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Toward Resilient Digital Economy: Challenges of Building the Tech-Startup Ecosystem in Post-Conflict Environment

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Abstract: Building a durable technology-startup ecosystem in post-conflict Syria is difficult. Syria confronts major economic, institutional, and social issues following nearly fourteen years of civil conflict (2011-2024), which killed over 500,000 people, displaced 13.5 million, and reduced GDP by 54% between 2010 and 2021. This study finds that entrepreneurship can boost economic recovery, job growth, innovation, and digital transformation. Based on resilience theory, entrepreneurial ecosystem frameworks, and empirical evidence from Syria's startup landscape, the study identifies four main challenges: financial and capital constraints, regulatory and institutional barriers, infrastructure deficits, and human capital erosion. Restrictive investment, regulatory ambiguity, broken infrastructure, weak digital connectivity, and the departure of skilled talent hinder entrepreneurial growth. Syria has around 200 firms, mostly in digital services, e-commerce, and fintech, but barely a dozen have reached the growth stage. The research also suggests lifting sector-specific sanctions, engaging the Syrian diaspora, and creating support organisations such as the National Startup Agenda (2025–2030), Tech Town, and DIGIT. These activities may improve financing, mentorship, technology, markets, and international partnerships. It concludes with proposals to strengthen regulations, finance, digital infrastructure, human capital, and innovation to build an inclusive, resilient, and sustainable digital economy in post-conflict Syria.

Keywords: Post-Conflict Entrepreneurship; Digital Economy; Startup Ecosystem; Economic Resilience; Innovation Policy; Diaspora Engagement; Venture Capital; Regulatory Reform; Technology Startups.

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1. Introduction

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The emergence of a resilient technology-start-up ecosystem in post-conflict Syria must be understood in the broader context of the country's economic devastation, institutional disruption, demographic displacement and technological transformation [1]. The civil war in Syria lasted for almost 14 years (2011-2024) and significantly undermined the productive potential of the country and the foundations for sustainable entrepreneurship. The conflict resulted in over 500,000 deaths, displaced some 13.5 million people, and led to a 54 percent contraction in GDP from 2010 to 2021. Poverty also increased significantly, affecting some 69 per cent of the population by 2022, while extreme poverty, almost non-existent before the conflict, affected over one-quarter of the population [2]. These conditions have created an environment in which conventional economic recovery mechanisms cannot handle the scale of reconstruction needed. Entrepreneurship, especially technology-based entrepreneurship, thus offers a key mechanism for creating jobs, promoting innovation, fostering self-reliance, and rebuilding economic activity. The fall of the Assad regime in December 2024 is a major political turning point and an opportunity to rethink Syria's economic development model [3]. It also offers a chance to establish institutions and policies that can foster private sector development, technological innovation and entrepreneurial activity. But the economic recovery challenge is exceptionally large. The study's evidence indicates that, at the current rate of economic growth, Syria will not recover its pre-conflict GDP until approximately 2080, highlighting the limits of traditional reconstruction approaches [4].

This makes developing new sources of economic growth crucial. Technology startups can help because they generally need less physical capital than traditional industries, can reach larger markets through digital platforms, and can create jobs for younger populations [5]. However, technology entrepreneurship does not flourish in a weak economy on its own; it depends on access to finance, reliable infrastructure, supportive regulations, skilled human resources, markets and institutional networks. Entrepreneurship is a significant resilience mechanism in other post-conflict settings. Experiences from countries such as Rwanda and Bosnia and Herzegovina demonstrate that entrepreneurial activities can help create employment, reintegrate displaced populations and rebuild local industries [6]. The digital economy opens up further possibilities as digital businesses can sometimes operate with less physical infrastructure, connect with customers across borders, and respond quickly to shifting market conditions. Ukraine illustrates how conflict has helped catalyse digital adoption and innovation, while Palestine has built a relatively nimble, export-oriented tech ecosystem despite ongoing capacity constraints, power outages, mobility restrictions and international payment issues. These experiences show that adverse conditions do not preclude entrepreneurial activity. But they can spur entrepreneurs to create flexible business models, and the sustainability and scalability of such ecosystems depend on the broader institutional context [7]. Syria has several characteristics that could support the development of a technology startup ecosystem. The country has a relatively young population that is becoming more comfortable with digital technologies and is highly motivated to take part in the economic reconstruction [8].

More than 200 startups are now active in Syria, particularly in digital services, e-commerce, fintech, logistics and food services [9]. Women's involvement in entrepreneurship is also growing. Female founders now make up around 35 percent of the ecosystem, up from 22.4 percent in 2015 and a mere 4.4 percent in 2009. This increase suggests that entrepreneurship can open new paths to economic participation for groups traditionally constrained by labour market structures. The emergence of startups in digital services, e-commerce, fintech, and logistics also suggests that Syrian entrepreneurs are responding to changing consumer needs and seeing opportunities in digitalisation [10]. But more than 200 startups do not necessarily mean the entrepreneurial ecosystem is mature. Most of these companies are still young, with many less than three years old, and only a dozen or so have moved into the growth stage. This shows a huge gap between launching a startup and scaling one. A thriving entrepreneurial ecosystem requires mechanisms that help businesses move from idea to establishment, growth and international competitiveness. Repeated startup failures to move beyond the early stages can leave an ecosystem with high entrepreneurial activity but little economic impact [11]. Thus, Syria needs not only to encourage new startups, but also to create conditions for existing ventures to survive, attract investment, grow their customer base, develop professional management systems, and enter regional and international markets. Financial and capital constraints are among the most important barriers. For software, digital platforms, financial technologies or innovative products, tech startups often need funding until they reach stable revenues. However, Syria's long-standing economic crisis has severely constrained traditional sources of entrepreneurial finance [12].

Venture capital, private equity and angel investment networks are scarce, so many entrepreneurs must rely on personal savings, family money, small grants or informal financing [13]. Such funding mechanisms may suffice to create a small enterprise but rarely support rapid technological development and international expansion. The lack of dedicated startup funding therefore directly contributes to the ecosystem's failure to produce larger growth-stage companies [14]. These difficulties are compounded by the banking environment. "The study finds an under-capitalized banking system that has not been sufficiently proactive toward entrepreneurial projects. This disconnect exists between innovative companies' financing needs and the financial products available to them [15]. Traditional banks are focused on collateral, proven revenues and stable cash flows, while tech startups often have intangible assets, unpredictable revenue paths and high growth potential. Therefore, alternative financing mechanisms such as seed funds, angel networks, venture capital, startup grants, innovation competitions and blended-finance instruments can support ecosystem development. International donors and development institutions can play a key role in reducing investment risk and attracting private investors to Syria's emerging tech sector. A second major problem stems from regulatory and institutional barriers. Entrepreneurs need transparency in procedures for business registration, taxation,

licensing, investment, employment, intellectual property protection and digital transactions [16]. But the existing regulatory environment is characterised as cumbersome, uncertain and lacking transparency. Centralised, outdated rules from the pre-conflict era may not adequately address the needs of technology-driven businesses [17].

Regulatory uncertainty can deter both domestic and foreign investment, as entrepreneurs cannot easily anticipate the costs, obligations or risks of setting up and expanding a business [18]. Regulatory flexibility matters especially for startups in fast-moving sectors such as fintech and digital services, where traditional legal structures may not easily accommodate new business models. Institutional support is also critical to overcoming these regulatory hurdles. Incubators, accelerators, technology parks, innovation centers, mentorship programs, and entrepreneurial networks can help startups overcome the shortcomings of the broader business environment. But Syria has historically had very little formal infrastructure to support entrepreneurship. This creates a structural gap where entrepreneurs may have innovative ideas but lack access to experienced mentors, legal advice, market intelligence, financial planning, technology resources and professional networks [19]. Therefore, dedicated innovation hubs and startup support organisations can help to bridge the gap between individual entrepreneurial initiative and ecosystem-level development. A third basic problem is the lack of infrastructure. Technology startups depend heavily on electricity, telecommunications, internet connectivity, transportation, payment systems and access to digital platforms [20]. Years of conflict have eroded these foundations, creating operational challenges for digital-first companies. Operating costs rise and productivity drops because of unreliable electricity supplies, damaged telecommunications networks, disrupted transport systems and unreliable internet access. Even brief outages can affect customers, employees, payment processing, cloud services and communications for startups that operate almost entirely online [21].

