

Singh, Vijay Kumar

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Policy and regulatory changes for a successful startup revolution: Experiences from the startup action plan in India

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ADB Working Paper Series

**POLICY AND REGULATORY CHANGES
FOR A SUCCESSFUL STARTUP
REVOLUTION: EXPERIENCES FROM
THE STARTUP ACTION PLAN IN INDIA**

Vijay Kumar Singh

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Vijay Kumar Singh is a professor and dean of the School of Law, University of Petroleum and Energy Studies in Dehradun, India.

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Please contact the authors for information about this paper.

Email: vrsingh.vk@gmail.com, vksingh@ddn.upes.ac.in

Asian Development Bank Institute
Kasumigaseki Building, 8th Floor
3-2-5 Kasumigaseki, Chiyoda-ku
Tokyo 100-6008, Japan

Tel: +81-3-3593-5500
Fax: +81-3-3593-5571
URL: www.adbi.org
E-mail: info@adbi.org

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Abstract

In January 2016, the Government of India launched the Startup India initiative, which has transformed the way in which the markets, potential entrepreneurs, and investors view startups. This transformation included a slew of policy measures intended to promote a startup culture and allow younger population members to take risk with their ideas and become “job creators” rather than “job seekers.” India’s demographic dividend required a suitable channelization of human resources. The Startup Action Plan (SAP) of 2016 proposed to address three key areas for empowering potential startups: (i) handholding and simplification; (ii) funding support and incentives; and (iii) incubation and industry–academia partnership. Emerging as the third-largest startup ecosystem of the world, India has potential for enormous growth. There have been several policies at all levels of government, industry, and academia to promote a startup culture. However, it is important to examine these initiatives and determine whether they move beyond the subsidy/tax holiday mindset and work on the root corrections necessary for a robust startup ecosystem. There are several issues that require consideration from the policy and regulatory perspective for a successful startup revolution. This paper explores these initiatives that the Government of India has taken and identifies the gaps that require attention from stakeholders. The paper also investigates the major challenges and potential solutions arising from the Indian experience of initiatives in the startup revolution.

Keywords: startup, legal compliance, financing, investors, global partnerships, entrepreneurship, incubation

JEL Classification: K290, K220, M13, L26, O31, J23, K15, K22, K29

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I see startups, technology and innovation as exciting and effective instruments for India's transformation.

(Narendra Modi, Prime Minister of India)

1. INTRODUCTION

Entrepreneurial initiatives, as a factor of production, are central to the economic development of any country (Tripathi 1971). Traditionally, the majority of the population in India followed the *Varna* system (*Brahmin*—the priest, *Kshatriya*—the warrior, *Vaishya*—the trader, and *Shudra*—the artisan). The Vaishya community was generally associated with commercial activities. The concept of the Hindu undivided family (HUF) as a business entity is unique to India, where family members are coparceners with the eldest member of the family as the decision maker, called *Karta*. The colonial rule in India and the influences of industrialization in Europe changed the social and economic dynamics of commerce, making inroads into the *Varna* system and enabling the permeation of non-business classes into commercial activities (Tripathi 1971).

India has mainly been an agricultural (including animal husbandry, fishing, and forestry) economy. In the 1850s, the textile industries of cotton and jute, and subsequently tea, coal, and paper, sowed the seeds of the modern factory system (Medhora 1965). The literature on the history of industry in India has highlighted divergent perspectives ranging from social and economic to political factors influencing the entrepreneurial spirit (Ray 1994). While discussing startups, one should not forget the rural artisans, self-entrepreneurs like potters, blacksmiths, weavers, cobblers, stone workers, carpenters, engravers, and so on. However, policy making has generally overlooked them, clubbing them together with non-farm workers (Solanki 2018).

The brunt of colonial rule introduced a socialistic pattern of governance in India, and the Indian government opted for a planned economy balancing social and industrial development. The regulations became tighter and sometimes onerous for private enterprises, which led to decelerated growth, inefficiencies, and corruption (Jang, Kim, and Cho 2013). Tight controls and skewness toward public enterprises guided the industrial policy resolutions (Burange and Yamini 2011). While progressive liberalization was apparent following the industrial policy of 1956, significant reform came in 1991 when the government decided to take a series of measures to unshackle the industrial economy from unnecessary bureaucratic control. These measures, among others, aimed to reform the trade policy, foreign exchange policy, industrial licensing policy, competition policy, and so on.

Professor Redlich (1948) reported a tripartite division of entrepreneurial function, that is, capitalist (provider of funds), manager (to manage the nuts and bolts), and entrepreneur in a narrow sense of the term, specifically planner, innovator, and ultimate decision maker (startup owner) (Hoselitz 1952). Broadly, it is possible to categorize entrepreneurs into “imitative” (who follow the beaten track) and “innovative” (who adopt new and improved business methods) groups. Startups focus on these innovative entrepreneurs and their ability to come up with a replicable and scalable business model (Blank 2013).

The “startup” ecosystem emerged globally in the United States (US), in what people popularly refer to as Silicon Valley, mainly constituting information technology (IT) companies such as Google, Apple, HP, Oracle, Cisco, Facebook, Twitter, and so on. Silicon Valley has the highest concentration of startups in the world (Ester 2017). India makes its own contribution to this success through its software engineers who found an abode in Silicon Valley in the 1970s and 1980s. However, it is paradoxical to note that

India could not arrest this “brain drain” due to a lack of policies promoting “innovator entrepreneurs.” However, this trend has changed in the last decade with the vitality of the globalizing cities in India and the prospects that they offer (Chacko 2007). India is one of the largest consumer markets.

One of the significant steps that the Government of India (GOI) took was to launch, in January 2016, the Startup Action Plan (SAP), popularly known as the “Startup India” initiative. The SAP transformed the way in which the markets, potential entrepreneurs, and investors view startups. This transformation included a slew of policy measures intending to promote a startup culture and allow younger population members to take risks with their ideas and become “job creators” rather than “job seekers.” India’s demographic dividend required a suitable channelization of human resources with a focus on handling issues of unemployment and creating first-generation entrepreneurs (Venkatapathy 1989).

1.1 Startup Growth Stages

Defining the stages of startups’ growth could be tricky, as various startup experts have suggested different numbers of stages ranging from three to six (McGowan 2017). In India, it is possible to divide the startup life cycle into four major stages (Department of Industrial Policy and Promotion (DIPP) 2018). However, there are no strict boundaries between these stages, and often there is a twilight zone between them.

Stage 1: Idea Validation—This phase involves having an idea to address a problem or identifying an opportunity with business potential. Entrepreneurs produce a robust business plan and obtain validation from mentors by developing a “prototype” for a pilot run. Until this stage, self-financing (bootstrapping), government grants through universities, or potential investors meet the funding requirements. The potential of a patent or design may attract investors at this stage.

Stage 2: Seed Funding—This is a crucial phase wherein, based on the feedback from the pilot in the validation stage, the startup seeks seed funding from angel investors, crowdfunding agencies, incubators, or government grants. Funding at this “early traction stage” is essential for startups to escape the “valley of death.” The “valley of death” is a term that refers to the difficulty of adjusting the negative cash flow during the initial stages of a startup. This phase continues until there is a regular flow of revenue from actual customers (Osawa and Miyazaki 2006).

Stage 3: Growth/Scaling Up Stage—By this stage, the business has a good grounding with consistent consumer acquisition. There are identified channels of growth and expansion. This is the stage when the business can gain funding support from venture capital (VC).

Stage 4: Maturity Stage—This stage consists of either exit by way of partial or full sale of startups to existing players in the market through M&A deals or an initial public offering (IPO).

Table 1: Startup in Different Stages in India (as on 17 December 2019)

Ideation	Validation	Early Traction	Scaling	Total
19,407	22,871	20,361	6,668	69,307

Source: www.startupindia.gov.in.

It is notable that these numbers are on a self-declaration basis. The recognized number of startups is about 25,000.

Alphalogic Techsys, a Pune-based software consulting firm, was the first to float its IPO, which enabled it to raise growth capital from a group of investors instead of selected VCs. The SEBI, the Indian securities regulator, has relaxed the listing norms, providing an exclusive institutional trading platform (ITP), now called the “Innovators Growth Platform” (IGP). The SEBI has further provided for norms whereby, after a year of being on the IGP, startups may move to the main stock exchanges by expanding their shareholder base to 200 (the minimum required for going public). They further require a profitability/net-worth track record of three years or at least 75% of their shareholding as qualified institutional investors.

