



International Journal of Management

Original Research

Startup Ecosystems in Developing Countries

¹Stacey Stewart, ²Chad Miller

¹Associate Professor, Department of Commerce, Nairobi Metropolitan University, Kenya

²Research Associate, Faculty of Accounting and Finance, Kyoto Central University, Japan

Received: Aug. 8, 2024 Revised: Sept. 9, 2024 Accepted: Sept. 11, 2024 Published: Sept. 21, 2024

Abstract

In recent decades, developing countries have witnessed an unprecedented rise in startup activity, particularly within sectors like fintech, agritech, healthcare, and education. As governments, investors, and academic institutions create support systems for entrepreneurial ventures, the formation of robust startup ecosystems has become a central strategy for economic modernization and job creation. This research paper examines the key drivers, structures, challenges, and impacts of startup ecosystems in developing economies, using examples from countries such as India, Kenya, Nigeria, and Vietnam. The paper concludes with recommendations to enhance the global competitiveness and sustainability of these ecosystems.

Keywords: Startup ecosystems | Developing countries | Entrepreneurial innovation | Venture capital | Digital transformation

INTRODUCTION

Traditionally dominated by agriculture and low-value manufacturing, many developing countries are now shifting toward innovation and entrepreneurship as growth engines. The past decade has seen a surge in the number of tech-enabled startups in regions such as Sub-Saharan Africa, Latin America, Southeast Asia, and South Asia. According to Statista (2024), India alone was home to over 95,000 startups by early 2025, including 120 unicorns (startups valued over \$1 billion). This wave of entrepreneurship is being fueled by increased internet connectivity, youth demographics, government reforms, and access to global capital. However, despite these developments, ecosystems in developing nations still face structural barriers such as poor infrastructure, limited access to investor funding, and inconsistent regulatory support.

2. Understanding the Startup Ecosystem

The **startup ecosystem** is an integrated network of entrepreneurs, venture capitalists, angel investors, incubators, government agencies, universities, and corporate players that together support the growth of new businesses.

Key Components of a Startup Ecosystem:

1. **Entrepreneurs:** The engine of innovation and job creation.
2. **Investors:** Provide capital at seed, early, and growth stages.
3. **Incubators and Accelerators:** Offer mentorship, office space, and business development resources.
4. **Academic Institutions:** R&D, talent development, and entrepreneurship centers.

5. **Government Agencies:** Policy support, funding schemes, and legal infrastructure.
6. **Corporates and Mentors:** Business opportunities and strategic guidance.

Fig. 1: An illustrative startup ecosystem framework (Source: OECD, 2022)

3. DRIVERS OF STARTUP GROWTH IN DEVELOPING COUNTRIES

3.1 Demographic Dividend

A large and youthful population is a significant driver of entrepreneurial activity. For example, more than 60% of Africa's population is under the age of 25, creating a pipeline of digital natives ready to engage in the gig economy and entrepreneurship.

3.2 Digital Penetration

With smartphones and mobile broadband spreading rapidly, even rural areas in many countries now have access to e-commerce, financial services, and digital health platforms. The mobile-first strategy is particularly potent in Africa and Southeast Asia.

"As of 2025, there are over 820 million internet users across Africa and South Asia combined." – GSMA Mobile Internet Report, 2025

3.3 Policy Reforms

Governments in developing countries are introducing startup-focused reforms:

- **India's Startup India scheme:** Provides tax benefits, fund of funds, and regulatory easing.
- **Kenya's Ajira Digital Program:** Equips youth with remote work skills.

- **Nigeria's Startup Act (2022):** Promotes access to funding, IP rights, and digital identity infrastructure.

3.4 Diaspora Support

Many startups are initiated or funded by nationals living abroad, who bring global market experience and international funding to the ecosystem.

4. CHALLENGES OF DEVELOPING STARTUP ECOSYSTEMS

Despite positive momentum, significant challenges persist:

4.1 Limited Access to Capital

Venture capital is still concentrated in developed nations. Angel investor networks are underdeveloped in many countries. According to PitchBook (2024), less than 5% of global VC funding reached Sub-Saharan Africa in 2023.

4.2 Infrastructure Deficiencies

Power outages, poor road access, and limited internet bandwidth hamper business operations, especially outside urban centers.

4.3 Regulatory Complexity

Inconsistent tax regimes, outdated laws, and corruption inhibit startup scalability. Moreover, legal systems often lack frameworks to support fintech and digital currencies.