The digital divide between major urban areas and rural communities further limits startups' ability to access nationwide markets and reduces opportunities for entrepreneurs outside major economic centres [22]. Thus, building digital infrastructure should be seen as an integral part of startup policy, and not as a general reconstruction task. Reliable broadband connectivity, affordable internet access, stable electricity, digital payment infrastructure, cloud services and secure telecommunications can go a long way in reducing barriers to entrepreneurship. In addition, infrastructure development can create a virtuous cycle: greater connectivity enables more startups to emerge, and growing digital businesses create additional demand for technology services and infrastructure investment [23]. Public-private partnerships can help, with governments providing regulatory and policy support and private technology companies contributing investment, technical expertise and operational capabilities. Fourth, the question of eroding human capital remains, especially in the long run. More than half of Syria’s population has been displaced, leading to a loss of skilled workers and entrepreneurs in large quantities. At the same time, years of conflict disrupted education and professional training, leaving gaps in technical, managerial, financial and entrepreneurial skills. Startups need more than programmers or technical specialists. Successful companies also need people with expertise in marketing, accounting, business development, cybersecurity, product management, leadership and international sales [24]. Thus, the erosion of these skills can impede startup growth, even if financial and infrastructure constraints are overcome. Syria’s human-capital potential remains significant despite the brain drain. Its youth are digitally savvy and eager to rebuild the economy. This lays an important foundation for the ecosystem's long-term development [25].

This foundation could be reinforced through investment in entrepreneurship education, coding, digital skills, financial literacy, business management and research in innovation and technology [26]. By establishing entrepreneurship centers, startup laboratories, incubators and partnerships with technology companies, universities can become important actors. Vocational and professional training programs can also help people acquire market-oriented skills that are immediately relevant to emerging digital businesses [27]. The Syrian diaspora is another important potential source of human and financial capital. Furthermore, many Syrians abroad have professional experience, international networks, technical knowledge, investment capacity and knowledge of global markets. Instead of seeing migration as a loss of human capital, policymakers can create mechanisms for diaspora professionals to contribute from afar by starting businesses, offering mentorship, investing in startups, or connecting Syrian entrepreneurs with foreign firms. Thus, engaging the diaspora can help offset domestic skill shortages while linking Syrian startups to international markets and investment networks [28]. There is also an important opportunity in the shifting sanctions landscape. At the sectoral level, sanctions are being rolled back on a large scale, easing some external constraints that previously contributed to Syria’s technological and economic isolation. Easing sanctions could improve access to international technologies, financial services, investment, software and cloud platforms, equipment and business collaborations. But the lifting of restrictions alone will not automatically create a functioning startup ecosystem [29].

Whether greater international openness translates into sustainable entrepreneurial development will depend on investor confidence, institutional credibility, regulatory transparency, banking reform, infrastructure quality and political stability [30]. Institutional programs such as the National Startup Agenda for 2025–2030, Tech Town, and DIGIT offer more opportunities to strengthen Syria’s entrepreneurial ecosystem [29]. Such initiatives can provide structured mechanisms for entrepreneurship development by linking startups with finance, mentorship, technology, markets and international partners. Their effectiveness, however, will depend on implementation capacity, accessibility, transparency and coordination between public institutions and private-sector actors. Startup programs should not limit their support to major cities or to a small group of established

entrepreneurs [25]. Supporting inclusive programs for women, young entrepreneurs, rural innovators, displaced populations, and early-stage companies could broaden entrepreneurship's economic benefits. Ultimately, building a resilient startup ecosystem requires coordination among multiple stakeholders. Government institutions must provide predictable regulations, improve infrastructure, facilitate investment and create an enabling business environment. Investors can provide financial capital and strategic expertise, and the international donor community can help mitigate risk and support capacity-building programs. Universities can bring research, skills, and innovation, and technology organisations can provide technical platforms and market access. Entrepreneurs remain central because ecosystem policies are effective only when they meet businesses' real needs [24].

Therefore, this study concludes that sustainable startup development is not one institution's job but requires joint action from government agencies, investors, international donors, universities, technology organisations, and entrepreneurs [22]. Overall, the Syrian technology-startup ecosystem is in a critical but potentially transformative phase. The fact that over 200 startups now exist shows that entrepreneurial activity has survived extraordinary economic and institutional pressures. Still, the small number of ventures at the growth stage indicates the ecosystem's fragility. The four interlinked issues of finance, regulation, infrastructure and human capital are mutually reinforcing and therefore need an integrated policy response. At the same time, sanctions relief, diaspora engagement, early institutional initiatives, digitalisation, and the country's youth bulge offer important opportunities for reconstruction [27]. The evidence points to the need for Syria to move beyond a narrow focus on startup creation to a broader ecosystem strategy focused on scalability, resilience, inclusion and international connectedness. Stronger regulations, greater access to financing, rebuilt digital infrastructure, developed human capital and promoted innovation can create the conditions for startups to become sustainable engines of employment and economic growth. In this sense, technology entrepreneurship can be more than a private-sector activity: it can be an important part of Syria’s broader post-conflict recovery strategy, helping translate economic disruption into opportunities for innovation, employment, digital transformation and long-term sustainable development [30].

2. Literature Review

The entrepreneurial ecosystems literature provides a key theoretical basis for understanding technology-startup development in post-conflict Syria. Isenberg [12] articulates six interdependent domains of an entrepreneurial ecosystem: policy, finance, culture, support, human capital, and markets. These dimensions indicate that startup development depends on the interaction of several economic, institutional and social factors rather than on individual entrepreneurs. Standard ecosystem models often assume relatively stable economies and may not fully account for entrepreneurial activity in fragile and conflict-affected contexts. Roundy et al. [16] contend that entrepreneurial ecosystems are resilient under crisis conditions through decentralised improvisation and adaptive responses rather than centralised planning. Williams and Vorley [21] similarly emphasize that entrepreneurship in post-conflict settings can support economic recovery by creating employment and alternative livelihoods. These views are especially pertinent to Syria, where years of conflict have degraded formal institutions, infrastructure, markets and access to finance. The distinction between opportunity- and necessity-driven entrepreneurship is also relevant in fragile economies. Williams [28] explains that in post-conflict environments, people may pursue entrepreneurship mainly because of limited employment opportunities and economic insecurity. Necessity-driven entrepreneurs can sustain household livelihoods, but businesses may remain small and informal, limiting their ability to scale. Salvi et al. [18] highlight this duality of informality: informal enterprises can provide economic survival when strong formal institutions are absent. Still, they can also restrict access to capital, legal protection and larger markets.

These features matter in Syria, given the protracted conflict and institutional decay that have created space for survival-oriented entrepreneurial activity. Bostani [2] describes the Syrian startup ecosystem as a fragile post-war environment in which formal support structures remain limited and many businesses struggle to progress beyond their early stages. Comparative research suggests that entrepreneurship can play an important role in post-conflict reconstruction. Naudé and Power [15] argue that entrepreneurship is a key mechanism for job creation, livelihood recovery and economic reconstruction in conflict-affected societies. Rwanda’s experience illustrates how government commitment and targeted support can improve entrepreneurial development, including greater participation by women entrepreneurs. Belitski et al. [8] show that entrepreneurial support organisations in Bosnia and Herzegovina helped overcome institutional weaknesses and foster private-sector development, despite the challenge of sustaining external support. Jaklič et al. [5] also emphasise the need for financing mechanisms and strategic collaboration to support entrepreneurship in difficult economic environments. Another pertinent example is Kosovo, where diaspora investment, mentorship and knowledge transfer have contributed to economic development. Williams [28] suggests that formal mechanisms for diaspora participation can mobilise financial resources, expertise and international networks that might otherwise remain outside the domestic economy. But the Syrian context differs from many other post-conflict cases. The degree of destruction, poverty, institutional decay and economic disruption has created an especially difficult environment for entrepreneurship. Aram Lab notes that long-term conflict, sanctions, institutional weakness and limited formal support infrastructure characterize Syria’s entrepreneurial ecosystem.