1.2 Startup Ecosystem

The creation of a startup ecosystem and a culture of promoting entrepreneurship are essential to create a startup revolution. As the SAP appropriately mentions, “the word FAIL needs to be redefined as ‘First Attempt In Learning’ to inculcate the culture of risk and failure.” The following important stakeholders could help to build a startup ecosystem.

1.2.1 Government Policy and Regulatory Framework

This is the starting point for a robust startup ecosystem. Government processes are the greatest decelerators otherwise, unless there is a specific focus on and effort toward Ease of Doing Business (EODB). The GOI has taken a slew of measures to create a positive ecosystem of collaboration and progress. This paper deals with this aspect in greater detail.

1.2.2 Incubators and Accelerators

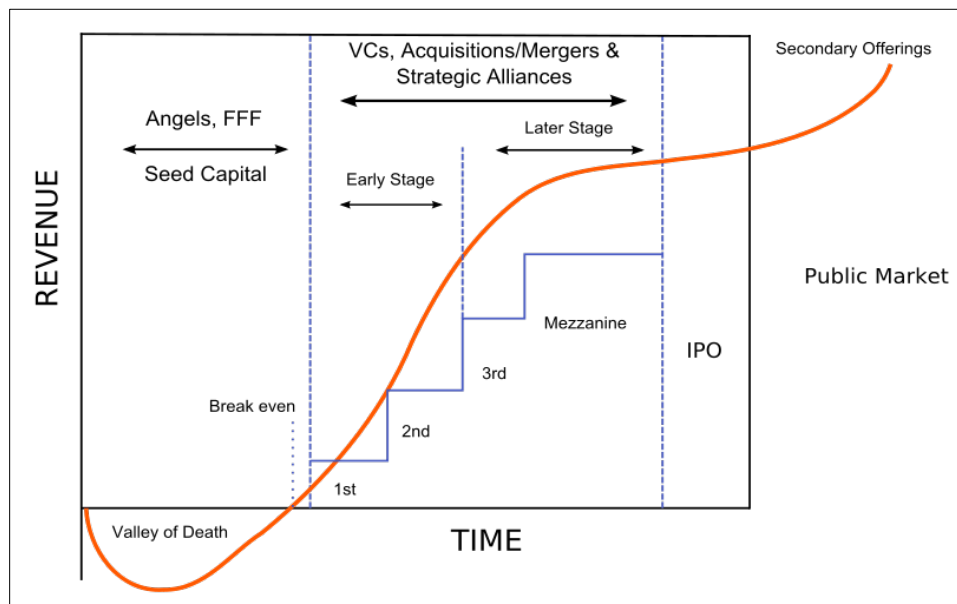
The primary difference between an incubator and an accelerator is that the latter provides equity funds in addition to space, a network, and mentorship (Wise and Valliere 2014). Accelerators, as the name suggests, act for a short period with a focused approach. There are many mentor groups that provide new entrepreneurs with training and mentorship, encouraging them to work on their startup ideas. The easy availability of infrastructure, like co-sharing workspace, cloud services, and IT services, is particularly important.

1.2.3 Universities and Schools

Universities and schools in India are now focusing on the need to promote a culture of entrepreneurship by creating a climate of teaching and learning, introducing courses on entrepreneurship, opening up incubation facilities, providing scholarships and means of seed funding, internships, break years, early release, and so on (DIPP 2018).

1.2.4 Funding and Finance

To address the funding needs of a startup, the role of investors is pivotal. Cardullo (1999) portrayed the startup financing cycle as follows:

Figure 1: Startup Financing Cycle (Cardullo 1999)

As noted above, there are angel, early stage, and late-stage investors in startups.

1.2.5 Competitive Markets

Startups must have competitive markets available for launching and selling their products and services. India has a large consumer market with an increasing disposable income conducive to startups.

2. STARTUP ACTION PLAN (SAP) OF 2016

The Government of India launched the SAP, which addressed various aspects of the startup ecosystem and provided innovative entrepreneurs with a launch pad and support system, in 2016. The driving objective behind the action plan was to fast-track the spread of the startup movement from the digital/technology sector to a wide array of sectors, including the social sector, manufacturing, agriculture, education, and healthcare, and from existing Tier-1 cities (like Delhi, Mumbai, Bengaluru, etc.) to Tier-2 (Agra, Lucknow, Nagpur, etc.) and Tier-3 cities, including semi-urban and rural areas (Kothari 2016). The SAP contains 19 points bifurcated into three key major areas for empowering potential startups: (i) handholding and simplification; (ii) funding support and incentives; and (iii) incubation and industry-academia partnership (StartupIndia 2016).

2.1 Definition of “Startup”

According to the notification that the Government of India issued (19 February 2019, originally issued on 11 April 2018), when an enterprise meets the following conditions, it will treat it as a startup:

- (i) It has been incorporated/registered for not more than 10 years (previously seven years, except in the biotechnology sector according to the notification dated 11 April 2018) in any of the following forms:

- a. A private limited company under the Companies Act, 2013 (including one-person companies);
 - b. A partnership firm under the Partnership Act, 1932;
 - c. A Limited Liability Partnership (LLP) under the LLP Act, 2008.
- (ii) Its turnover has not exceeded INR 100 crore (previously INR 25 crores) for any of the financial years since incorporation/registration.
 - (iii) It is working toward the innovation, development, or improvement of products or processes or services or it is a scalable business model with high potential for employment generation and wealth creation.

However, “an entity formed by splitting up or reconstruction of an existing business shall not be considered a ‘startup’. An entity shall also cease to be a startup on completion of 10 years from the date of its incorporation/registration or if its turnover for any previous year exceeds INR 100 crore.”

The above definition lays down a clear parameter on the basis of the age of the entity, its turnover, and its objective, which necessarily focuses on innovation, employment generation, and wealth creation. An entity that meets the aforesaid criteria needs to apply for recognition as such from the Department for Promotion of Industry and Internal Trade (DPIIT).

2.2 Simplification and Handholding

One of the major challenges for startups has been legal compliance. Addressing this issue, the government provided for the following points, emphasizing an “ecosystem without the trappings of a system.”

2.2.1 Compliance Regime Based on Self-Certification

India has worked extensively on its EODB ranking, which is evident from the consistent improvement in the latest rankings from 142nd in 2014 to 63rd in 2020. One of the important parameters for the EODB ranking has been the “ease of starting a business,” and for this parameter there has been an improvement from 158th in 2014 to 136th in 2020 (World Bank 2020). For startups, India has relaxed the compliance regime further, especially in the two areas of compliance relating to labor laws and the environment. For five applicable pieces of labor legislation, startups just have to provide self-certification and there will be no inspection for 3 years, unless some complaint arises in this regard. For environmental law compliance, startups are allowed to give “self-certification” in 36 categories of newly introduced “white category industries.” These categories are in industrial sectors with a pollution index score of up to 20 and are practically non-polluting (Korreck 2019). This self-certification mechanism offers great relief to startups.

2.2.2 Startup India Hub and Mobile App and the Startup India Portal

Finding a mentor and resolving teething troubles have been a considerable challenge for startups. The SAP addressed this issue by creating the “Startup India” hub working on a hub-and-spoke model and bringing different stakeholders of the startup ecosystem into one platform. To this effect, the government created an online portal (<https://www.startupindia.gov.in>) and a mobile app. These act as an official networking portal connecting more 70,000 startups, 65 investors, 480 mentors, 95 accelerators, 470 incubators, and 38 government bodies (as of 25 December 2019). There are about 3.5 lakh users of this portal.

2.2.3 Fast-Tracking Patent Examination at Lower Costs and Legal Support

Startups operate on their innovation strength; hence, the protection of the idea/brand in the form of a patent, trademark, or design is crucial. The recognition of these intellectual property rights (IPRs) facilitates commercialization for startups and opens up funding opportunities (Conti, Thursby, and Thursby 2013). In this regard, the SAP came up with the scheme for Startup Intellectual Property Protection (SIPP) with the aim of facilitating the filing of IPRs. The Controller General of Patents, Designs, and Trademarks (CGPDTM) is the nodal agency to steer this policy. The CGPDTM has a panel of more than 4,000 facilitators who help startups in obtaining IPRs at rebated rates. These applications also receive fast tracking by virtue of coming from startups. The government has extended the scheme, which initially operated for a year, to 3 years until March 2020.

