3.49 billion in Korea. This funding disparity underscores the gap between policy rhetoric and institutional capacity (Olanipekun, 2020).

**Table 3: SME Policy Indicators and Performance Metrics in Pakistan**

Policy Indicator (Pakistan)	Status/Metric	Impact on Development
Registration Complexity	12 procedures / 155 days	High barrier to formalization.
SME Contribution GDP	~ 30%	Significant but underdeveloped.
SME Definition (2021)	Small: $\leq$ \$150m PKR / Medium: $\leq$ \$800m PKR	Provides clear bands for targeted support.
SBP Initiatives	Innovative pandemic financing	Alleviated short-term liquidity crises.
CPEC Opportunity	Special Economic Zones (SEZs)	Potential for infrastructure and market linkage.

**6. The Synergy of Digital Transformation and Sustainability**

Digital transformation is the thread that increasingly binds finance, training, and policy together. The adoption of advanced technologies cloud computing, blockchain, and AI enables SMEs to optimize internal processes, expand market reach via e-commerce, and improve resource efficiency (Hanaysha et al., 2022).

**Digital Innovation as a Resilience Factor**

During the COVID-19 pandemic, digitalized SMEs exhibited significantly higher survival rates (64%) compared to their non-digital counterparts (Chukwuka, 2024). E-commerce platforms like WhatsApp Business and Facebook Marketplace allowed firms to maintain customer relationships and facilitate payments during lockdowns, particularly for women-led enterprises in emerging markets (Lüdeke-Freund, 2020). Furthermore, digital tools facilitate the transition toward a

circular economy; IoT sensors and AI-driven analytics help minimize waste and overproduction, aligning firm operations with the People, Planet, and Profit pillars of sustainability (Nziku & Henry, 2021).

**Supply Chain Finance and Technological Coupling**

A sophisticated example of this synergy is the co-evolution of Supply Chain Finance (SCF) and technological innovation (Ozili, 2022). Research indicates that the integration of digital data flows within supply chains allows SMEs to obtain financing based on the creditworthiness of core enterprises, effectively substituting traditional collateral (Gherghina et al., 2020). The "coupling coordination degree" ( $\sigma$ ) of these systems is a vital metric for policymakers; an index score of  $\sigma \geq 0.7$  often serves as a benchmark for unlocking preferential tax and credit incentives (Danladi et al., 2023).

**Table 4: Global Metrics for SME Digital and Green Transformation**

Theme	Metric/Indicator	Source	Key Insight
Digital Adoption	+15% revenue growth	McKinsey (2022)	SMEs benefit tangibly from tech integration.
Green Innovation	3,000+ MT CO2 reduction	NITI Aayog (2021)	Eco-practices improve brand and resource use.
Crisis Resilience	64% survival rate	ITC (2021)	Digital SMEs survived better during COVID-19.
Globalization	38% digital export share	UNCTAD (2021)	Growing trend in cross-border SME activities.

## 7. Regional Challenges and the Way Forward

The challenges to SME sustainability are not uniform. In regions like Sub-Saharan Africa and Southeast Asia, financial challenges remain the most pressing barrier, often forcing firms into high-interest debt cycles that jeopardize short-term operation (Eton et al., 2021). In contrast, research in China suggests that access to external finance is less of a growth constraint than the need for managerial competencies and rapid adaptation to highly competitive market conditions (Onyekwelu et al., 2023).

For policymakers and practitioners, the evaluation of these factors suggests several critical imperatives:

### 1. **Transition to "One-Window" Portals:**

Reducing the administrative cost of doing business is as important as providing capital. Digital registration and tax filing systems can lower the threshold for formalization (Chinomona et al., 2020).

### 2. **Psychological and Action-Oriented Training:** Support programs must move beyond traditional "classroom" learning to include experiential, action-oriented mentoring that builds cognitive resilience (Rashid et al., 2025).

### 3. **Alternative Credit Models:** Financial institutions must be incentivized to move beyond land-based collateral, utilizing Fintech and supply chain data to assess risk more accurately (Desalegn et al., 2024).

### 4. **Inclusivity and Targeted Support:** Policies must account for the unique barriers faced by women, rural youth, and informal workers, ensuring that digital and financial tools are culturally and linguistically accessible (Salami et al., 2023).