The 14-year conflict has also severely affected government institutions, the education system, physical infrastructure and private sector networks. The World Bank [29] further identifies the economic consequences of conflict, including significant GDP reductions and increased poverty. Thus, post-conflict entrepreneurial development in Syria must move beyond restoring pre-conflict institutions and instead establish new institutional structures that support a modern, digitally oriented economy. Entrepreneurial support organisations increasingly recognise fragile entrepreneurial ecosystems as important actors. Startup Syria [20] identifies system design, community building and institutional scaffolding as key approaches to strengthen entrepreneurial activity in Syria. Such approaches link short-term startup support with long-term ecosystem development. Zex Pr Wire [9] stresses the significance of small-scale interventions and early wins in generating momentum in fragile environments. Hatahet [11] also argues that local actors should lead in identifying challenges and developing appropriate solutions because they have contextual knowledge external organisations may lack. MENA Startup Digest [4] and Startup Syria [20] also emphasise building on existing local organisational capacity rather than promoting long-term dependence on external support. Sustained support requires long-term funding, flexibility, strong relationships with local stakeholders, and continuous learning and adaptation. Short-term projects, rigid program structures, limited local ownership and failure to address structural constraints can undermine the effectiveness of entrepreneurial support initiatives. The digital economy provides further opportunities for entrepreneurial resilience in conflict-affected societies.

Ameen et al. [13] note that the Ukrainian experience shows conflict can drive technology use and inspire startups to develop innovative solutions to crisis-related problems. Similarly, Quansah [10] shows how Palestine's technology ecosystem developed despite electricity shortages, movement restrictions, payment difficulties, and limited financial resources. These experiences show that constraints can motivate entrepreneurs to develop flexible, innovative business models. For Syria, Bostani [2] sees the country’s young, tech-savvy population as a key opportunity. However, limited internet access, uncertainty about digital adoption, and unfamiliarity with digital services remain barriers. According to Fathallah et al. [14], young, technology-oriented populations, mobile-phone penetration, diaspora networks, and open-source technologies are important resources for digital entrepreneurship in conflict-affected economies. However, infrastructure, financing, regulation, and human-capital constraints remain substantial challenges. The World Bank [29] points out infrastructure damage, limited access to capital, regulatory barriers and human-capital erosion as the main challenges to economic recovery. These are especially vital for technology startups, where digital business basics, reliable electricity, telecommunications, internet access, financial services and skilled employees are essential. “The displacement and migration of skilled Syrians has led to a significant loss of technical and entrepreneurial expertise. Fathallah et al. [14] show that conflict-driven erosion of human capital can limit entrepreneurship and long-term economic recovery.

The Syrian diaspora is also an important potential source of investment, knowledge, mentorship and connections to international markets. Williams [28] argues that a successful engagement with the diaspora can transform migration networks into productive economic assets for post-conflict reconstruction. While a growing body of research exists on post-conflict entrepreneurship, significant gaps remain for Syria. Empirical research on the Syrian startup ecosystem is sparse, especially as conflict and security constraints limited systematic study before the political transition. Bostani [2] and Startup Syria [20] provide new evidence on Syria's entrepreneurial landscape, but further academic analysis is needed to understand how startups can contribute to long-term recovery. The link between digital transformation and post-conflict reconstruction is also weakly theorised in the Syrian context. Further research is needed on the potential contribution of diaspora engagement, sanctions relief, institutional reform and emerging support mechanisms. Much of the existing comparative literature has focused on relatively successful cases such as Rwanda and Kosovo. Little attention has been paid to environments facing the combination of prolonged conflict, institutional decay, infrastructure destruction and economic isolation that Syria faces. This study fills these gaps by drawing on entrepreneurial ecosystem theory, resilience perspectives, digital-economy scholarship, and comparative evidence to explore the challenges and opportunities shaping Syria’s technology-startup ecosystem.

3. Methodology

The research technique is qualitative, exploratory, and analytical, and it is used to evaluate the obstacles and prospects of building a resilient technology-startup ecosystem in post-conflict Syria. A qualitative approach is suitable because the study examines complex economic, institutional, social, technological and entrepreneurial factors that cannot be captured by numerical indicators alone. The exploratory dimension allows the research to explore a developing startup environment where institutions, finance methods, infrastructure, and regulatory conditions are still evolving. The analytical part assesses existing evidence and uncovers the links between conflict-related disruption and the capacity of entrepreneurs, support institutions and markets to recover and adapt. The research relies mainly on secondary material and documentary analysis. The review covers academic literature, official publications, international organisation reports, entrepreneurship studies, development reports and available evidence on Syria’s economic and startup environment. Key sources include publications from the World Bank, the United Nations Development Programme (UNDP), the Council on Foreign Relations, Syrian government institutions, Startup Syria, Aram Lab and other related entrepreneurial and development organisations. These sources provide evidence on economic conditions, entrepreneurial activity, institutional arrangements, technology development, and post-conflict recovery. Using

multiple sources also helps the study compare perspectives and build a clearer picture of the burgeoning startup ecosystem (Table 1).

Table 1: Primary methodological dimensions

Method / Source	Examples	Analytical Contribution
Documentary Analysis	Academic literature, government publications, development reports	Establish economic, institutional, and startup context
Institutional Sources	World Bank, UNDP, Startup Syria, Aram Lab, Syrian institutions	Examine ecosystem conditions and support mechanisms
Thematic Analysis	Four core ecosystem dimensions	Identify recurring patterns and relationships
Theoretical Frameworks	Isenberg framework and resilience theory	Interpret ecosystem interaction and adaptive capacity
Comparative Cases	Rwanda, Bosnia and Herzegovina, Kosovo, Palestine, Ukraine	Identify contextual lessons for resilience

The documentary analysis is based on facts about the economic impact of protracted conflict, institutional deficiencies, startup dynamics, infrastructure conditions, financial constraints, regulatory impediments, demographic shifts and recovery efforts. Researchers place special emphasis on issues that affect technology entrepreneurs' ability to start, run, develop and sustain enterprises. Researchers examine data on access to cash, internet connection, business regulation, market access, skilled workers, entrepreneurship-support organisations, and international participation. Researchers also examine relocation, migration and loss of productive capacity, which influence the availability of entrepreneurial and technical expertise. Thematic analysis is used to organise the assembled evidence. The approach is structured around four key dimensions: financial and capital limits, regulatory and institutional impediments, infrastructural inadequacies, and depreciation of human capital. Financial restrictions include lack of access to investment, credit, venture capital, banking services and other forms of entrepreneurial finance. Regulatory and institutional impediments are shortcomings in governance, administrative procedures, corporate regulation and institutional support. Infrastructure gaps include a lack of telecommunications, internet access, electricity, digital services, and other infrastructure technology entrepreneurs need. Human capital loss includes skills shortages, displacement, migration and challenges in attracting and retaining competent experts.

The analysis draws on Isenberg's entrepreneurial ecosystem paradigm, which considers the relationship between policy, finance, support institutions, human capital, culture and markets. This perspective treats the startup ecosystem as an integrated system rather than isolating specific hurdles. Resilience theory is also applied to measure how entrepreneurs, support organisations, and ecosystem institutions respond to protracted upheaval and uncertainty. In this context, resilience refers to adapting business models, continuing activities under adverse conditions, using digital technologies, seeking other markets, activating diaspora networks and adapting to changing institutional and economic conditions. Together with documentary and thematic analysis, the study uses a comparative case technique. Insights from other post-conflict or conflict-affected situations (Rwanda, Bosnia & Herzegovina, Kosovo, Palestine, and Ukraine) are drawn to provide contextual insights pertinent to Syria. These cases are not accepted as direct models, as every country has diverse political, economic, institutional and social variables. Rather, they offer insights into entrepreneurship development, digital innovation, diaspora participation, institutional support, funding and ecosystem resilience. The comparison may help uncover both recurring ways to develop entrepreneurial ability and the limitations of transferring policies across national contexts (Table 2).