2.2.4 Relaxed Norms of Public Procurement for Startups

A new startup cannot compete with established players, especially in cases of public procurement, wherein two of the major qualification criteria are based on “prior experience” and “prior turnover.” To promote startups in the manufacturing sector in India, the government has relaxed the requirements of prior experience, prior turnover, and earnest money deposit (EMD) in cases of startups without compromising on the quality standards and technical parameters. The Government e Marketplace (GeM) also facilitates startups, and Startup India is integrated with the Central Portal for Public Procurement (CPPP).

2.2.5 Faster Exit for Startups

Fear of failure and associated problems with insolvency operate as a dampener for new-age entrepreneurs. Among the major problems are the lock-in of capital, unusual delays in resolution, and ultimate erosion of capital. To improve this situation, the new insolvency law of India, namely the Insolvency and Bankruptcy Code 2016 (IBC), provides a fast-track mechanism for insolvency resolution of startups, which takes 135 (90 + 45) days instead of 270 days in the normal channel for startups (other than a startup organized as a partnership firm, as insolvency regulations applicable to partnership firms are not included).

2.3 Funding Support and Incentives

Scalability is one of the major characteristics of the startup revolution. In Silicon Valley, “think big” is the focus of innovation. Its conventional business model is all about scale, reaching large markets, and the ambition to create a social impact (Ester 2017). Scalability requires funding support; however, it is extremely difficult to convince someone to invest in startups, which by nature are not impervious, and there is a question of survival in most cases. The good news for India is that an expert committee on venture capital (VC) opined that “India has the potential to build about 2,500 highly scalable businesses in the next 10 years, and given the probability of entrepreneurial success that means 10,000 Startups will need to be spawned to get 2,500 large scale businesses” (Press Information Bureau (PIB) 2016). This necessitated the creation of a special ecosystem for funding support and incentives for private investors (Shrivastava and Garg 2017). The SAP addressed these concerns in the following ways.

2.3.1 Providing Funding Support through a Fund of Funds for Startups (FFS)

This is an initiative in which, with a corpus of INR 10,000 crores, the GOI has created a Funds of Funds for Startups (FFS). The Small Industries Development Bank of India (SIDBI) manages the fund, and it supports different alternative investment funds (AIFs) registered with the Securities and Exchange Board of India (SEBI). AIFs extend funding support to startups (twice the SIDBI's contribution). The SIDBI identifies experienced professionals (fund managers) in the venture funding ecosystem through its Venture Capital Investment Committee. "SIDBI has committed Rs 3123.20 crore to 49 SEBI registered AIFs. These funds have raised a corpus fund of INR 27,478 crore. INR 483.46 crore have been drawn from Fund of Funds for Startups. Further, the AIFs have invested a total of Rs. 1,625.73 crore into 247 startups" (PIB 2019b).

2.3.2 Credit Guarantee

The GOI formulated the Credit Guarantee Scheme for Startups (CGSS) with a corpus contribution of INR 2,000 crores. This will enable startups to raise loans without any collateral for their business purposes. A startup with DIPP recognition is eligible for a credit guarantee up to INR 500 lakhs through member lending institutions (MLIs) per case, inclusive of the term loan, working capital, or any other instrument (PIB 2017). The National Credit Guarantee Trustee Company (NCGTC) has the trusteeship management of this scheme.

2.3.3 Tax Exemptions

Tax incentives/exemptions are one of the major driving forces for startups. The SAP envisaged the following main tax benefits:

- a. *Tax Exemption on Capital Gains*: Under Section 54EE of the Income Tax (IT) Act, startups are exempt from capital gains tax on capital invested through a fund that the government has notified. The existing section 54GB of the IT Act is also available to startups now; this provides exemption from tax on long-term capital gains on the sale of a residential property to HUFs and individuals if they invest such gains in startups for a period of 5 years.
- b. *Tax Exemption/Holiday for Startups for 3 Years*: Startups incorporated after 1 April 2016 can avail themselves of a tax rebate of 100% on their profits for a total period of 3 years within a block of 7 years (section 80 of the IT Act).
- c. *Tax Exemption on Investments above Fair Market Value (FMV)*: Investments not registered as a venture capital fund (VCF) or incubators above the FMV are exempt for eligible startups.
- d. *Angel Investors*: A robust financial ecosystem to support startup initiatives is crucial. The emergence of high net-worth individuals (HNIs) as angel investors contributes substantially to this ecosystem. Tax exemptions for angel investors provide significant encouragement.

2.4 Industry–Academia Partnerships and Incubation

"A pivotal component for growth of Startups is regular communication and collaboration within the Startup community, both national as well as international. An effective Startup ecosystem can't be created by the Startups alone. It is dependent on active participation of academia, investors, industry and other stakeholders" (Action Plan 2016). To this effect, the SAP provides for the following eight action points:

- Organizing Startup Fests for Showcasing Innovation and Providing a Collaboration Platform
- Launch of the Atal Innovation Mission (AIM) with the Self-Employment and Talent Utilization (SETU) Program
- Harnessing Private Sector Expertise for Incubator Setup
- Building Innovation Centers at National Institutes
- Setting up Research Parks
- Promoting Startups in the Biotechnology Sector
- Launching Innovation-Focused Programs for Students
- Annual Incubator Grand Challenge

The objective of the aforesaid points is to create a culture of first-generation entrepreneurship. Awareness and the availability of training programs and mentors, competitions and roadshows, and incubation facilities play an important role in creating a startup culture.

2.4.1 Building a Startup Infrastructure and Culture

The SAP envisages the organization of startup fests, both national and international, to showcase innovation and provide collaboration platforms for new entrepreneurs. Incubator grand challenges motivate new players to participate and test their ideas and passion for innovation, leading to business ideas. These platforms also allow the harnessing of private-sector expertise. The national institutes of learning, that is, the National Institute of Technology (NIT), the Indian Institute of Management (IIM), and the Indian Institute of Technology (IIT), have become involved by establishing centers of innovation and entrepreneurship through government funding with an objective of setting up and scaling up technology business incubators (TBIs) at these NITs/IITs/IIMs. With an objective of promoting industry–academia collaboration through joint research projects and consulting assignments, the SAP anticipated the setting up of seven new research parks in the IIT.

2.4.2 Atal Innovation Mission (AIM)

The AIM is an initiative that promotes the establishment of Atal Incubation Centers (AICs) for nurturing innovative startup businesses in their quest to become scalable and sustainable entities in subject specific areas, such as manufacturing, energy, transport, health, agriculture, education, water and sanitation, and so on. The AIM will provide a grant-in-aid of up to INR 10 crore for a maximum period of 5 years to cover the capital and operational expenditures involved in launching an AIC. Entities such as higher education institutions, groups of individuals, individuals, R&D institutes, the corporate sector, AIFs registered with the SEBI, and business accelerators are eligible to apply. The objective of AICs is to “create world class incubation facilities across various parts of India with suitable physical infrastructure in terms of capital equipment and operating facilities, coupled with the availability of sectoral experts for mentoring the start-ups, business planning support, access to seed capital, industry partners, trainings and other relevant components required for encouraging innovative start-ups.” To create an environment of scientific temperament, innovation, and creativity amongst Indian students, the government has established Atal Tinkering Labs in schools. NITI Aayog, the planning body of the GOI, oversees this initiative. There are also schemes like the

National Initiative for Developing and Harnessing Innovations (NIDHI) and Million Minds Augmenting National Aspiration and Knowledge (MANAK).

An analysis of the SAP shows a clear focus of the government on building a startup culture in the country and facilitating the entrepreneurship revolution. This is a highly necessary requirement for unemployed youths, who traditionally have looked toward the job market, especially government jobs, to find useful/fruitful engagement. The success of the SAP would be a significant cultural transition (Paltasingh 2012).

3. REGULATORY ECOSYSTEM

The Department for Promotion of Industry and Internal Trade (DPIIT), previously known as the Department of Industrial Policy and Promotion (DIPP), is the nodal agency for dealing with matters related to startups in India (<https://dipp.gov.in>). The DPIIT comes under the Ministry of Commerce and Industry, the Government of India, which also deals with issues relating to industrial policies and foreign direct investment (FDI). To obtain the benefits of “startups” under the Startup India initiative, as outlined above, recognition from DPIIT is necessary. Startups meeting the definition criteria of startups may apply for recognition in the prescribed format. The government charges no fees for this recognition.

