The Good, the Bad, and the Ugly of 'Startup India'

A Review of India's Entrepreneurship Policy

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Promoting high-tech entrepreneurship is widely accepted as a catalyst for economic growth, but outside of developed countries, there has been little independent assessment of these policies. Using a comprehensive set of data sources, we provide the first assessment of the "Startup India" programme launched in 2016. We find that Startup India has had a positive impact in reducing regional entrepreneurial disparities but has been less successful in providing financial support through its fund of funds for startups. Furthermore, the policy has failed to recognise and address the under-representation of marginalised caste groups and women entrepreneurs in the Indian start-up ecosystem.

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A high rate of entrepreneurial activity is linked with positive outcomes for countries; these include an increased rate of value creation and economic development (Baumol 2002; Leff 1979; Wennekers and Thurik 1999), more employment opportunities (Glaeser et al 2015), and improved international competitiveness (Audretsch and Beckman 2007; van Praag and Versloot 2007). The governments' policy choices shape institutions that play a crucial role in determining entrepreneurial behaviour (Minniti 2008), both by promoting productive entrepreneurship (Baumol 1996) and reducing the constraints on entrepreneurship (Braunerhjelm et al 2010). This has led to the emergence of entrepreneurship policies as a central tenet of the economic strategies of governments around the world (Arshed et al 2014). However, governmental efforts to transform economies through entrepreneurship policies often fail to live up to the expectations of policymakers (Lerner 2009). The efficacy of entrepreneurship policies in meeting their stated objectives has been contested (Curran and Storey 2002; Williams 2013), with calls for more quantitative rather than qualitative evaluations of entrepreneurship policies that focus on the changes over time (Naudé 2013). Arenal et al (2019), in their analysis of research on entrepreneurship policy, also highlight that the field continues to be dominated by Anglo-Saxon countries, with major contributions from researchers affiliated with the United States (US) and the European Union.

We aim to address this crucial gap by evaluating India's entrepreneurship promotion policy, "Startup India." The Indian government unveiled the policy in January 2016 with the vision of transforming the entrepreneurial ecosystem in India to nurture innovation and support the growth of startups. To the best of our knowledge, this is the first paper to review this flagship policy initiative. We draw on a comprehensive set of sources—including data from the Economic Census, private research platforms, such as Tracxn, parliamentary proceedings, ministerial press releases, Startup India's official portal, industry reports, media articles, and video interviews with key stakeholders—to track the progress of the Startup India initiative from its launch up to March 2020.

Three key findings emerge from our analysis. First, the evidence suggests that the networking, training, and mentoring facilities provided by the Startup India hub, along with the entrepreneurship outreach campaigns in tier-2 and tier-3 cities, have helped address regional entrepreneurial disparities in India. Second, the fund of funds for startups (FFS), set up

under the initiative to extend financial support to start-ups, is inefficient and has proven inadequate to meet the funding needs of the start-up ecosystem. Four years after its launch, the FFS has committed merely 31% of its total announced corpus and provided financial support to only 1.1% (320 out of 28,979) of all the start-ups recognised by Startup India. And third, the Startup India policy has not addressed the underrepresentation of female and minority entrepreneurs from Scheduled Castes (SCs) and Scheduled Tribes (STs) in the Indian entrepreneurial ecosystem.

The rest of the paper is structured as follows: we begin by discussing the regional entrepreneurial disparity and the steps introduced in Startup India to address it. We then move to discussing the performance of the FFS in light of the seed-stage and early-stage funding requirements of Indian start-ups. In the following section, we discuss the underrepresentation of women entrepreneurs and entrepreneurs from marginalised castes and the lack of policy support in Startup India to improve their representation. Finally, we finish with the conclusion.