Table 2: Data sources and analytical approaches

Dimension	Focus of Analysis	Purpose
Financial and Capital Constraints	Investment, credit, venture capital, banking, and startup finance	Identify barriers to startup creation and scaling
Regulatory and Institutional Barriers	Governance, business regulation, administration, and support institutions	Assess institutional conditions affecting entrepreneurship
Infrastructure Deficits	Internet, telecommunications, electricity, and digital services	Evaluate technological foundations for startups
Human Capital Erosion	Skills shortages, migration, displacement, and retention	Assess availability of entrepreneurial and technical talent

The methodological approach includes collecting documents, appraising sources, thematic analysis, theoretical interpretation, comparative evaluation and synthesis. Initial identification and assessment of relevant academic, governmental and institutional

papers. Evidence is then organised around the key obstacles influencing Syria's startup environment. The results are discussed through entrepreneurial ecosystem and resilience perspectives and compared with selected international cases. In the final summary, the study identifies policy opportunities related to sanctions relief, diaspora engagement, organisations supporting entrepreneurship, digital infrastructure, finance methods, and human-capital development. Overall, this technique presents an integrated assessment of Syria's burgeoning technology-startup ecosystem, drawing on qualitative information, thematic analysis, theoretical frameworks and comparative experience. It aims to understand how conflict-related restrictions interact with entrepreneurs' and institutions' responses to these constraints. This method supports realistic recommendations to boost entrepreneurship, digital innovation, institutional capacity, access to financing, human capital and long-term economic recovery. The report connects Syria's specific issues with broader ideas of ecosystem and resilience and provides a structured platform for building an inclusive, sustainable and resilient digital economy. The technique also acknowledges that secondary evidence may vary in scope, date and institutional perspective. Information is therefore understood in relation to its documentation, considering the period addressed and the aim of each source. This supports a tempered view of Syria's developing startup ecosystem and avoids using isolated observations as a proxy for the whole ecosystem.

4. Results and Discussions

4.1. The Syrian Context: From Conflict to (Potential) Recovery

Syria's thirteen-year civil war (2011–2024) inflicted catastrophic damage on the country's economic and social fabric. The conflict, described as the world's deadliest and one of the most protracted of the past three decades, resulted in over 500,000 deaths and the displacement of approximately 13.5 million people—more than half of Syria's pre-conflict population. The economic toll has been equally devastating: GDP shrank by 54 percent between 2010 and 2021, with real GDP projected to contract further in 2024. Poverty affected 69 percent of the population as of 2022, with extreme poverty—virtually non-existent before the conflict—affecting more than one in four Syrians. The fall of the Assad regime in December 2024 marked a watershed moment, creating unprecedented opportunities for political transition and economic reconstruction. For the first time in decades, young Syrians have a real opportunity to craft an entrepreneurial future, yet the path remains unclear and has no precedent. The international community has recognized the urgency of moving beyond emergency relief toward supporting early recovery, reconstruction, and economic rehabilitation. However, the challenge remains immense. The UNDP has warned that at current growth rates, Syria's economy will not regain its pre-conflict GDP level before 2080—55 years from now.

This projection underscores the need for alternative growth pathways that can accelerate recovery and create meaningful employment opportunities for Syria's young population. The Syrian economy faces multiple structural challenges. The destruction of physical infrastructure—including factories, roads, ports, and telecommunications networks—has crippled productive capacity. The banking system is undercapitalized and cannot provide the financing businesses need. International sanctions, while partially lifted, created a legacy of isolation that will take years to overcome. Demographic changes compound these challenges. The displacement of over half the population has resulted in a massive brain drain, with many of Syria's most educated and skilled citizens now living abroad. Those who remain are disproportionately young, with limited employment opportunities and uncertain prospects. Despite these challenges, there are grounds for optimism. The Syrian people have shown remarkable resilience throughout the conflict, and the entrepreneurial spirit that sustained many through the leanest years now has a chance to flourish. The lifting of major sanctions has begun to erode the isolation that long stifled innovation. The international community has signaled its willingness to support recovery, with the UNDP and other agencies launching programs to support entrepreneurship and digital innovation.

4.2. The Current State of Syria's Startup Ecosystem

Despite the overwhelming difficulties, entrepreneurship has not vanished from Syria. According to the 2025 Startup Syria report, over 200 startups currently operate in the country, mainly in digital services, e-commerce, fintech, logistics, and food services. However, the ecosystem remains severely underdeveloped: only a dozen ventures have reached the growth stage, and most startups are less than three years old. Geographically, Damascus remains the primary hub, hosting 33.57 percent of startups, followed by Homs (14.71 percent) and Aleppo (12.14 percent). Emerging clusters are also solidifying in Latakia and other urban centers. This geographical concentration reflects the uneven distribution of infrastructure, talent, and market access across the country. A significant and encouraging demographic shift is underway: female founders now account for about 35 percent of the ecosystem, up from 22.4 percent in 2015 and 4.4 percent in 2009. Women are taking leading roles in edtech, healthcare, and the creative industries. This increase in female participation reflects broader social changes and the recognition of women's economic potential.

The ecosystem is underpinned by "anchor" companies like BeeOrder—a food delivery app that has become a symbol of grit and resilience—and YallaGo, a smart transportation solution covering seven Syrian governorates. These ventures survived the lean years, cultivated user behavior, and demonstrated that entrepreneurship remains a viable path despite overwhelming

difficulties. However, the ecosystem remains fragile. Most startups are concentrated in relatively low-tech sectors, and few have achieved the scale necessary to compete regionally or internationally. Without formal investment channels, most startups remain undercapitalized and unable to pursue ambitious growth strategies. The Syrian government has recognized entrepreneurship's potential and set ambitious targets: building a startup ecosystem that launches 1,000 companies and attracts up to $200 million in venture capital by 2028. While these targets are aspirational, they signal a commitment to supporting entrepreneurship as a driver of economic recovery (Figure 1).

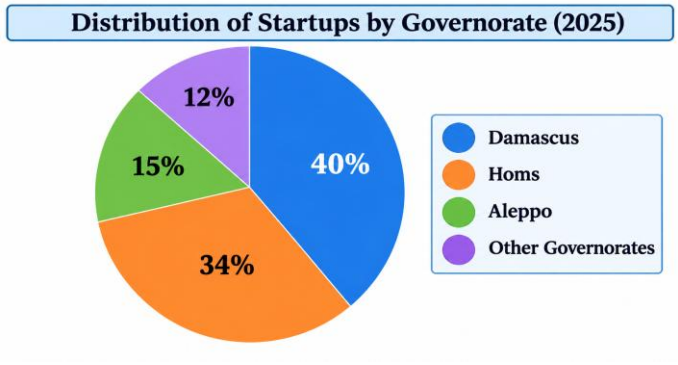


Figure 1: Distribution of startups by governorate (2025)

4.3. The Four Pillars of Challenge

4.3.1. Financial and Capital Constraints

The most pressing challenge facing Syrian startups is the lack of investment capital. Syria's financial ecosystem is barren compared to regional markets that benefit from venture capital, private equity, and angel investors. Most startups rely on personal savings, family contributions, and small grants to launch. Formal investment channels are nearly non-existent: development finance institutions, venture capital, private equity, and angel investors remain largely absent (Figure 2).