3.1 Inter-Ministerial Board of Certification (the Board)

The Board undertakes the validation of startups for granting tax-related benefits. The Board comprises the following three members (initially there were eight members):

- Joint Secretary, DPIIT, Convenor
- Member Representative, Department of Biotechnology
- Member Representative, Department of Science and Technology

3.2 Monitoring Mechanism

To review the progress of the Startup India program on a regular basis, the government put in place the Monitoring Committee, comprising high officials from different concerned ministries, to review continuously the progress and implementation of various measures for the growth of the startup ecosystem (PIB 2019c). The Government of India has further established the structure of the National Startup Advisory Council (NSAC) to help create an environment of absorption of innovation in industry and taken measures to foster a culture of entrepreneurship. The Minister of Commerce and Industry will chair the NSAC (PIB 2020).

3.3 NITI Aayog

The National Institution for Transforming India (NITI) is the new *avatar* of the erstwhile Planning Commission (*Yojana Aayog*), which came into existence on 1 January 2015 as the government’s premier think tank. Reflecting the changed dynamics of the new India, NITI aims to “foster cooperative federalism through structured support initiatives and mechanisms with the States on a continuous basis, recognizing that strong States make a strong nation” (PIB 2015). NITI Aayog drives the Atal Innovation Mission and indirectly supports the SAP through its initiatives; for example, NITI Aayog launched “Pitch to MOVE—a mobility pitch competition that aims to provide budding entrepreneurs

of India a unique opportunity to pitch their business ideas to a distinguished jury” (PIB 2018).

4. COMPLEMENTARY FRAMEWORK AND SCHEMES

Startups begin with a small venture, scaling up to a bigger enterprise in due course. As a legacy of Gandhian philosophy and the focus on the socialistic pattern of administration, the small-scale sector has been an important agenda item for all political parties, policy makers, and intelligentsia since independence in India. The special push for this sector has had the multiple objectives of regional dispersal of industries, employment generation, and providing a “seedbed for Entrepreneurship” (Uddin 1989; Singh 2010). There are several complementary frameworks that accelerates the startup revolution.

4.1 Micro, Small, and Medium Enterprises (MSMEs)

Due to their nature of permeability into local areas, providing large employment opportunities at a low capital cost, small-scale industries (SSIs) play a crucial role in economic development. They also help in reducing regional imbalances by creating opportunities for industrialization of rural and backward areas, assuring more equitable distribution of the national income and wealth. Due to their focus on socio-economic development, SSIs have featured consistently in the industrial policies of India (Reddy 2008). Subsequent to an amendment of the GOI (Allocation of Business) Rules 1961, two ministries, specifically the Ministry of Small Scale Industries and the Ministry of Agro and Rural Industries, merged to create the Ministry of Micro, Small and Medium Enterprises (M/o MSMEs) in May 2007. The M/o MSMEs now creates an ecosystem through policies, projects, programs, and schemes to assist MSMEs in scaling up with the support of state governments, which have the primary responsibility for MSMEs.

The definition of MSMEs concerns their investment threshold (there is now a proposition to change this to define them solely on a turnover basis):

Table 2: Classification of MSMEs

Enterprise	Manufacturing Sector on the basis of investment in plant and machinery	Service Sector on the basis of investment in equipment	New Classification Criteria <i>proposed on the basis of annual turnover only*</i>
Micro	Not more than INR 25 lakh	Not more than INR 10 lakh	Not more than INR 5 crore
Small	INR 25 lakh to INR 5 crore	INR 10 lakh to INR 2 crore	INR 5 to INR 75 crore
Medium	INR 5 crore to INR 10 crore	INR 2 crore to INR 5 crore	INR 75 crore to INR 250 crore

Source: DCMSME (2018).

The National Small Industries Corporation Limited (NSIC), working under the Ministry of MSMEs, has set up six livelihood business incubators under the “Scheme for Promotion of Innovation, Entrepreneurship & Agro Industry” (ASPIRE). These rapid incubation centers provide facilities for hands-on training and education on working projects and offer support to prospective entrepreneurs and start-up companies to start product manufacturing.

4.2 Make in India Program

In September 2014, the GOI launched the “Make in India” program with the objectives to

- inspire confidence in India’s capabilities amongst potential partners abroad, the Indian business community and citizens at large;
- provide a framework for a vast amount of technical information on 25 industry sectors; and
- reach out to a vast local and global audience via social media and constantly keep them updated about opportunities, reforms, etc.

The DPIIT is also the nodal point to run this program; however, a dedicated investor facilitation cell (IFC) assists investors in seeking regulatory approval and provides hand-holding services through the pre-investment phase, execution, and after-care support. While there may be criticism of the success of this program (Green 2014), it is undeniable that the EODB rankings have significantly improved for India, reflecting the positive perception of foreign investors in Indian markets. Standup India and then Startup India followed the Make in India initiative. The government launched the *Standup India* scheme with the objective of supporting disadvantaged groups, in particular the scheduled castes/tribes (SC/ST) and/or female entrepreneurs with bank loans from INR 1 Lakh to INR 1 crore for setting up a greenfield enterprise (a startup).

4.3 Digital India Program

This is an umbrella program, which the GOI launched in 2015, involving multiple government ministries and departments. The objective of this program is to realize the full potential of digitization in all walks of life. The Department (now Ministry) of Electronics and Information Technology (D/MeitY) coordinates this program. There are nine growth areas in this program, namely the Universal Access to Mobile Connectivity, Broadband Highways, Public Internet Access Program, Reforming Government through Technology, e-Governance: e-Kranti—Electronic Delivery of Services, Electronics Manufacturing, Information for All, IT for Jobs, and Early Harvest Programs. Startups have a natural home in the digital sector, and this initiative complements the startup revolution well.

4.4 Skill India Program

While the demographic dividend is a plus factor for any country, it takes no time to turn negative if youths are not skillful enough for employment. With the objective of enhancing youth employability through skill development, the government formed a dedicated Ministry for Skill Development and Entrepreneurship (MSDE) in July 2015. The National Skill Development Corporation (NSDC) under the guidance of the MSDE has introduced an initiative that allows aspirant candidates to register for skill training/learning and employment opportunities through the online portal. The Skill India Mission under the National Policy on Skill Development and Entrepreneurship 2015 created sector skill councils (SSCs), which the NSDC monitors. It has identified forty priority sectors based on a skill gap analysis, for example the food industry, healthcare, telecoms, banking and finance, and so on. It runs National Skill Qualification Framework recognized courses that meet the requirements and standards of the industry in these sectors. These courses focus on the practical delivery of work and thus startups can obtain skilled resources that they may employ in different sectors (MSDE 2009).

4.5 National Schemes

Inspired by the initiatives and push from the Prime Minister himself, various ministries and departments of the GOI are complementing the startup revolution by way of more than a hundred schemes. These schemes may encourage entrepreneurs to test a startup idea for scalability. Some example of these schemes are:

- The Ministry of Electronics and Information Technology—Support for International Patent Protection in Electronics and Information Technology (SIP-EIT)
- The Khadi and Village Industries Commission under the Ministry of MSME—Scheme of Funds for Regeneration of Traditional Industries (SFURTI)
- The National Minorities Development and Finance Corporation (NMDFC)—Virasat—A Credit Scheme for Craftpersons

A review of the aforesaid initiatives from the GOI shows how the central government is geared up the overall machinery to make Startup India successful. For example, the Startup *Yatra* (journey) initiative involves a mobile van traveling throughout the state recording ideas from budding entrepreneurs and offering them the chance of incubation. However, the success of the GOI schemes like “Startup India” lies in its adaptability and in the enthusiasm of the state governments.

4.6 MUDRA Loans

To provide business finance for micro-business units, including startups, the GOI has established the Micro-Units Development and Refinance Agency (MUDRA). Micro or small businesses operating in the manufacturing, trading, and services sectors (including startups) are eligible for loans in the following three categories:

- *Sishu* (*infant*): loans up to INR 50,000
- *Kishor* (*adolescent*): loans up to INR 5 lakhs
- *Tarun* (*young*): loans up to INR 10 lakhs

4.7 International Linkages

India has also entered into global partnerships to make the startup ecosystems of India and its partners closer and to facilitate joint innovation, which it refers to as “international bridges.” It has entered into such global partnerships with Finland, the Netherlands, the United Kingdom, the Russian Federation, the United States, Portugal, Japan, Sweden, Israel, Singapore, and the Republic of Korea. For example, it conceptualized the India–Korea Startup Hub as part of a joint statement signed between the Korea Trade-Investment Promotion Agency (KOTRA) and Invest India on 9 July 2018. The hub’s objective was “to enable collaborations between startups, investors, incubators, & aspiring entrepreneurs of both countries and provide them requisite resources for market entry & global expansion.” The State Bank of India and Mahindra are mentoring the startup grand challenge “to channelize the entrepreneurial capacity between Indian and Korean Startups to work together and build solutions for the challenges facing the world for example Credit Rating, Predictive Analytics, Fraud Detection, Cyber Security, Primary/Secondary/Tertiary Healthcare.”