## Conclusion

This evaluation has demonstrated that the long-term sustainability of small and medium-sized enterprises (SMEs) depends on the effective interplay of three foundational pillars: access to finance, entrepreneurial training and human capital development, and supportive government policies. While each element contributes independently to entrepreneurial success, their

synergistic interaction is what ultimately determines the resilience and growth potential of small businesses in volatile and competitive environments. Access to finance remains a primary constraint for SMEs, particularly in emerging economies, where information asymmetry, collateral deficits, and high transaction costs create significant barriers. Innovative solutions such as Fintech-driven credit scoring, supply chain finance, equity crowdfunding, and sustainability-linked loans have shown promise in bridging the financing gap and enabling more inclusive capital access. However, financial resources alone are insufficient without adequate human capital. Entrepreneurial training programs that emphasize psychological resilience, action-oriented learning, financial literacy, and digital competencies equip business owners with the cognitive flexibility and practical skills needed to manage resources effectively, adapt to disruptions, and pursue innovation. Government policies play a pivotal enabling role by shaping the regulatory and fiscal environment. Simplifying registration procedures, reducing compliance burdens, implementing targeted tax incentives, and promoting digital one-window systems can significantly lower barriers to formalization and scaling. The case of Pakistan illustrates both the potential and the implementation gaps in SME policy frameworks, where ambitious policies often face challenges due to limited institutional capacity and funding. Digital transformation emerges as a powerful cross-cutting force that strengthens the synergy among finance, training, and policy. Technologies such as AI, blockchain, e-commerce, and IoT not only enhance operational efficiency and market reach but also facilitate the transition toward sustainable and circular business models. Empirical evidence from the COVID-19 period further confirms that digitally enabled SMEs demonstrated greater resilience and survival rates. Moving forward, policymakers, financial institutions, and training providers must adopt integrated, inclusive approaches that address the unique needs of women entrepreneurs, rural businesses, and informal sectors. Key



recommendations include the development of one-window digital portals, expansion of action-oriented psychological training, promotion of alternative credit assessment models, and stronger public-private partnerships for sustainable finance. Ultimately, fostering sustainable entrepreneurial development requires a holistic ecosystem that balances economic viability with social equity and environmental responsibility. By strengthening the alignment of access to finance, training, and government policies supported by digital innovation emerging economies can unlock the full potential of SMEs as engines of inclusive growth, job creation, and long-term sustainable development.

## REFERENCES

- Ali, E. B., Anufriev, V. P., & Amfo, B. (2021). Green economy implementation in Ghana as a road map for a sustainable development drive: A review. *Scientific African*, 12, Article e00756. <https://doi.org/10.1016/j.sciaf.2021.e00756>
- Aljuwaiber, A. (2021). Entrepreneurship research in the Middle East and North Africa: Trends, challenges, and sustainability issues. *Journal of Entrepreneurship in Emerging Economies*, 13(3), 380–426. <https://doi.org/10.1108/JEEE-05-2020-0111>
- Barua, S. (2020). Financing sustainable development goals: A review of challenges and mitigation strategies. *Business Strategy & Development*, 3(3), 277–293. <https://doi.org/10.1002/bsd2.94>
- Beckmann, M., Garkisch, M., & Zeyen, A. (2023). Together we are strong? A systematic literature review on how SMEs use relation-based collaboration to operate in rural areas. *Journal of Small Business & Entrepreneurship*, 35(4), 515–549. <https://doi.org/10.1080/08276331.2020.1786645>
- Bradley, S. W., Kim, P. H., Klein, P. G., McMullen, J. S., & Wennberg, K. (2021). Policy for innovative entrepreneurship: Institutions, interventions, and societal challenges. *Strategic Entrepreneurship Journal*, 15(2), 167–184. <https://doi.org/10.1002/sej.1395>
- Burchi, A., Włodarczyk, B., Szturo, M., & Martelli, D. (2021). The effects of financial literacy on sustainable entrepreneurship. *Sustainability*, 13(9), 5070. <https://doi.org/10.3390/su13095070>
- Cao, Z., & Shi, X. (2021). A systematic literature review of entrepreneurial ecosystems in advanced and emerging economies. *Small Business Economics*, 57(1), 75–110. <https://doi.org/10.1007/s11187-020-00382-z>
- Cardella, G. M., Hernández-Sánchez, B. R., & Sánchez-García, J. C. (2020). Women entrepreneurship: A systematic review to outline the boundaries of scientific literature. *Frontiers in Psychology*, 11, Article 536630. <https://doi.org/10.3389/fpsyg.2020.536630>
- Chege, S. M., & Wang, D. (2020). Information technology innovation and its impact on job creation by SMEs in developing countries: An analysis of the literature review. *Technology Analysis & Strategic Management*, 32(3), 256–271. <https://doi.org/10.1080/09537325.2019.1651263>
- Chen, C. L., Lin, Y. C., Chen, W. H., Chao, C. F., & Pandia, H. (2021). Role of government to enhance digital transformation in small service business. *Sustainability*, 13(3), 1028. <https://doi.org/10.3390/su13031028>