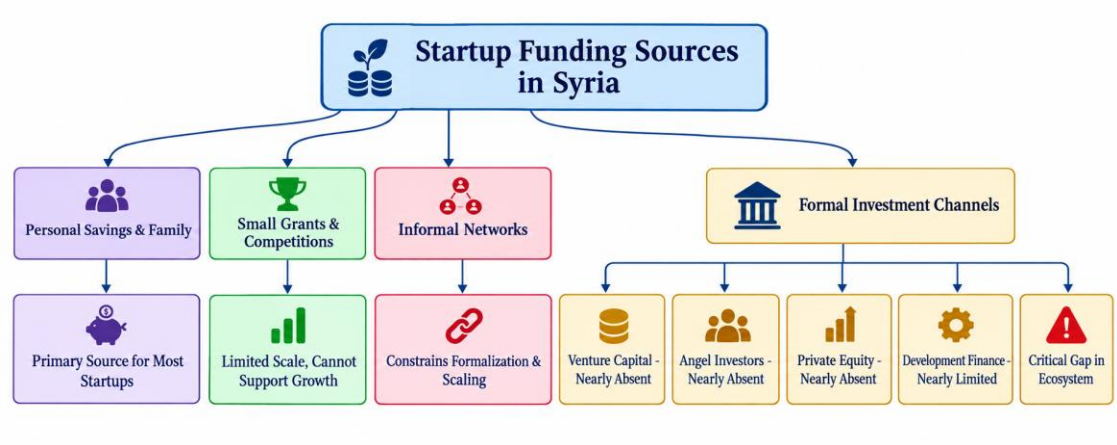


Figure 2: Startup funding sources in syria

The consequences of this funding gap are severe. Promising ventures often stall after initial assistance ends, and founders risk becoming dependent on aid rather than building market-ready ventures. Without follow-up support or pathways to investment, many entrepreneurs cannot move from idea to a viable business. As one economic consultant observed, "The current banking system is one of the obstacles, as it is undercapitalized and not proactive towards projects." International sanctions add another layer of complexity. While sanctions aimed to pressure the previous regime, they also made it harder for legitimate Syrian businesses to function. International investors remain hesitant to engage with Syrian startups due to regulatory and compliance risks. As a result, the ecosystem survives on minimal capital and cannot break into high-growth sectors or attract global attention. The Syrian government has recognized this challenge and set ambitious targets to attract venture capital. The National Startup Agenda (2025–2030) includes provisions to facilitate access to financing and create a more favorable investment environment. The Syria Angels Network, launched in July 2025, aims to connect early-stage Syrian startups with local and

diaspora investors, with over 30 investors committing approximately $10 million to support early-stage ventures. However, these initiatives remain in their infancy. The gap between ambition and reality remains substantial, and it will take years to build the financial infrastructure necessary to support a thriving startup ecosystem. The challenge is compounded by a weak banking system that remains undercapitalized and unable to provide the financing businesses need.

4.3.2. Regulatory and Institutional Barriers

Syria's regulatory framework significantly hinders business growth. The registration process is cumbersome, taxation policies are unclear, and the legal framework lacks transparency. Entrepreneurs often resort to informal networks, limiting their ability to scale and access formal support mechanisms. The institutional architecture required to support a functioning startup ecosystem is largely absent. Formal infrastructure, such as incubators and accelerators, is virtually nonexistent. Outdated, centralized regulations from the pre-conflict era remain in place and ill-suited to the needs of technology startups. As the Aram Lab report in 2026 notes, a "structural gap" exists where entrepreneurial ambition outpaces the institutional architecture needed to support it. Recent developments offer cautious optimism. The Syrian Ministry of Communications and Information Technology officially unveiled the "National Agenda for Startups (2025–2030)" in April 2026, the first comprehensive national framework for organizing and supporting the entrepreneurial ecosystem. The agenda aims to create a qualitative shift in the technical business environment by facilitating company formation, improving access to financing, and opening new markets for entrepreneurs (Figure 3).

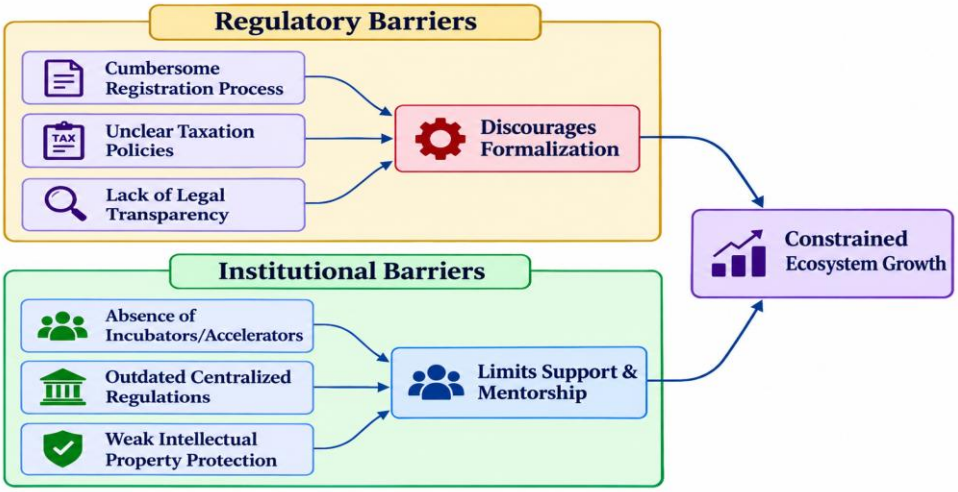


Figure 3: Regulatory and institutional barriers

Minister Abdul Salam Haykal described the initiative as a "pivotal moment in the history of Syrian entrepreneurship," emphasizing that startups have become an essential pillar of economic recovery, job creation, and productivity improvement. However, a substantial gap remains between policy formulation and implementation. The agenda's success depends on effective coordination between government institutions, universities, the private sector, and entrepreneurial support organizations. As one analysis noted, "Syria's entrepreneurial ecosystem holds significant opportunities. The country has a young, tech-savvy population eager to contribute. Nevertheless, its promise is hindered by limited access to capital, sanctions, and a lack of regulatory frameworks that support startups." Intellectual property protection represents a particularly significant challenge. Without effective IP enforcement, entrepreneurs are reluctant to invest in innovation, and investors hesitate to fund ventures that cannot protect their competitive advantages. Strengthening IP protection will require both legal reform and institutional capacity-building. Corruption and rent-seeking also present significant obstacles. While the fall of the Assad regime has reduced the most egregious forms of corruption, informal payments and bureaucratic delays continue to constrain business activity. Addressing these challenges requires not only legal reform but also a broader shift in institutional culture.

4.3.3. Infrastructure Deficits

Over a decade of conflict has devastated the physical and digital infrastructure startups need to operate. Collapsing infrastructure—including unreliable electricity, damaged telecommunications networks, and destroyed transportation systems—fundamentally constrains business operations. As one observer noted, "daily realities—such as unstable electricity and damaged water networks—remain harsh." Internet penetration remains limited, and connectivity is often unreliable. For digital-first startups, this creates fundamental operational challenges. As a Syrian founder observed, "infrastructure issues, slow

internet, and capital constraints due to sanctions remain significant barriers." The digital divide between urban centers and rural areas further constrains market expansion and limits the reach of digital services (Figure 4).

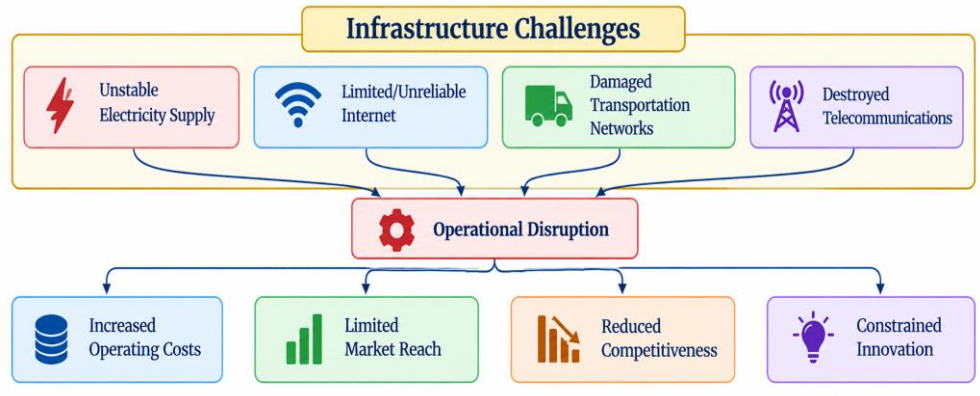


Figure 4: Infrastructure challenges and impacts

The government has acknowledged these challenges and is working to remove obstacles facing the communications and technology sector. The inauguration of "Tech Town" in Damascus—an innovation hub offering office space, meeting rooms, event venues, and specialized laboratories for artificial intelligence, cybersecurity, and virtual reality—represents a tangible step toward rebuilding digital infrastructure. Similarly, the UNDP-implemented Digital Innovation Center (DIGIT), funded by the Japanese government, aims to empower youth in tech entrepreneurship, promote digital innovation, and support startups with effective digital solutions. However, these initiatives remain small relative to the infrastructure deficit. Rehabilitating telecommunications networks, in particular, requires substantial investment that the Syrian government cannot provide alone. International donors and private investors will need to play a significant role in rebuilding digital infrastructure. The infrastructure deficit also creates opportunities for innovation. As one report noted, "Syria's markets are structurally weak and fragmented, yet they offer a 'golden age' for problem-solving ventures in 'keystone' sectors like agriculture, construction, and renewable energy." The same deficits that constrain entrepreneurship also create opportunities for innovative solutions to address pressing needs.