The Good: Promoting Geographic Representation

Entrepreneurship in India has been, and continues to be, highly concentrated in three megacities: Mumbai, Bengaluru, and Delhi NCR. All of India's 21 unicorns (start-ups with valuations of $1 billion/₹7,400 crore[1] or more) are headquartered in these three cities (Hurun 2019). India's venture capital industry is also clustered in and around these three cities (Rault and Mathew 2019). The cities collectively accounted for 93% of all the funding raised between 2014 and 2019 (Table 1). Clustering of entrepreneurial activity, however, is neither a recent nor an India-specific phenomenon. Indeed, clusters of related businesses can be found across the world and have existed throughout modern economic history (Chatterji et al 2014). While these clusters are known to facilitate the creation of new firms, improve the performance of existing businesses (Delgado et al 2010), and promote local economic growth (Chatterji et al 2014), such geographic concentration of entrepreneurial activity leads to the overlooking of the economic possibilities of other regions in a country. This creates an imbalanced entrepreneurial ecosystem (Rault and Mathew 2019). The adverse effects of such an ecosystem get further amplified and manifest as increased regional economic disparity. Recent studies have also shown that the concentration of high-tech start-ups in a region can lead to increased economic inequality and limit the supply of future entrepreneurs from industries other than those belonging to the clusters (Kwon and Sorenson 2021).

Table 1: City-wise Distribution of Equity Funding Raised in India in 2014–19

(₹ crore)

City	2014–16	Share (%)	2017–19	Share (%)
Bengaluru	58,749	43	1,24,313	47
Delhi	48,648	36	93,210	35
Mumbai	18,663	14	28,941	11
Others	10,360	7	16,613	7
Total	1,36,420	100	2,63,077	100

Other cities: Pune, Jaipur, Chennai, Hyderabad, Ahmedabad, Surat, and Kolkata.
Source: Tracxn (2020).

Recognising the concentration of high-tech, innovative start-ups in Mumbai, Bengaluru, and Delhi NCR and the advantages of a more regionally balanced ecosystem, one of Startup India's objectives is to address the geographic imbalances in high-tech entrepreneurship by broadening entrepreneurial networks across the country. The Startup India Action Plan states:

> with this Action Plan the Government hopes to accelerate spreading of the start-up movement from existing tier 1 cities to tier 2 and tier 3 cities including semi-urban and rural areas. (MOCI 2016: 2)

To achieve this objective, the initiative aims to expand India's network of incubators, scout for entrepreneurs from tier-2 and tier-3 cities, and encourage start-ups across the country to register with the central Startup India hub. The hub serves as a platform for collaboration between the central and state governments, venture capital funds, angel networks, banks, incubators, accelerators, universities, legal partners, consultants, and research and development (R&D) institutions (Startup India 2016). The key objective of the hub is to assist start-ups across India at various stages of their lifecycles; for example, with obtaining finances, business advice, technology commercialisation, and upgrading of management and marketing skills (Startup India 2016). Enacting policies to encourage partnerships, collaborations, and investments in new enterprises helps bridge the gaps between such enterprises and the resources available to them (Baum and Oliver 1991). Such bridging mechanisms facilitate inter-organisational relationships and establish channels for the efficient flow of essential services between external resource providers and new organisations (Amezcua et al 2013).

As of 6 May 2020, a total of 79,783 start-ups from across the country, representing all the states and union territories of India, had registered under the Startup India hub. The hub had over 4,09,000 registered users and 19 free-to-access online courses, covering a variety of areas, including design thinking, data analytics, financial statement analysis, and managerial economics. It also had a network of 611 incubators, 590 mentors, and 131 accelerators across the country (Startup India 2020).

To avail the concessions and rebates of the initiative, a start-up must register with the hub and apply for recognition through the Department for Promotion of Industry and Internal Trade (DPIIT), which falls under the purview of the Ministry of Commerce and Industry (MOCI). The DPIIT is the nodal agency responsible for the implementation of the Startup India initiative. Upon recognition, start-ups can avail benefits such as tax exemptions, easy public procurement norms, fast-tracking of intellectual property rights (IPR) applications, and rebates in patent protection (Startup India 2016). The latest update from the MOCI states that as of 1 March 2020, a total of 28,979 start-ups were recognised by the DPIIT (GOI 2018). Maharashtra, which includes the financial capital of Mumbai, recorded the highest number of start-ups recognised by the DPIIT (5,477); followed by Karnataka (4,206), which hosts the start-up capital, Bengaluru; and then the political capital, Delhi (3,740). These three states are followed by Uttar Pradesh (UP) (2,342) and Haryana (1,635), which are home to the entrepreneurial hubs of Noida and Gurugram. However, we cannot consider the absolute

number of recognised start-ups as a measure of the entrepreneurial success of a state. This figure does not take into account factors such as the state's gross domestic product (GDP), level of industrialisation, overall population, availability and quality of human capital, and quality of infrastructure.