- Chinomona, E., Popoola, B. A., & Popoola, O. O. (2020). The influence of entrepreneurial training, access to finance, entrepreneurial capacity, entrepreneurial atmosphere on youth entrepreneurship. *African Journal of Business and Economic Research*, 15(1), 81–105. <https://doi.org/10.31920/1750-4562/2020/v15n1a4>
- Chukwuka, E. J. (2024). Strategic role of feasibility study in entrepreneurial profitability and project management. *ARC International Journal of Business and Entrepreneurship Research*, 9(1).
- Danladi, S., Prasad, M. S. V., Modibbo, U. M., Ahmadi, S. A., & Ghasemi, P. (2023). Attaining sustainable development goals through financial inclusion: Exploring collaborative approaches to Fintech adoption in developing economies. *Sustainability*, 15(17), 13039. <https://doi.org/10.3390/su151713039>
- Desalegn, G., Tangl, A., Fekete-Farkas, M., Gudisa, G., & Boros, A. (2024). Linking policies and regulations to sustainable finance for the promotion of urban agriculture: Evidence from micro and small businesses. *Heliyon*, 10(11), Article e31560. <https://doi.org/10.1016/j.heliyon.2024.e31560>
- Díaz-Arancibia, J., Hochstetter-Diez, J., Bustamante-Mora, A., Sepúlveda-Cuevas, S., Albayay, I., & Arango-López, J. (2024). Navigating digital transformation and technology adoption: A literature review from small and medium-sized enterprises in developing countries. *Sustainability*, 16(14), 5946. <https://doi.org/10.3390/su16145946>
- Dvouletý, O., Srhoj, S., & Pantea, S. (2021). Public SME grants and firm performance in European Union: A systematic review of empirical evidence. *Small Business Economics*, 57(1), 243–263. <https://doi.org/10.1007/s11187-019-00306-x>
- Etim, E., & Daramola, O. (2020). The informal sector and economic growth of South Africa and Nigeria: A comparative systematic review. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(4), 134. <https://doi.org/10.3390/joitmc6040134>
- Eton, M., Mwosi, F., Okello-Obura, C., Turyehebwa, A., & Uwonda, G. (2021). Financial inclusion and the growth of small medium enterprises in Uganda: Empirical evidence from selected districts in Lango sub-region. *Journal of Innovation and Entrepreneurship*, 10(1), 23. <https://doi.org/10.1186/s13731-021-00165-x>
- Farinha, L., Lopes, J., Bagchi-Sen, S., Sebastião, J. R., & Oliveira, J. (2020). Entrepreneurial dynamics and government policies to boost entrepreneurship performance. *Socio-Economic Planning Sciences*, 72, Article 100950. <https://doi.org/10.1016/j.seps.2020.100950>
- Gherghina, Ş. C., Botezatu, M. A., Hosszu, A., & Simionescu, L. N. (2020). Small and medium-sized enterprises (SMEs): The engine of economic growth through investments and innovation. *Sustainability*, 12(1), 347. <https://doi.org/10.3390/su12010347>
- Graña-Alvarez, R., Lopez-Valeiras, E., Gonzalez-Loureiro, M., & Coronado, F. (2024). Financial literacy in SMEs: A systematic literature review and a framework for further inquiry. *Journal of Small Business Management*, 62(1), 331–380. <https://doi.org/10.1080/00472778.2022.2051178>
- Guerrero, M., Liñán, F., & Cáceres-Carrasco, F. R. (2021). The influence of ecosystems on the entrepreneurship process: A comparison across developed and developing economies. *Small Business Economics*, 57(4), 1733–1759. <https://doi.org/10.1007/s11187-020-00392-x>