4.3.4. Human Capital Erosion

The conflict has taken a devastating toll on Syria's human capital. The displacement of approximately 13.5 million people—over half the population—has resulted in a massive brain drain (Figure 5).

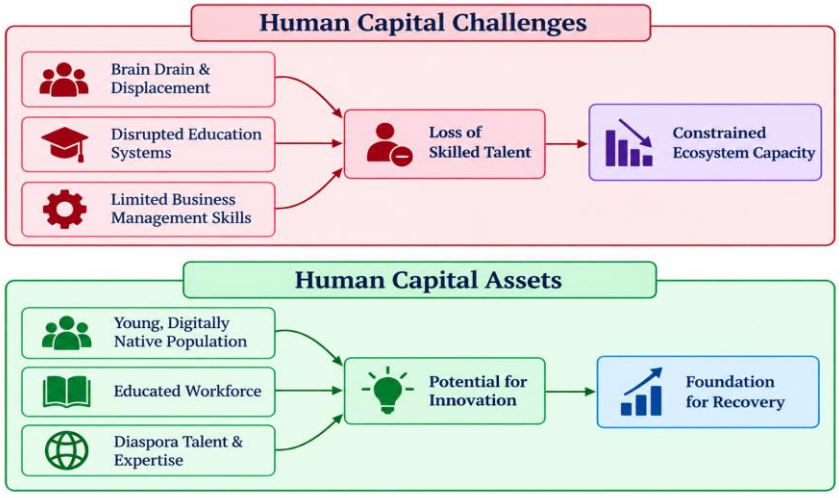


Figure 5: Human capital challenges and assets

Education and training systems have been disrupted, leaving many entrepreneurs without essential business and financial management skills. The erosion of human capital represents perhaps the most insidious challenge, as it undermines the very

foundation of sustainable ecosystem development. The demographic profile of those who remain in Syria is disproportionately young and less educated than the pre-conflict population. Many of the country's most skilled and experienced professionals have emigrated, and the education system has struggled to produce graduates with the technical and business skills a modern economy needs. Despite these challenges, Syria retains significant human capital assets. The country's youth population is digitally native, highly educated by regional standards, and eager to help rebuild the economy. Syrian entrepreneurs abroad have built successful businesses, secured funding, and gained expertise in global markets. The challenge lies in connecting this talent—both within Syria and in the diaspora—with opportunities, mentorship, and capital.

The government has placed youth at the center of its entrepreneurial strategy, recognizing them as the digital economy's primary asset. The National Startup Agenda aims to encourage innovative projects in universities and turn scientific research into high-potential enterprises in fields such as software, artificial intelligence, e-commerce, and digital services. As the Minister of Higher Education and Scientific Research affirmed, "the true investment begins with talent," underscoring the state's intent to help young people turn their ideas into productive projects. Rebuilding human capital will require sustained investment in education and training, both within Syria and through diaspora engagement. The education system must be reformed to emphasize entrepreneurship, digital literacy, and business skills. Mentorship programs that connect experienced entrepreneurs with emerging founders can accelerate skill development. Diaspora engagement can also bring global expertise and networks to bear on local challenges.

4.4. Emerging Opportunities: The Turning Point

4.4.1. Sanctions Relief and Market Opening

The year 2025 marked a pivotal shift in the geopolitical and economic environment. The European Union's lifting of major sector-specific sanctions on banking, energy, and transport, alongside the United States' historic move to permanently repeal the Caesar Act through the 2026 National Defense Authorization Act, began to erode the isolation that had long stifled Syrian innovation. These legislative changes, combined with updates to UK and Australian sanction regimes, fundamentally altered the conditions under which Syrian entrepreneurs operate. While daily realities remain harsh, removing secondary sanctions has allowed the first tentative inflows of capital and the re-engagement of third-party investors. In July 2026, Syria announced its first foreign venture capital investment—$10 million in the local super-app startup Labbay—representing a milestone in the ecosystem's development.

As one analysis noted, "for investors, Syria's re-entry expands the region's innovation map." Lifting sanctions also facilitates international partnerships and market access. Syrian startups can now more easily collaborate with international partners, attend global events, and access international markets. This integration into the global economy, while still in its early stages, creates opportunities for knowledge transfer, partnership development, and market access. However, sanctions relief will not automatically deliver benefits. The legacy of isolation means that many international actors remain hesitant to engage with Syria, and the institutional capacity to facilitate international partnerships remains limited. Rebuilding international trust and developing the institutional infrastructure needed for global engagement will require sustained effort.

4.4.2. Institutional Support Infrastructure

Establishing institutional support mechanisms is another critical opportunity. Tech Town, inaugurated in Damascus in July 2026, provides an integrated ecosystem for startups, offering office space, meeting rooms, event venues, and specialized laboratories. The hub aims to connect entrepreneurs, investors, and experts while helping transform innovative ideas into market-ready projects. Launched in August 2025, UgaritLabs positions itself as a venture catalyst and innovation hub, offering end-to-end services, including incubation, business development, operational support, and regional expansion strategies. Named after the ancient Syrian city of Ugarit, the birthplace of the alphabet, UgaritLabs symbolizes invention, culture, and communication. The lab aims to launch its first accelerator cohort by the end of 2025.

The UNDP-implemented Digital Innovation Center (DIGIT), funded by the Japanese government, provides a physical center for prototyping and vocational training. These initiatives, though still limited in scale, mark the beginning of institutional scaffolding essential to ecosystem development. These institutions' effectiveness will depend on their ability to deliver value to entrepreneurs and adapt to evolving needs. Successful institutions in other post-conflict contexts have demonstrated the importance of flexibility, local ownership, and sustained funding. The Syrian institutions will need to learn from these experiences while developing approaches appropriate to the local context. Coordination among institutional actors will be critical. The National Startup Agenda provides a coordination framework, but effective implementation will require ongoing collaboration among government ministries, universities, entrepreneurial support organizations, and international partners (Figure 6).

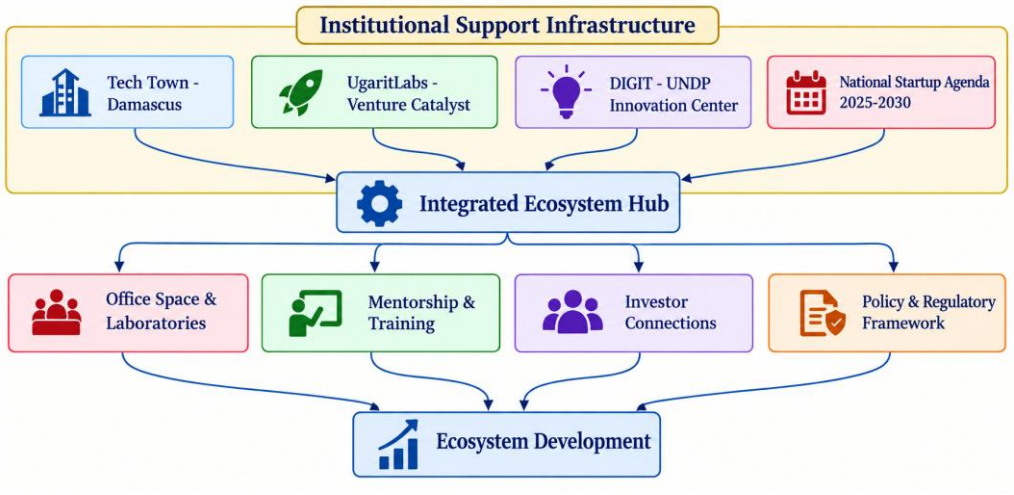


Figure 6: Institutional support infrastructure

4.4.3. Diaspora Engagement

The Syrian diaspora represents an untapped resource of immense potential. Over the past decade, Syrian entrepreneurs abroad have built successful businesses, secured funding, and gained expertise in global markets. With appropriate engagement, the diaspora could bring capital, mentorship, and networks to Syria's startup ecosystem. This approach has worked elsewhere: Kosovo's diaspora-driven investment strategy provides a compelling model. The Syria Angels Network, launched in July 2025, represents a concrete step toward mobilizing diaspora investment. At its founding gathering, over 30 investors from Syria and the diaspora committed approximately $10 million to support early-stage Syrian startups. SYNC, a California-based, volunteer-led non-profit founded by members of the Syrian tech diaspora, aims to mobilize Syrian tech talent abroad and connect them with opportunities back home. The ecosystem also made its presence felt internationally, with Syria participating in GITEX Expand North Star under the banner "Syria Is Online" and the SYNC 25 conference in Silicon Valley reconnecting Syrian-American tech expertise with founders on the ground.