5. ROLE OF STATE GOVERNMENTS

India works on the principle of cooperative federalism, which envisages that “national and state agencies undertake government functions jointly rather than exclusively. The nation and states would share power, without power being concentrated at any government level or in any agency” (Srikrishna 2015). India is a large, heterogeneous, and complex nation, with multiple languages, religions, and ethnicities and over 1.30 billion people (Singh 2007). The country has now evolved from a few political parties to 1,841 registered political parties (with 7 national, 49 state, and 1,785 unrecognized parties). In the initial years of independence, the relationship between the center and the states was stable due to a single party being in power both at the center and in the states. Over a period, the role of regional parties in sub-national politics in several states increased, and they had a hold on the coalitions at the central level. The fiscal federalism in the country was not untouched by these developments and accordingly the fiscal relationship between the center and the states evolved by way of devising mechanisms and concessions to retain control (CUTS 2011). The Constitution of India has an inbuilt mechanism to keep the economic unity of the country through provisions under Part XIII (Atiabari 1961).

The Seventh Schedule of the Constitution of India provides three lists, specifically the Union List, State List, and Concurrent List, which people also refer to as List I, List II, and List III. While the Parliament of India has some supremacy in terms of having precedence in legislating laws in the concurrent list, it generally would not encroach on the items that the State List includes. Industries are normally under the purview of the state governments (Entry 24 of List II) subject to the industries that the Central Law declares to be expedient in the public interest, including the industries for the purposes of defense or for the prosecution of war (entries 7 and 52 of List I of the Seventh Schedule of the Constitution of India). Startups are not a particularly new idea for state governments, as the states of Andhra Pradesh, Kerela, Rajasthan, and Goa already had a startup policy before the GOI implemented the SAP in 2016. However, after the SAP, state governments started a huge push on startup initiatives, which is evident from the fact that 11 states adopted the policy in 2016 itself, four more did so in 2017, and three followed in 2018. Now, except the few union territories and northeastern states, all the states (25 in total) have their own policy to promote startups. However, in terms of the opening up of startups and the coverage of geographical areas, the following statistics are quite encouraging:

Table 3: Startup India Recognition Heat Map

484 Districts out of about 732 Districts	29 States (All)	7 Union Territories out of 9
55% in Tier 1	27% in Tier 2	18% in Tier 3

Source: States Startup Ranking Report of 2018.

5.1 Startup Policy of State Governments

An analysis of the startup policies of the 25 state governments shows that they have developed their startup policies along the broad lines of the SAP; however, the incentives that they provide to the startup ecosystem vary. A comparison of the nodal agencies of these state governments indicates that the agencies for implementing the startup policy are in the hands of:

- Department of Industries—8

- Department of MSMEs—4
- Department of Information Technology (IT)—9
- Special purpose vehicles, like the *Entrepreneurship Development and Innovation Institute* in Tamil Nadu—4

While, as natural devolution, the states' MSME Department could have been the natural choice for a nodal agency, due to the perception that startups have more to do with information technology, in the majority of cases, the Department of Information Technology is the nodal agency. In many of the cases, the startup policy is part of the broader IT and e-commerce policy.

The startup policies of the states provide startups with a host of fiscal and non-fiscal benefits. Some of the major ones are the following:

- Self-certification in the case of some forms of statutory compliance and single-window clearance
- Interest subsidies on loans
- Tax holidays in terms of tax reimbursements
- Mentoring assistance
- Product development and marketing/commercialization assistance
- Availability of land at concession rates
- Subsidies on utilities like power
- Broadband and internet connection subsidies
- Seed funding and scaling-up funding
- Infrastructure availability, like co-working space
- Reimbursement of IPR (patent and trademark) application charges
- Encouragement for startup competitions
- Preference/promotion of startups in government procurement

5.2 States' Startup Ranking

In 2018, the DIPP conducted the first ever States' Startup Ranking Exercise, with the key objective "to encourage States and Union Territories to take proactive steps towards strengthening the Startup Ecosystems within their jurisdictions." The aim of this ranking was just like the World Bank's Ease of Doing Business Rankings, that is, "creating a healthy competition among states to further learn, share and adopt good practices." The government has also announced the Framework for Startup Ranking 2019 to evaluate progress made from 1 May 2018 to 30 June 2019. One of the major components of this evaluation framework is the ease of financing startups. With an objective of infusing competitiveness (competitive federalism) among the state governments, the GOI launched a ranking framework in 2018 to determine the robustness of the startup ecosystem in the seven framework pillars and 38 action points, which are actually the reform areas in focus for promoting a conducive startup ecosystem (DIPP 2018).

Table 4: Startup Ranking Framework

Ranking Framework Overview Pillar#	Framework Pillar	Number of Action Points	Score
1	Startup policy and implementation	13	7
2	Incubation support	3	20
3	Seed funding support	2	15
4	Funding support—angel and venture	3	10
5	Simplified regulations	4	13
6	Easing public procurement	5	14
7	Awareness and outreach	8	11
Total		38	100

Source: States Startup Ranking Report of 2018.

With an objective of promoting cross-learning and providing impetus for beginners, the government performed pairing for mentoring. A total of 30 states and UTs participated in this exercise. In line with their percentile-based grading, the government categorized states into the following six categories:

- Best Performer: 100th percentile (Gujarat)
- Top Performers: higher than the 85th and lower than the 100th percentile (Karnataka, Kerela, Odisha,¹ and Rajasthan)
- Leaders: higher than or equal to the 70th percentile and lower than or equal to the 85th percentile (Andhra Pradesh, Bihar, Chhattisgarh, Madhya Pradesh, and Telangana)
- Aspiring Leaders: higher than the 50th percentile and lower than the 70th percentile
- Emerging States: Higher than the 25th percentile and lower than or equal to the 50th percentile
- Beginners: Lower than or equal to the 25th percentile

The ranking framework helped the states to take action and work on the key reform areas necessary for a facilitative startup ecosystem. There are several best practices of the states along the seven interventions that the ranking framework lists (StartupIndia 2019). The government has already announced the 2019 ranking framework and the process is underway for data collection at the startup portal. It has also announced the National Startup Awards 2020 for startups and ecosystem enablers (incubators and accelerators).

¹ In 2011, the Government of India approved the name change of the State of Orissa to Odisha. This document reflects this change. However, when reference is made to policies that predate the name change, the formal name Orissa is retained.

6. STARTUPS' PERSPECTIVE ON SMALL BUSINESS FINANCING

For the success of any new business, access to external finance and the ability to undertake profitable investment opportunities are especially important (Levine 2005). Financing for small businesses, including startups, has been their Achilles' heel. Most of these startups rely initially on informal channels of funding, like family, friends, moneylenders, and self-funding. The formal channels of banks are not available to these new startups due to the requirements of a credit history/rating, the risk and viability of the business, and so on (Chavis, Klapper, and Love 2011).

Soon after independence, the GOI provided mechanisms to support small-scale industries through initial funding and national schemes. At the level of state government, state financial corporations (SFCs) provided the small-scale sector with financial support. However, one of the greatest challenges in such financing was the "poor lending decision," creating "non-performing assets" (NPAs). Under the Startup India scheme, the GOI created the Fund of Funds under the SIDBI.

Table 5: Number of Startups Provided with Financial Assistance under the Fund of Funds (Year-Wise as on 13 June 2019*)

Financial Year	2016–17	2017–18	2018–19	2019–20*
No. of startups given financial assistance under the FFS	62	58	98	31

Source: PIB (2019a).