- Ha, D., Le, P., & Nguyen, D. K. (2025). Financial inclusion and fintech: A state-of-the-art systematic literature review. *Financial Innovation*, 11(1), 69. <https://doi.org/10.1186/s40854-024-00624-x>
- Hanaysha, J. R., Al-Shaikh, M. E., Joghee, S., & Alzoubi, H. M. (2022). Impact of innovation capabilities on business sustainability in small and medium enterprises. *FIIB Business Review*, 11(1), 67–78. <https://doi.org/10.1177/231971452111042232>
- Harahap, B., Risfandy, T., & Futri, I. N. (2023). Islamic law, Islamic finance, and sustainable development goals: A systematic literature review. *Sustainability*, 15(8), 6626. <https://doi.org/10.3390/su15086626>
- Islam, Y., Mindia, P. M., Farzana, N., & Qamruzzaman, M. (2023). Nexus between environmental sustainability, good governance, financial inclusion, and tourism development in Bangladesh: Evidence from symmetric and asymmetric investigation. *Frontiers in Environmental Science*, 10, Article 1056268. <https://doi.org/10.3389/fenvs.2022.1056268>
- Jatmiko, B., Udin, U. D. I. N., Raharti, R., Laras, T., & Ardhi, K. F. (2021). Strategies for MSMEs to achieve sustainable competitive advantage: The SWOT analysis method. *The Journal of Asian Finance, Economics and Business*, 8(3), 505–515. <https://doi.org/10.13106/jafeb.2021.vol8.no3.0505>
- Kansheba, J. M. P., & Wald, A. E. (2020). Entrepreneurial ecosystems: A systematic literature review and research agenda. *Journal of Small Business and Enterprise Development*, 27(6), 943–964. <https://doi.org/10.1108/JSBED-11-2019-0364>
- Khoshmaram, M., Shiri, N., Shinnar, R. S., & Savari, M. (2020). Environmental support and entrepreneurial behavior among Iranian farmers: The mediating roles of social and human capital. *Journal of Small Business Management*, 58(5), 1064–1088. <https://doi.org/10.1080/00472778.2019.1704456>
- Kumar, L., Nadeem, F., Sloan, M., Restle-Steinert, J., Deitch, M. J., Ali Naqvi, S., ... & Sassanelli, C. (2022). Fostering green finance for sustainable development: A focus on textile and leather small medium enterprises in Pakistan. *Sustainability*, 14(19), 11908. <https://doi.org/10.3390/su141911908>
- Li, H., Chen, C., & Umair, M. (2023). Green finance, enterprise energy efficiency, and green total factor productivity: Evidence from China. *Sustainability*, 15(14), 11065. <https://doi.org/10.3390/su151411065>
- Lüdeke-Freund, F. (2020). Sustainable entrepreneurship, innovation, and business models: Integrative framework and propositions for future research. *Business Strategy and the Environment*, 29(2), 665–681. <https://doi.org/10.1002/bse.2456>
- Mapanje, O., Karuaihe, S., Macheche, C., & Amis, M. (2023). Financing sustainable agriculture in sub-Saharan Africa: A review of the role of financial technologies. *Sustainability*, 15(5), 4587. <https://doi.org/10.3390/su15054587>
- Mashapure, R., Nyagadza, B., Chikazhe, L., Msipa, N., Ngorora, G. K. P., & Gwiza, A. (2022). Challenges hindering women entrepreneurship sustainability in rural livelihoods: Case of Manicaland province. *Cogent Social Sciences*, 8(1), Article 2132675. <https://doi.org/10.1080/23311886.2022.2132675>
- Nugroho, L. (2020). *Mobile banking for empowerment Muslim women entrepreneur: Evidence from Asia (Indonesia and Bangladesh)*. [Research Paper/Report].