For the first time in a decade, the Syrian ecosystem physically bridged the gap with the global tech community in 2025. However, diaspora engagement faces significant challenges. The Syrian diaspora is geographically dispersed and politically diverse, making coordination difficult. Many diaspora members have been away from Syria for years or decades and may lack current knowledge of local conditions. The legacy of conflict and division may make some diaspora members reluctant to engage with an unstable country. Overcoming these challenges will require sustained effort and strategic investment. Formal channels for diaspora engagement, such as investment networks and advisory councils, can provide structure and accountability. Diaspora members who have maintained ties with Syria can bridge the gap for those who have been away longer. The government can also incentivize diaspora engagement through tax benefits, streamlined processes, and recognition of diaspora contributions.

4.4.4. International Recognition and Integration

Syria's re-entry into the international community has created opportunities for international recognition and integration. Syria's debut at Türkiye's Teknofest, showcasing drones and agri-tech innovations, signaled the country's re-entry into regional technology networks. Syrian startups have begun winning international recognition: edtech startup TarKeys won an $8,000 grant from TiE Dubai after pitching at Expand North Star. This international integration, though still early, creates opportunities for knowledge transfer, partnership development, and market access. As one observer noted, "Syria's re-entry expands the region's innovation map." The challenge lies in sustaining and deepening this integration while building the domestic institutional capacity to support ecosystem development.

International recognition also gives Syrian entrepreneurs opportunities to access global markets. Syrian startups that can demonstrate their capabilities on the international stage may attract customers, partners, and investors worldwide. This export-oriented approach can help Syrian startups achieve the scale necessary for sustainable growth. However, international integration also creates challenges. Competition from more established international players may be difficult for nascent Syrian startups. Brain drain may increase as Syrian entrepreneurs gain international recognition and opportunities abroad. Balancing the benefits of international integration with the need to build domestic capacity will be a critical challenge:

- **Toward a Resilient Digital Economy:** Building a resilient digital economy in post-conflict Syria requires a multi-dimensional approach that addresses the interconnected challenges identified above.
- **First, financial ecosystem development:** This requires establishing formal investment channels, including venture capital funds, angel investor networks, and development finance mechanisms. The government's target of attracting $200 million in venture capital by 2028, while ambitious, provides a useful benchmark. However, achieving this target will require regulatory reform, building investor confidence and developing a pipeline of investment-ready startups.
- **Second, institutional and regulatory reform:** This includes streamlining business registration, clarifying tax policies, strengthening intellectual property protection, and creating a transparent legal framework for startups. The National Startup Agenda (2025–2030) provides a policy foundation, but effective implementation requires sustained political commitment and institutional capacity-building.
- **Third, human capital development and diaspora engagement:** This involves investing in education and training, creating pathways for diaspora engagement, and building mentorship networks that connect experienced entrepreneurs with emerging founders. Syria's youth population, its greatest asset, must have the skills and opportunities to drive digital transformation (Figure 7).

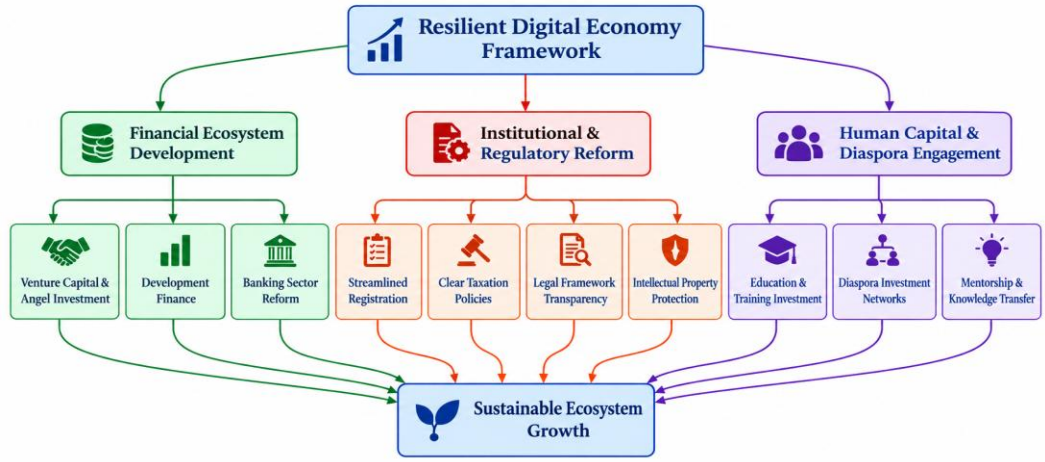


Figure 7: Resilient digital economy framework

This framework emphasizes the interdependence of the three pillars. Without regulatory reform, financial ecosystem development will be constrained by an unfavorable investment climate. Regulatory reform without financial ecosystem development will fail to unlock the capital needed for growth. Human capital development without diaspora engagement will miss the opportunity to leverage global expertise. All three pillars must advance in tandem to build a sustainable ecosystem. The framework also emphasizes resilience—the ecosystem's capacity to withstand and recover from shocks. In a post-conflict context characterized by ongoing instability and uncertainty, resilience is not merely desirable but essential. This requires diversified funding sources, adaptable regulatory frameworks, and flexible institutional structures that can respond to changing circumstances.

5. Results

The analysis yields several significant findings regarding the state and trajectory of Syria's tech-startup ecosystem:

- The ecosystem exists but remains critically underdeveloped. Over 200 startups are active in Syria, mostly in digital services, with a geographic concentration in Damascus. However, only a dozen ventures have reached the growth stage, and most are less than three years old. The ecosystem exhibits what scholars describe as a "structural gap" where entrepreneurial ambition outpaces institutional architecture.
- Financial constraints represent the most severe barrier to growth. The near-absence of formal investment channels—venture capital, private equity, and angel investors—creates a funding gap that prevents promising ventures from scaling. Entrepreneurs remain dependent on personal savings, family contributions, and small grants. While initiatives like the Syria Angels Network and the government's $200 million venture capital target signal intent, implementation remains early.

- Regulatory and institutional barriers compound financial constraints. Cumbersome registration processes, unclear tax policies, and limited legal transparency discourage formalization and restrict access to support mechanisms. The National Startup Agenda (2025–2030) provides a policy framework, but effective implementation requires significant institutional capacity-building.
- Infrastructure deficits constrain operational capacity and market reach. Unstable electricity, limited internet penetration, and damaged telecommunications networks create fundamental operational challenges for digital-first startups. While initiatives like Tech Town and DIGIT are important steps, they remain too small to match the scale of the infrastructure deficit.
- Human capital erosion threatens the ecosystem's long-term sustainability. The displacement of over half the population and the disruption of education and training systems have depleted Syria's human capital base. However, the country retains significant assets: a young, digitally native population and a diaspora with global expertise.
- Emerging opportunities support cautious optimism. The lifting of major sector-specific sanctions, the establishment of institutional support mechanisms, diaspora engagement and Syria's re-entry into international technology networks collectively create a more enabling environment for ecosystem development.
- The ecosystem demonstrates remarkable resilience. Despite overwhelming challenges, Syrian entrepreneurs have persisted, and the ecosystem has adapted and innovated. This resilience, while born of necessity, provides a foundation for sustainable recovery.
- Gender dynamics are shifting positively. Female founders now account for approximately 35 percent of the ecosystem, a significant increase from pre-conflict levels. This shift reflects broader social changes and the recognition of women's economic potential.
- International integration is accelerating. Syria's participation in international technology events and diaspora networks signals the country's re-entry into global technology networks. This integration creates opportunities for knowledge transfer and market access.