To contextualise these figures, we compare the proportionate share of each state and union territory in the DPIIT-recognised start-up pool with their proportionate share in the total projected population for 2020 (Table 2). The results highlight that only 30% of all states and union territories in India (11) have an equal or higher proportionate share in the DPIIT-recognised start-up pool vis-à-vis their share in the country's population. The high-performing regions, unsurprisingly, are the ones with established entrepreneurial hubs; for instance, Maharashtra and Karnataka. The top-performing regions also happen to be leaders in other development indices, such as GDP per capita (Statista 2021), the Human Development Index (Bhardwaj 2021), and the infrastructure index (Mampatta and Kundu 2017); the converse holds for poor-performing states. The data thus highlight that the existing disparities across the states on economic and social indicators also translates to their entrepreneurial performance. Governments in states, such as Bihar, UP, West Bengal, Madhya Pradesh, and Rajasthan need to proactively engage with their regional start-up communities and strengthen their entrepreneurial ecosystem to bridge this gap.

Table 2: Proportionate Share of States and Union Territories in the Total Number of DPIIT-recognised Start-ups vis-à-vis Their Share in the Total Population of the Country

States/Union Territories	No of DPIIT-recognised Start-ups	Share of DPIIT-recognised Start-ups (%)	Projected Population in 2020	Share of Population in 2020 (%)	Difference (%)
Top 5					
Delhi	3,740	12.91	1,84,98,192	1.37	+11.54
Maharashtra	5,477	18.90	12,19,24,973	9.01	+9.89
Karnataka	4,206	14.51	6,68,34,193	4.94	+9.57
Haryana	1,635	5.64	2,77,93,351	2.05	+3.59
Telangana	1,609	5.55	3,89,19,054	2.87	+2.68
Bottom 5					
Uttar Pradesh	2,342	8.08	23,33,78,519	17.24	-9.16
Bihar	374	1.29	12,22,56,981	9.03	-7.74
West Bengal	839	2.90	9,86,62,146	7.29	-4.39
Madhya Pradesh	815	2.81	8,38,49,671	6.19	-3.38
Rajasthan	823	2.84	7,95,84,255	5.88	-3.04

Source: MOCI (2020b), UIDAI (2020).

The Startup India initiative has helped to prioritise the entrepreneurial ecosystem in policy decisions at the state government level. Before its launch, only four states were actively supporting start-ups through a dedicated start-up policy (GOI 2018). But since its launch in January 2016, a total of 23 states and two union territories have formulated a dedicated start-up policy as of December 2019 (MOCI 2020b). Though significant interstate disparities still exist, the prioritisation of entrepreneurship policies among state governments, and the creation of a central Startup India hub with networking, training, and mentorship facilities, are positive steps towards levelling regional entrepreneurial imbalances in India. Since the launch of the policy in 2016, several technology start-ups from non-traditional and geographically remote areas, such as the Himalayan states and the north-eastern region of India, have registered with the initiative (Singh 2018). As of 6 May 2020, a total of 338 start-ups from the north-eastern states have registered. The networking facilities provided by the Startup India hub are likely to bridge the gap between start-ups located in tier-2 and tier-3 cities and external resources, as more start-ups, mentors, incubators, accelerators, and venture capital firms join the network.