- Nziku, D. M., & Henry, C. (2021). Policies for supporting women entrepreneurs in developing countries: The case of Tanzania. *Journal of Entrepreneurship and Public Policy*, 10(1), 38–58. <https://doi.org/10.1108/JEPP-07-2019-0058>
- Olanipekun, K. A. (2020). Assessment of factors influencing the development and sustainability of small scale foundry enterprises in Nigeria: A case study of Lagos State. *Asian Journal of Social Sciences and Management Studies*, 7(4), 288–294. <https://doi.org/10.20448/journal.500.2020.74.288.294>
- Onyekwelu, P. N., Ibe, G. I., Monyei, F. E., Attamah, J. I., & Ukpere, W. I. (2023). The impact of entrepreneurship institutions on access to micro-financing for sustainable enterprise in an emerging economy. *Sustainability*, 15(9), 7425. <https://doi.org/10.3390/su15097425>
- Ozili, P. K. (2022). Green finance research around the world: A review of literature. *International Journal of Green Economics*, 16(1), 56–75. <https://doi.org/10.1504/IJGE.2022.125554>
- Park, S., Lee, I. H., & Kim, J. E. (2020). Government support and small-and medium-sized enterprise (SME) performance: The moderating effects of diagnostic and support services. *Asian Business & Management*, 19(2), 213–238. <https://doi.org/10.1057/s41291-019-00070-3>
- Portuguez Castro, M., & Gómez Zermeño, M. G. (2021). Being an entrepreneur post-COVID-19 resilience in times of crisis: A systematic literature review. *Journal of Entrepreneurship in Emerging Economies*, 13(4), 721–746. <https://doi.org/10.1108/JEEE-07-2020-0246>
- Rashid, M., Anser, M. K., Shah, S. T. H., Nabi, A. A., Ahmad, I., & Zaman, K. (2025). Fostering entrepreneurship: Analyzing the influence of access to finance, innovation investment, educational attainment, infrastructure development, and regulatory environment. *Future Business Journal*, 11(1), Article 140. <https://doi.org/10.1186/s43093-024-00430-x>
- Rosário, A. T., Raimundo, R. J., & Cruz, S. P. (2022). Sustainable entrepreneurship: A literature review. *Sustainability*, 14(9), 5556. <https://doi.org/10.3390/su14095556>
- Salami, C. G. E., Ekakitie, S. E., & Ebinim, L. O. (2023). Impact of government policy on entrepreneurship growth and development of small-scale business. *Journal of Global Social Sciences*, 4(14), 73–102.
- Setyaningsih, S., Widjojo, R., & Kelle, P. (2024). Challenges and opportunities in sustainability reporting: A focus on small and medium enterprises (SMEs). *Cogent Business & Management*, 11(1), Article 2298215. <https://doi.org/10.1080/23311975.2023.2298215>
- Singla, A., & Mallik, G. (2021). Determinants of financial literacy: Empirical evidence from micro and small enterprises in India. *Asia Pacific Management Review*, 26(4), 248–255. <https://doi.org/10.1016/j.apmr.2021.03.002>
- Singh, P. K., & Chudasama, H. (2020). Evaluating poverty alleviation strategies in a developing country. *PLoS ONE*, 15(1), Article e0227176. <https://doi.org/10.1371/journal.pone.0227176>

- Stacey, N., Gibson, E., Loneragan, N. R., Warren, C., Wiryawan, B., Adhuri, D. S., Steenbergen, D. J., & Fitriana, R. (2021). Developing sustainable small-scale fisheries livelihoods in Indonesia: Trends, enabling and constraining factors, and future opportunities. *Marine Policy*, 132, Article 104654. <https://doi.org/10.1016/j.marpol.2021.104654>
- Tuffour, J. K., Amoako, A. A., & Amartey, E. O. (2022). Assessing the effect of financial literacy among managers on the performance of small-scale enterprises. *Global Business Review*, 23(5), 1200-1217. <https://doi.org/10.1177/0972150919899753>
- Wagner, M., Schaltegger, S., Hansen, E. G., & Fichter, K. (2021). University-linked programmes for sustainable entrepreneurship and regional development: How and with what impact?. *Small Business Economics*, 56(3), 1141-1158. <https://doi.org/10.1007/s11187-019-00280-4>
- Yasin, R. F. F., Mahmud, M. W., & Diniyya, A. A. (2020). Significance of financial literacy among women entrepreneur on halal business. *Journal of Halal Industry & Services*, 3, Article 1. <https://doi.org/10.15282/jhis.v3i0.54>
- Zada, M., Yukun, C., & Zada, S. (2021). Effect of financial management practices on the development of small-to-medium size forest enterprises: Insight from Pakistan. *GeoJournal*, 86(3), 1073-1088. <https://doi.org/10.1007/s10708-019-10111-w>