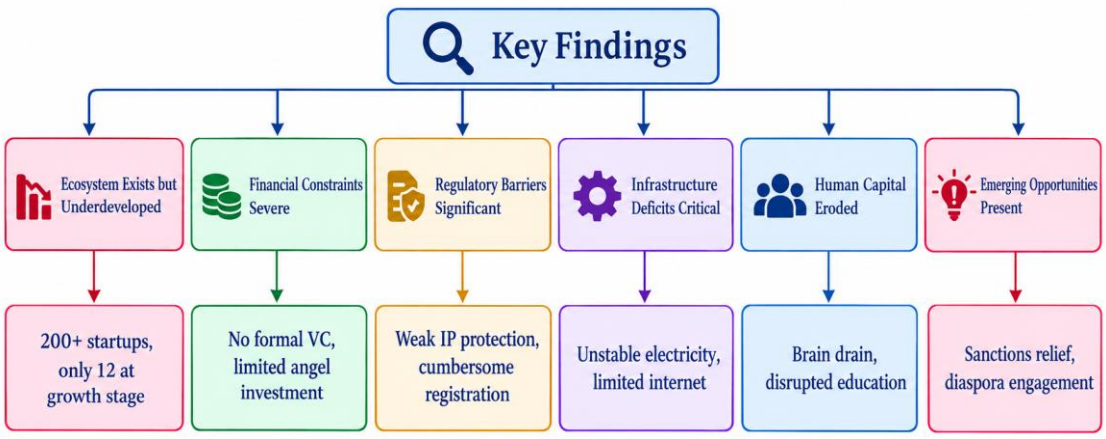


Figure 8: Summary of key findings

Overall, Figure 8 provides a brief overview of the main findings on the Syrian startup ecosystem, highlighting its current challenges and future opportunities. The data show that although over 200 firms exist, few have reached the development stage, indicating an immature ecosystem. Severe financial limitations, restricted access to venture capital, and insufficient angel investment are hampering startups. Major regulatory hurdles, such as weak intellectual property protection and burdensome business registration, also challenge businesses. Furthermore, the ecosystem is still suffering from inconsistent electricity, inadequate internet connectivity, disrupted education and dwindling human capital. Easing sanctions and rising diaspora engagement also offer opportunities for future growth.

6. Conclusion

Syria stands at a historic crossroads. After nearly fourteen years of devastating conflict, the country has an unprecedented opportunity to build a new economic future—one in which entrepreneurship and digital innovation play central roles. The tech-startup ecosystem, though severely underdeveloped, has shown remarkable resilience: over 200 startups remain operational, female participation has surged, and anchor companies have survived the leanest years. However, the path to a resilient digital economy is fraught with challenges. Financial constraints, regulatory barriers, infrastructure deficits, and human capital erosion collectively create a "structural gap" between entrepreneurial ambition and institutional architecture. Bridging this gap requires

sustained commitment from policymakers, international donors, and organizations that support entrepreneurs. The emerging opportunities—sanctions relief, institutional support infrastructure, diaspora engagement, and international integration—offer grounds for cautious optimism. Yet these opportunities must be translated into tangible progress through effective implementation, sustained investment, and adaptive learning. As scholars of post-conflict entrepreneurship have emphasized, building entrepreneurial ecosystems in fragile contexts requires patience, localization, and a willingness to learn from small successes.

The Syrian case offers lessons for other post-conflict settings. It shows that entrepreneurship persists even in the most challenging circumstances, that diaspora engagement can catalyze ecosystem development, and that institutional support—however limited—can lay the foundations for recovery. It also illustrates the profound challenges of building a digital economy amid infrastructure destruction, institutional collapse, and human capital depletion. For Syria, the stakes could not be higher. The UNDP has warned that at current growth rates, the economy will not regain its pre-conflict GDP level before 2080. Entrepreneurship offers a pathway to accelerate this timeline—not through magic or quick fixes, but through the patient, persistent work of building an ecosystem where innovation can flourish, jobs can be created, and dignity can be restored. The young, tech-savvy population that has endured so much deserves nothing less than a concerted effort to unlock their potential and build a resilient digital economy for the future. The challenge is immense, but the opportunity is historic. With sustained commitment, strategic investment, and adaptive learning, Syria can build a digital economy that serves as a model for other post-conflict settings. As one Syrian entrepreneur observed, "Researchers have survived the worst. Now researchers must build the best." This sentiment captures the resilience that has sustained Syrians through the conflict and will be essential for the recovery ahead. The path will not be easy, but the destination—a resilient, inclusive, and prosperous digital economy—is worth the journey.

6.1. Recommendations

Policymakers should focus on regulatory reform to streamline firm registration, define startup taxation policies, implement transparent intellectual property protection, and build a legal environment that promotes entrepreneurship. The National Startup Agenda provides a policy framework, but effective implementation must remain a focus. The government should also establish a separate startup fund with a clear implementation strategy to meet its anticipated $200 million venture capital target. A public-backed venture capital fund might attract private investment and show the viability of the Syrian market. Investments in digital infrastructure should prioritise reliable electricity, increased internet access and improved telecommunications networks, as these basic infrastructure needs are critical to developing the digital economy. Formal structures for diaspora engagement should also be established to stimulate investment, mentorship and knowledge transfer. Tax incentives, co-investment schemes, and diaspora advisory councils could improve existing programs like the Syria Angels Network. At the same time, the education system should be strengthened by including entrepreneurship, technological literacy, and business skills in curricula and by establishing partnerships between institutions and the commercial sector, so graduates gain relevant digital-economy skills. The country also needs to encourage gender-inclusive legislation to ensure women entrepreneurs can access existing startup programs and financial opportunities while addressing the specific challenges they face.

Effective coordination across government ministries, especially those dealing with communications and technology, higher education, finance and the economy, will also be needed to reduce redundancy and ensure consistent policy implementation. International donors can also gradually combine humanitarian aid with longer-term development investment while still acknowledging humanitarian needs. More emphasis should be placed on entrepreneurship training, company development services and infrastructure repair. Startup Syria, UgaritLabs and the DIGIT center, for example, require consistent, flexible funding to build institutional capacity and adapt to evolving conditions. International donors can also support regulatory reform by providing technical assistance on legislation, building institutional capacity and sharing international best practices. Foreign integration can be enhanced by promoting Syrian participation in technology events, helping Syrian and foreign startups find partners, and establishing knowledge-sharing platforms. Donors should also assist the restoration and growth of telecommunications networks, internet connectivity and reliable electricity and encourage private-sector participation in infrastructure projects. The Syrian diaspora is a major potential resource for economic recovery; therefore, more support should be given to diaspora engagement efforts, including investment networks, mentorship programs and knowledge-transfer platforms. International donors should also improve coordination to minimise duplication, bring together complementary expertise and maximise the impact of development measures, including by involving organisations such as the UNDP in a coordinating role.

Entrepreneurial support organisations need to blend short-term activities like pitch competitions and training programs with longer-term institutional growth. Their initiatives must be contextualised by increasing local engagement in governance, acknowledging context-specific obstacles, and generating solutions that respond to community needs rather than relying on externally created approaches. This implies that program design, partnerships and funding arrangements should focus on building local organising capacity to strengthen local competencies, involvement and coordination. Support organisations could

also connect local entrepreneurs with global networks through diaspora participation, international alliances and better access to international markets. As the Syrian ecosystem reconnects with global technological networks, it should develop these opportunities systematically. The focus should be on the quality, sustainability, growth potential and social or economic impact of initiatives rather than the number of businesses generated. Implement strong monitoring and evaluation procedures to measure progress, identify obstacles and support evidence-based adjustments to programs and tactics. Sustainable ecosystem development involves cross-sector cooperation; therefore, collaboration among government ministries, universities and other ecosystem stakeholders should be strengthened. Finally, entrepreneurial support organisations should establish specialised initiatives for women entrepreneurs that address their specific barriers to participation and build on women's growing participation in the startup ecosystem.

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