6.1 Private Funding

Robust private funding ecosystem is a *sine qua non* for a successful startup revolution. Startups in India, both tech and non-tech, face a dearth of funding beyond the Series B stage. The RBI, in its report, suggested, "A board that allows equities exchange of these SMEs can effectively help address this problem. It will also give the wider public to participate in the dynamic Indian startup ecosystem. The Innovators Growth Platform (IGP) proposed by SEBI is a welcome development. Some modifications are required for the success of IGP. SEBI must relax the norms defining the Accredited Investors (AIs) who could participate. To create enough liquidity, participation of HNIs, Mutual Funds, FIs, etc. must be encouraged. Most technology startups or high-growth startups are often loss making hence there should be no profitability requirement to list. SEBI should facilitate dual class share structure which is very popular with tech startups across the world. Further, standards for internal governance of MSMEs may be developed that can help MSMEs identify current gaps and areas of improvement" (RBI 2019).

6.2 CSR Funding for Incubators

The Companies Act 2013 (CA) requires companies beyond a threshold to spend at least 2% of their average net profits made during the three immediately preceding financial years in one or more of the areas specified in the Seventh Schedule of the Act (section 135 of the CA). One of the areas in which such investment is possible is the contribution that specified institutes engaged in promoting scientific research make to incubators.

Table 6: CSR Spending in the Area of Technology Incubators

Year	FY 2014–15 (INR Cr.)	FY 2015–16 (INR Cr.)	FY 2016–17 (INR Cr.)	FY 2017–18 (INR Cr.)
Spending in technology incubators	4.74	26.34	23.09	15.55
Overall CSR spending	10,065.93	14,517.37	14,329.78	13,623.62

Source: <https://www.csr.gov.in/developmentlist.php>.

7. STARTUP ECOSYSTEM UNTIL 2019

The Startup Action Plan of the GOI has no doubt provided much-needed support and encouragement for entrepreneurship in India. The post-SAP data on startups with DPIIT recognition are very encouraging, making India the third-largest startup ecosystem in the world with close to 25,000 startups.

Table 7: State-Wise Number of Startups that the DPIIT Has Recognized (as of 5 November 2019*)

States with a Startup Policy	2016	2017	2018	2019*	Total
1 Andaman and Nicobar	0	1	2	5	8
2 Andhra Pradesh	4	103	162	140	409
3 Assam	10	35	68	57	170
4 Bihar	1	48	149	15	213
5 Chhattisgarh	11	57	121	143	332
6 Goa	2	20	44	32	98
7 Gujarat	29	298	452	514	1,293
8 Haryana	28	271	487	591	1,377
9 Himachal Pradesh	0	9	17	25	51
10 Jharkhand	2	35	88	80	205
11 Karnataka	67	886	1,213	1,374	3,540
12 Kerala	24	172	332	563	1091
13 Madhya Pradesh	7	107	297	272	683
14 Maharashtra	93	1,104	1,661	1,778	4,636
15 Manipur	0	4	7	4	15
16 Nagaland	1	4	2	2	9
17 Odisha ^a	4	115	168	142	429
18 Punjab	7	31	70	81	189
19 Rajasthan	14	140	246	300	700
20 Tamil Nadu	54	271	459	489	1,273
21 Telangana	20	328	511	492	1,351
22 Uttar Pradesh	29	413	791	709	1,942
23 Uttarakhand	4	45	69	84	202
24 West Bengal	8	181	275	255	719
	439	4,681	7,691	8,147	20,935

^a In 2011, the Government of India approved the name change of the State of Orissa to Odisha. This document reflects this change. However, when reference is made to policies that predate the name change, the formal name Orissa is retained.

Source: PIB (2019d).

Table 8: State-Wise Number of Startups that the DPIIT Has Recognized (as of 5 November 2019*)

States/Union Territories without a Startup Policy	2016	2017	2018	2019*	Total
1 Chandigarh	9	22	27	32	90
2 Dadra and Nagar Haveli	0	3	0	2	5
3 Daman and Diu	0	1	0	1	2
4 Delhi	75	743	1,187	1,152	3,157
5 Meghalaya	0	0	2	6	8
6 Mizoram	0	0	2	1	3
7 Pondicherry	0	3	16	6	25
8 Sikkim	0	1	0	2	3
9 Tripura	0	0	4	5	9
	84	773	1,238	1,207	3,302

Source: PIB (2019d).

7.1 Major Sectors for Startups

The traditional perception is that startups operate in the area of information technology (primarily software development). However, the latest sector-wise data on startups show that they operate in more than 45 different sectors. The top 15 sectors in which startups operate in India are the following:

Table 9: Major Sectors for Startups

Sl. No.	Sector	2016	2017	2018	2019*	Total
1	IT Services	0	610	1,417	1,351	3,378
2	Healthcare and Life Sciences	0	424	768	808	2,000
3	Education	0	313	767	658	1,738
4	Food and Beverages	0	179	365	450	994
5	Professional and Commercial Services	0	190	388	400	978
6	Agriculture	0	174	319	427	920
7	Finance Technology (FinTech)	0	160	237	362	759
8	Green Technology	0	128	274	310	712
9	Technology Hardware	0	152	260	286	698
10	Renewable Energy	0	142	292	262	696
11	Enterprise Software	0	148	249	263	660
12	Internet of Things (IOT)	0	143	265	246	654
13	Retail	0	116	241	224	581
14	Artificial Intelligence (AI)	0	73	218	288	579
15	Construction	0	83	212	282	577
						17,519

Source: PIB (2019d). * As of 5 November 2019.

While IT services still lead, newer focus areas, like FinTech, the IOT, AI, aggrotech, and renewable energy, are encouraging. Realizing the potential of new areas like FinTech (technological solutions for providing financial services), one of the states in India (Maharashtra) has come up with a dedicated FinTech policy for startups with a vision of becoming a “global FinTech hub.” Another example is the regulatory sandbox regulations

that the Insurance Regulator in India implemented to facilitate FinTech innovations in the insurance sector.

7.2 Startup Culture

One of the major challenges for the government lies in creating a culture of entrepreneurship and developing confidence in the minds of the younger generation (Pereira 2007). Looking at the numbers of new startups and initiatives at the level of schools and universities, the future in India looks positive; however, it will take more time to see the results of these initiatives. The Global Entrepreneurship Monitor (GEM) Report for India on entrepreneurial framework conditions ranks it higher on almost all its parameters, which include government support, internal market dynamics, and infrastructure. However, entrepreneurial and behavioral attitudes, like the motivational index, established business ownership rate, and so on, still require improvement (GEM 2019). It is necessary to nurture the risk-taking appetite among youths so that they can venture into entrepreneurship, which has generally been associated with families with a business background.

7.3 Female Startup Founders

The phenomenon of female entrepreneurship is becoming increasingly global (Estrin and Mickiewicz 2011). In India, women occupy about 30% of corporate senior management positions, which is notably higher than the global average (24%); however, women constitute only 13.76% of the total entrepreneurs, and the figure is even lower in the case of startups, about 10% (Colaco and Hans 2018). Different state governments have devised incentives specifically to promote female entrepreneurship; for example, under MSMEs, Trade Related Entrepreneurship Assistance and Development (TREAD) provides women “with trade related training, information and counselling & grant of up to 30% of the total project cost.” A dedicated online portal called *udyam sakhi* (entrepreneur friend) helps to provide women with information on entrepreneurship.

7.4 Bureaucratic Hassle

Irrespective of several measures to eliminate the bureaucratic hassle for the startup ecosystem, in a general review of writings/reviews on this subject, the perception of the ineffectiveness of bureaucracy has emerged as one of the prominent factors. While the situation has changed at the central level to a greater extent (StartupIndia 2020), reforms in the complete hierarchy are still desirable. This is further complicated when different sets of governments at the state level become involved. Digitization and states’ ranking framework have helped to bring some standardization; however, it is still a work in progress.

7.5 Funding Blues

Beating the “valley of death” has been a pertinent issue that startups have faced. The GOI has undertaken several initiatives in this regard by providing support through initial seed funding, incubation support, and various subsidies; however, this support has not been sufficient to bail out the startups. There is a need for startups to secure funding from private players (VCFs) and maybe even from the public at large (IPOs).

On the other side of the coin, some authors have criticized the paternalistic and bureaucratic approach of the government in promoting small-scale industries, which

leads to dependency. They have suggested that, when developing a self-reliant modern small-scale industry, it is important to make it free. How long can the protection last (Tendulkar and Bhavani 1997)? Taking this argument forward, overreliance on and expectation of government support are not a good idea. The ecosystem has to generate the required trust from private investors, as private equity (PE) funding has proved to be a more stable source of equity funding (Pandit, Tamhane, and Kapur 2015).