The Bad: Inefficient Funding Mechanism

Easy access to capital is a crucial factor that drives entrepreneurship, as finance is the lifeblood of every business. Given the scarcity of financial resources, ensuring its adequate supply for start-ups is a significant challenge (Graebner and Eisenhardt 2004; Xiao 2015). In the Global Entrepreneurship Monitor (GEM) country report in 2018, 50% of entrepreneurs in India declared the lack of financial support a major strategic constraint for their businesses. Similarly, 41% of entrepreneurs reported a lack of funds as a hurdle for business growth (Innoven Capital 2018). Approximately 38% of entrepreneurs cited financial problems as the key reason for dissolving their businesses (GEM 2018). Although the inflow of venture capital funds into the Indian entrepreneurial ecosystem has increased over the past decade, such funds have been concentrated in a few key sectors. For instance, 80% of the overall funding raised by the Indian start-up ecosystem in 2019 was concentrated in four sectors—consumer tech, SaaS/software, fintech, and business-to-business (B2B) commerce and tech (Sheth et al 2020). This further highlights the difficulty that start-ups in non-technology and "non-hot" sectors experience in raising funds from venture capital firms.

In terms of overall (non-government) funding trends in the Indian start-up ecosystem in 2019, seed-stage funding registered a marginal growth of 1.7%, from $1.13 billion (₹8,362 crore) in 2018 to $1.15 billion (₹8,510 crore) in 2019 (Sriram 2020). Seed-stage funding constituted only a minuscule share of the total $14.5 billion (₹1,07,300 crore) in funds raised in 2019 (Abrar 2019). These trends highlight the severe supply crunch in seed-stage funding in the Indian start-up ecosystem. Approximately 90% (71,776) of all the start-ups registered with the Startup India network (79,783) are either at the ideation, validation, or early traction stage, amplifying the need for increased funding support from the government at the seed and early stages. The Startup India policy document acknowledges the financial constraints facing entrepreneurs. "Funding Support and Initiative" was one of the three main subheadings in the policy document. The Startup India Action Plan (MOCI 2016: 13), states:

> One of [the] key challenges faced by Startups in India has been access to finance. Often Startups, due to lack of collaterals or existing cash flows, fail to justify the loans. Besides, the high risk nature of Startups wherein a significant percentage fail to take-off, hampers their investment attractiveness. Startup India's objective is to provide funding support for [the] development and growth of innovation driven enterprises.

The Government of India (GOI) set up an FFS under the Startup India initiative with a total allocation of ₹10,000 crore ($1.35 billion) over four years (Startup India 2016). The Small

Industries Development Bank of India (SIDBI) was put in charge of administering the fund. The established arrangement stated that the DPIIT would allocate funds to SIDBI, which in turn would invest the money in alternative investment firms (AIFs). The AIFs would then raise matching funds, and after the fundraising, invest the money and disburse it to start-ups. In principle, investment via daughter funds is a prudent strategy because if governments directly invest in start-ups, it could lead to favouritism and inefficient allocation of scarce financial resources (Lerner 2009: 111–36).

The pace and quantity of fund allocation, investment, and disbursement under the Startup India initiative have been slow and insufficient. The MoCI has acknowledged this operational bottleneck. In an interview with DD News following the union budget of 2019, the then secretary of the DPIIT, Ramesh Abhishek, acknowledged the lack of seed-stage funding in the Indian start-up ecosystem and stressed that the government had an important role to play in ensuring its sufficient supply (Mishra 2019). However, four years after the launch of the FFS (on 18 February 2020), SIDBI had committed only ₹3,123.20 crore ($413.3 million), a mere 31% of the total amount announced to support 47 AIFs. These AIFs, in turn, had invested ₹3,378.47 crore ($447 million) in 320 start-ups, of which only ₹912.91 crore ($120.9 million) had been drawn from the FFS (Table 3; MoCI 2020a). Furthermore, merely 29% (₹913.9 crore) of the total committed amount of ₹3,123.20 crore had been drawn from the FFS.