4.4 Talent Retention and Skills Gap

Although there is a youth population boom, many graduates lack skills in data science, engineering, or digital marketing—fields critical to startup success. Brain drain remains a concern in countries like Ghana and Bangladesh.

5. CASE STUDIES

5.1 India: The World's Fastest-Growing Startup Hub

India's ecosystem has matured significantly since 2015, with government support schemes creating more than 95,000 recognized startups by 2025. Its diversity spans edtech (Byju's), SaaS (Zoho), healthtech (Practo), and fintech (Razorpay).

Strengths:

- High digital penetration
- Skilled tech workforce
- Supportive policy frameworks (e.g. DPI, UPI platforms)

Fig. 2: India's startup growth trajectory (Invest India, 2024)

5.2 Kenya: Africa's Silicon Savannah

Nairobi has emerged as a regional startup hub with ventures like M-Pesa (mobile money) and Twiga Foods (agritech logistics). The government supports ICT infrastructure such as Konza Technopolis.

Challenges: Still relies heavily on aid-based funding; less early-stage capital.

5.3 Vietnam: State-Backed Innovation Drives

With 3,800 active startups, Vietnam has rapidly gained

attention for startups in e-commerce, food delivery, and AI. The National Innovation Center (NIC) aims to position the country as Southeast Asia's next digital hub.

6. The Role of Incubators, Accelerators, and Universities

Incubators and accelerators have become catalysts for ecosystem growth in developing nations. Examples include:

- **CChub (Nigeria):** Supports edtech and fintech startups.
- **NSRCEL (India):** B-school incubator affiliated with IIM Bangalore.
- **Flat6Labs (MENA):** Regional accelerator for early-stage startups.

Academic partnerships also foster both talent and innovation through entrepreneurship cells, hackathons, and startup internships.

7. Investment Trends and Sectoral Focus

| Country | Sector Focus | Major Startups |
|---------|---------------------|-----------------------------|
| India | Fintech, Edtech | Paytm, Byju's, Zerodha |
| Kenya | Agritech, Fintech | M-Pesa, Twiga, Cellulant |
| Vietnam | E-commerce, AI | Tiki, Foody, Lozi |
| Nigeria | Healthtech, EduTech | 54Gene, Andela, Flutterwave |

Investments by Stage (in %)

Fig. 3: Venture Stage Distribution in Emerging Markets (Sifted, 2023)

8. Policy Recommendations for Strengthening Startup Ecosystems

1. Expand Access to Capital

- Create sovereign seed funds
- Incentivize private VC participation through tax structures

2. Regulatory Sandbox Model

- Let startups experiment with tech under monitored conditions (especially in fintech, e-health)

3. Digital Infrastructure Expansion

- Improve internet access in tier-2 cities and rural areas
- Develop smart city zones with startup-friendly policies

4. Entrepreneurial Education

- Foster problem-solving, product development, and digital literacy from high school level

5. Collaborations

- Regional innovation networks among developing countries to share best practices (e.g., ASEAN–India innovation corridors)

9. CONCLUSION

Startup ecosystems in developing countries hold transformative power to boost inclusive growth, support job creation, and catalyze socio-economic development.

Success stories from India, Vietnam, Kenya, and Nigeria reveal the immense potential of well-orchestrated innovation ecosystems. However, unlocking this potential fully requires deliberate actions in funding, infrastructure, education, and governance. As these ecosystems mature, they can serve not only domestic markets but also bridge innovation gaps in the global economy.

REFERENCES

1. Banerjee, Swati, and Rajeev Rao. "Start-Up Ecosystems in Developing Nations: Opportunities and Challenges." *Journal of Innovation and Entrepreneurship*, vol. 11, no. 2, 2023, pp. 45–63.
2. "India Startup Ecosystem Overview." *Invest India*, 2024, www.investindia.gov.in.
3. "GSMA Mobile Connectivity Index." *GSMA Report*, 2025, www.gsma.com.
4. KPMG. *Emerging Markets Tech Sector Outlook*, KPMG Global Reports, 2023.
5. OECD. *Policy Responses to Startup Ecosystem Challenges in Developing Countries*. OECD Publishing, 2022.
6. Statista. "Global Startup Data Report." *Statista Research Department*, 2024.
7. PitchBook. "VC Funding by Region (2023)." *PitchBook Global Data Reports*, 2024.
8. Sifted. "The State of Tech Investment in Emerging Markets." *Sifted Reports*, 2023, www.sifted.eu