7.6 Startup Failures

Studies have shown that 90% of startups fail within 3–5 years of commencing operation (Failory 2020). However, during this research, it became apparent that there is a conspicuous absence of an official figure of closed startups and an analysis and lessons learnt on the Startup India portal. This may be because the SAP is just 4 years old and it is too early to judge the success/failure on the number of startups closed.

The “Stayzilla” Case—The founder of this travel startup in India entered into a wrangle with one of its creditors, which led to cases of fraud and so on. The issue became murkier to the extent that the robustness of the startup ecosystem came into question. Presently, the matter is still under liquidation proceedings. In such cases, preparing an exit strategy from the beginning, including pre-packaged insolvency, M&A, IPO, and so on, would be greatly useful (Chambers 2019).

8. CONCLUSION AND SUGGESTIONS

A review of the Startup Action Plan of the GOI shows a positive impact on the number of startups, and it seems that the startup ecosystem has reached the early traction stage. One of the major requirements for this initiative to sustain momentum is the availability of funds so that the SAP is able to emerge from the “valley of death,” a crucial period that requires acceleration and consistent efforts. There is a point at which one can state, “What entrepreneurs need, far more than the fine words or advice of politicians or academics, is the support, solace, and help of other entrepreneurs” (Broughton 2012). There is a greater need for established businesses to handhold the startups and encourage them through mentorship, incubation, and financial support, crafting their role in the existing ecosystem of business. People should not perceive the startup revolution as a fad.

While the SAP does not have any fixed tenure as such, its performance in producing the desired results of creating an ecosystem of entrepreneurship that would drive “sustainable economic growth and generate large scale employment opportunities” is subject to scrutiny from the Parliament through the elected representatives.

The RBI Committee on MSMEs deliberated on all the aspects relating to startups in India and found that “the major reason for migration of startups to other countries is because of better enabling environment such as tax concessions, well developed infrastructure, ease of doing business, exit policy, etc. Hence, the Committee was of the view that financial incentives and excellent infrastructure facilities must be deployed to retain successful Indian startups and to lure the best talent from across the world to start businesses in India” (RBI 2019).

There is a need to focus on developing a culture of entrepreneurship. The mindset of youths is still toward fixed-tenure employment rather than venturing out in startups. For

a successful startup revolution, this attitude needs to change. Business failures should act as lessons for new entrepreneurs, and thus it is important to bring forward failure case studies of startups as a reference point to avoid known potholes.

The skewness of funding support toward IT- and software-focused startups requires diversion. There is a need to invite innovation in the areas of renewable energy, agrotech, smart cities, health, water, and plastic waste management (Dhindaw and Kumar 2019). The startup ecosystem also requires integration into the overall economic development perspective of the country (Jain 2011). It cannot be a standalone policy. Whenever we discuss startups, we discuss them from the angle of startups themselves, but an analysis from the sectoral side concerning how small innovations can help a particular sector is necessary. One such analysis on how startups can ameliorate the conditions of Indian farmers has shown the way for other sectors (Anand and Raj 2019).

It is good news that the startup ecosystem so far has performed well in accordance with the SAP. Rising numbers of soonicorns (startups that have the potential to become unicorns soon) and unicorns (startups with a value over a billion US dollars) in India are witnesses. A robust startup ecosystem will not only boost the economy but also contribute to the sustainable development goals (SDGs), specifically SDG 8 on decent work and economic growth. The recent announcement of the Government of India about the creation of the National Infrastructure Pipeline (NIP) to achieve the GDP of \$5 trillion by 2024–25 raises further hope for the startup revolution. The hallmark of India's efforts in creating a startup ecosystem is the GOI's regular active interventions with the required policy and regulatory changes.

REFERENCES

- Anand, Anupam and Saravanan Raj. 2019. "Agritech Startups: The Ray of Hope in Indian Agriculture. MANAGE: Centre for Agricultural Extension Innovations, Reforms, and Agripreneurship (CAEIRA)." Accessed 15 December 2019. <https://www.manage.gov.in/publications/discussion%20papers/MANAGE-Discussion%20Paper-10.pdf>.
- Atiabari. 1961. *Atiabari Tea Co. Ltd. v. State of Assam* AIR 1961 SC 232.
- Blank, Steve. 2013. "Why the Lean Startup Changes Everything." *Harvard Business Review*. Accessed 15 November 2019. <https://hbr.org/2013/05/why-the-lean-start-up-changes-everything?referral=00060>.
- Broughton, Philip. 2012. "The Start Uprising: Eighteen Months of the Startup America Partnership." Ewing Marion Kauffman Foundation. Accessed 12 December 2019. SSRN: <https://ssrn.com/abstract=2186472> or <http://dx.doi.org/10.2139/ssrn.2186472>.
- Burange, L.G., and Shruti Yamini. 2011. *A Review of India's Industrial Policy and Performance*. Working Paper, Department of Economics, University of Mumbai. Accessed 30 November 2019. https://www.researchgate.net/publication/280727114_A_Review_of_India's_Industrial_Policy_and_Performance.
- Cardullo, Mario W. 1999. *Technological Entrepreneurism: Enterprise Formation, Financing and Growth*. Baldock, England: Research Studies Press Ltd.
- Chacko, Elizabeth. 2007. "From Brain Drain to Brain Gain: Reverse Migration to Bangalore and Hyderabad: India's Globalizing High Tech Cities." *GeoJournal* 68 (2/3): 131–40. www.jstor.org/stable/41148150.
- Chambers, John. 2019. "India Is Becoming an Entrepreneurship Model for the World." *Economic Times*, 1 January 2019. Accessed 12 December 2019. <https://economictimes.indiatimes.com/small-biz/startups/newsbuzz/india-is-becoming-an-entrepreneurship-model-for-the-world-john-chambers/articleshow/67332196.cms>.
- Chavis, Larry, Leora Klapper, and Inessa Love. 2011. "The Impact of the Business Environment on Young Firm Financing." *World Bank Economic Review* 25 (3): 486–507. www.jstor.org/stable/41342486.
- Colaco, Vembly, and V. Basil Hans. 2018. "Women Entrepreneurship in India—Changes and Challenges." *Sahyadri Journal of Management*, 2 (2). SSRN: <https://ssrn.com/abstract=3319405>.
- Conti, Annamaria, Jerry Thursby, and Marie Thursby. 2013. "Patents as Signals for Startup Financing." *Journal of Industrial Economics* 61 (3): 592–622. www.jstor.org/stable/43305837.
- Consumer Unity and Trust Society (CUTS). 2011. "Fiscal Federalism in India Call to Revisit the Debate, Issues for Parliamentarians." CUTS International, 1/2011. https://parfore.in/wp-content/themes/parfore/pdf/1-2011Fiscal_Federalism_in_India_Call_to_Revisit_the_Debate.pdf.
- Development Commissioner Ministry of Micro, Small and Medium Enterprise (DCMSME). 2018. "Agenda Papers for 16th Meeting of National Board for Micro, Small & Medium Enterprises." https://www.dcmsme.gov.in/meetings/final-Agenda_16th_NBMSME.pdf.

- Dhindaw, Jaya, and Aarathi Kumar. 2019. "How the Government Can Play a Role in Spurring Innovation and Growing India's Startup Ecosystem." CityFixLabs India. Accessed 30 December 2019. [https://yourstory.com/socialstory/2019/08/government-policy-innovation-india-tech-start-ups.attitude needs to change](https://yourstory.com/socialstory/2019/08/government-policy-innovation-india-tech-start-ups.attitude%20needs%20to%20change).
- Department of Industrial Policy and Promotion (DIPP). 2018. "States' Startup Ranking 2018." Accessed 12 December 2019. https://www.startupindia.gov.in/content/dam/invest-india/compendium/Startup%20India%20-%20National%20report_Final%20Version_web.pdf.
- Ester, Peter. 2017. "Silicon Valley: The DNA of an Entrepreneurial Region." In *Accelerators in Silicon Valley* (pp. 21–36). Amsterdam: Amsterdam University Press. doi:10.2307/j.ctt1zrvhk7.6.
- Estrin, Saul, and Tomasz Mickiewicz. 2011. "Institutions and Female Entrepreneurship." *Small Business Economics* 37 (4): 397–415. www.jstor.org/stable/41486142.
- Failory. 2020. "The Ultimate Startup Failure Rate Report." Accessed 2 January 2020. <https://www.failory.com/blog/startup-failure-rate>.
- GEM. 2019. *Global Entrepreneurship Monitor 2017–18: India Report*. Ahmedabad: Entrepreneurship Development Institute India (EDII). <https://www.gemconsortium.org/economy-profiles/india>.
- Green, Russell A. 2014. "Can 'Make in India' Make Jobs? The Challenges of Manufacturing Growth and High-Quality Job Creation in India." James A. Baker III Institute for Public Policy of Rice University. Accessed 24 November 2019. <https://www.bakerinstitute.org/media/files/files/9b2bf0a2/Econ-pub-MakeInIndia-121514.pdf>.
- Hoselitz, Berthold. 1952. "Entrepreneurship and Economic Growth." *American Journal of Economics and Sociology* 12 (1): 97–110. www.jstor.org/stable/3484612.
- Jain, Vishal. 2011. "Indian Entrepreneurship and the Challenges to India's Growth." Accessed 12 December 2019. <https://iveybusinessjournal.com/publication/indian-entrepreneurship-and-the-challenges-to-indias-growth/>.
- Jang, Jiho Jung-yul., Jung-yul Kim, and Young-Hee Cho. 2013. "Change of Industrial Strategies and Government-Business Relationship in India." *Journal of International and Area Studies* 20 (2): 101–15. Accessed 12 December 2019. www.jstor.org/stable/43107260.
- Korreck, Sabrina. 2019. *The Indian Startup Ecosystem: Drivers, Challenges and Pillars of Support*. ORF Occasional Paper No. 210, September 2019. Delhi: Observer Research Foundation.
- Kothari, Vinod. 2016. *Taxmann's Guide to Start-Ups*. New Delhi: Taxmann Publications.
- Levine, Ross. 2005 "Finance and Growth: Theory and Evidence." In *Handbook of Economic Growth*, edited by Philippe Aghion and Steven Durlauf. Amsterdam: Elsevier.
- McGowan, Emma. 2017. "From Early to Acquired: What Are the Stages of a Startup?" Accessed 12 December 2019. <https://www.startups.com/library/expert-advice/startup-stages>.
- Medhora, Pheroze B. 1965. "Entrepreneurship in India." *Political Science Quarterly* 80 (4): 558–80.

- Ministry of Skill Development and Entrepreneurship (MSDE). 2009. *National Skill Development Policy*. Government of India. <https://www.msde.gov.in/assets/images/NationalSkillDevelopmentPolicyMar09.pdf>.
- Osawa, Yoshitaka, and Kumiko Miyazaki. 2006. "An Empirical Analysis of the Valley of Death: Large-Scale R&D Project Performance in a Japanese Diversified Company." *Asian Journal of Technology Innovation* 14 (2): 93–116.
- Paltasingh, Tattwamasi. 2012. "Entrepreneurship Education & Culture of Enterprise: Relevance & Policy Issues." *Indian Journal of Industrial Relations* 48 (2): 233–46. www.jstor.org/stable/23509835.
- Pandit, Vivek, Toshan Tamhane, and Rohit Kapur. 2015. *Indian Private Equity: Route to Resurgence*. McKinsey & Company. Accessed on 13 December 2019. <https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/private-equity-and-indias-economic-development>.
- Pereira, Alexius. 2007. "Attitudes towards Entrepreneurship in Singapore: The Role of the State in Cultural Transition." *Asian Journal of Social Science* 35 (3): 321–39. www.jstor.org/stable/23654465.
- Press Information Bureau (PIB). 2015. "Government Establishes NITI Aayog (National Institution for Transforming India) To Replace Planning Commission." Government of India, 1 January 2015. <https://pib.gov.in/newsite/PrintRelease.aspx?relid=114276>.
- . 2016. "Establishment of Fund of Funds for Funding Support to Start-Ups." Government of India, 22 June 2016. <https://pib.gov.in/newsite/PrintRelease.aspx?relid=146400>.
- . 2017. "Credit Guarantee Fund for Startups." Government of India, 26 July 2017. <https://pib.gov.in/newsite/PrintRelease.aspx?relid=169037>.
- . 2018. "NITI Aayog Launches 'Pitch to MOVE.'" Government of India, 14 August 2018. <https://pib.gov.in/newsite/PrintRelease.aspx?relid=181877>.
- . 2019a. "Financial Assistance to Startups." Government of India, 21 June 2019. <https://pib.gov.in/newsite/PrintRelease.aspx?relid=190561>.
- . 2019b. "Startup India Scheme." Government of India, 28 June 2019. <https://pib.gov.in/newsite/PrintRelease.aspx?relid=190914>.
- . 2019c. "Impact of Startup India." Government of India, 3 July 2019. <https://pib.gov.in/newsite/PrintRelease.aspx?relid=191151>.
- . 2019d. "Facilities for New Startups." Government of India, 20 November 2019. <https://pib.gov.in/PressReleasePage.aspx?PRID=1592372>.
- . 2020. "Central Government Notifies National Startup Advisory Council." 21 January 2020. <https://pib.gov.in/newsite/PrintRelease.aspx?relid=197539>.
- Ray, Rajat. 1994. "Entrepreneurship and Industry in India 1800–1947." Delhi: Oxford University Press.
- Reserve Bank of India (RBI). 2019. "Report of the Expert Committee on Micro, Small and Medium Enterprises." <https://www.rbi.org.in/Scripts/PublicationReportDetails.aspx?UrlPage=&ID=924>.
- Reddy, Tamma K. 2008. "Problems and Prospects of Small Scale Industries in India." In *Man & Development*, 23–40. <http://www.indiaenvironmentportal.org.in/files/Problems%20and%20prospects%20of%20small%20scale%20industry.pdf>.

- Redlich, Fritz. 1948. "The Business Leader in Theory and Reality." *American Journal of Economics and Sociology* 8: 223–4.
- Shrivastava, Amit, and Amit Garg. 2017. "Private Equity in India and Indian Promoters' Perspective: A Primer." *Journal of Private Equity* 20 (3): 68–75. www.jstor.org/stable/44397525.
- Singh, Nirvikar. 2007. "Fiscal Federalism and Decentralization in India." SSRN: <https://ssrn.com/abstract=1282267>.
- Singh, Vijay K. 2010. "MSME: 'Nursery for Entrepreneurship': A Legal Perspective." Accessed 10 December 2019. SSRN: <https://ssrn.com/abstract=2973036> or <http://dx.doi.org/10.2139/ssrn.2973036>.
- Solanki, Sandeep. 2008. "Sustainability of Rural Artisans." *Economic and Political Weekly* 43 (19): 24–7. www.jstor.org/stable/40277437.
- Srikrishna, Bellur N. 2015. "Foreword to the Report 'Cooperative Federalism: From Rhetoric to Reality.'" New Delhi: Vidhi Center for Legal Policy.
- StartupIndia. 2016. "Action Plan January 16, 2016." <https://www.startupindia.gov.in/content/dam/invest-india/Templates/public/Action%20Plan>.
- . 2019. "Compendium of Best Practices." Accessed 25 December 2019. https://www.startupindia.gov.in/content/sih/en/compendium_of_good_practices.html.
- . 2020. "Regulatory Updates." Accessed 9 January 2020. https://www.startupindia.gov.in/content/sih/en/startupgov/regulatory_updates.html.
- Tendulkar, Suresh, and Tatineni A Bhavani. 1997. "Policy on Modern Small Scale Industries: A Case of Government Failure." *Indian Economic Review* 32 (1), new series: 39–64. www.jstor.org/stable/24010468.
- Tripathi, Dwijendra. 1971. "Indian Entrepreneurship in Historical Perspective—A Re-interpretation." *Economic and Political Weekly* 6 (22): M59–63.
- Uddin, Sami. 1989. *Entrepreneurship Development in India*. Delhi: Mittal Publications.
- Venkatapathy, Ramchandran. 1989. "Self Concept (Conative) in Relation to First Generation Entrepreneurs and Second Generation Entrepreneurs." *Indian Journal of Industrial Relations* 24 (3): 312–9. www.jstor.org/stable/27767052.
- Wise, Sean, and Dave Valliere. 2014. "The Impact on Management Experience on the Performance of Start-Ups within Accelerators." *Journal of Private Equity* 18 (1): 9–19. www.jstor.org/stable/43503826.
- World Bank. 2020. "Doing Business 2020: Comparing Business Regulation in 190 Economies: Economic Profile INDIA." <https://www.doingbusiness.org/content/dam/doingBusiness/country/i/india/IND.pdf>.