Table 3: A Timeline of the Allocation of Funds under the FFS, Startup India

Date	FFS Updates	In ₹ Crore	Share of Total Announced Support (%)	No of Start-ups Funded
16 January 2016	Total announced corpus	10,000.0	100	0
18 December 2017	Total funds committed by SIDBI to AIFs	605.7	6.0	–
	Total investment made by AIFs	337.0	–	75
	Total drawdown from FFS	90.6	0.9	–
6 April 2018	Total funds committed by SIDBI to AIFs	1,136.0	11.3	–
	Total investment made by AIFs	569.0	–	120
14 May 2018	Total drawdown from FFS	141.0	1.4	–
18 February 2020	Total funds committed by SIDBI to AIFs	3,123.2	31.2	–
	Total investment made by AIFs	3,378.5	–	320
	Total drawdown from FFS	9,12.9	9.1	–

Source: MoCI (2017, 2018, 2020a), Sasi (2018).

The data available from the MoCI also suggest that the growth rate of key metrics has improved over time. The rate of fund allocation by SIDBI to AIFs has increased from 88% in 2018 to 175% in 2019. The rate of total investments made by AIFs in start-ups had increased from 69% in 2018 to 494% in 2019. The rate of drawdowns from the FFS had increased from 56% in 2018 to 548% in 2019. Similarly, the rate of the number of start-ups funded under the scheme rose from 60% in 2018 to 167% in 2019. However, despite the increment, only 1.1% (320) of all DPIIT-recognised start-ups (28,979) have received financial support under the Startup India initiative so far. The data highlight that the FFS in its present form is inadequate to meet the demands of the growing Indian start-up ecosystem.

The Ugly: Silence on Caste and Gender Disparities

Startup India emphasises building a strong and inclusive entrepreneurial ecosystem. The "about us" section of the Startup India website (Startup India 2016) reads:

> Startup India is a flagship initiative of the Government of India, intended to catalyse startup culture and build a strong and inclusive ecosystem for innovation and entrepreneurship in India.

However, the key policy documents, namely "Startup India Action Plan 2016" and "Startup India Status Report 2018," are silent on measures to promote the participation of women and marginalised communities. Therefore, the initiative fails to address and refuses to acknowledge the biggest hurdles to an inclusive entrepreneurial ecosystem—widespread caste and gender disparities in India.

Under-representation of entrepreneurs from SC and ST communities: Rigid caste-based social stratification is inherent to Indian society. Although several attempts have been made to address caste inequalities through legislative and political reforms, caste continues to be a potent force in determining an individual's socio-economic interactions (Bapuji and Chrispal 2020). Nafziger (1971) points out that over time, the social stratification system has led to reduced occupational mobility, technological change, and innovation within Indian society. In examining the impact of the caste system on entrepreneurship in India, Medhora (1965) argues that the caste divide has led to rigidity in the Indian economic system by inhibiting change and restricting the scope of entrepreneurship to a small group of people. The caste system has ensured that people belonging to the lower echelons of the caste hierarchy remain outside the realm of entrepreneurship by restricting their mobility and limiting their access to economic and social resources[2] (Bapuji and Chrispal 2020).

Table 4: Share of Enterprise Ownership and Employment by Caste Category, 2001–13 (%)

	2001	2005	2011	2013
Population share				
Non-SC/ST	75.6	–	74.8	–
SC	16.2	–	16.6	–
ST	8.2	–	8.6	–
Share of enterprise ownership				
Non-SC/ST	–	87.5	–	83.2
SC	–	8.8	–	11.4
ST	–	3.6	–	5.4
Share of employment				
Non-SC/ST		88.5	–	84.9
SC	–	8.1	–	10.1
ST	–	3.4	–	5.0

(a) The population figures are derived from the 2001 and 2011 Census (Office of the Registrar General and Census Commissioner 2001, 2011). Hence, the population column for 2005 and 2013 are left blank. (b) The share of enterprise ownership of communities is derived from the Economic Census of 2005 and 2013 (MoSPI 2005, 2013). Hence, the ownership columns for 2001 and 2011 are left blank.
Source: Iyer et al (2013); Ministry of Statistics and Programme Implementation (MoSPI 2005, 2013); Ministry of Social Justice and Empowerment (2018).

Recent evidence on the representation of SCs and STs suggests that their share in enterprise ownership remains disproportionately low. Iyer et al (2013), using data from 1990 to 2005, report that despite collectively accounting for almost a fourth of the population in 2001, SCs and STs combined owned only 12.4% of all enterprises in India in 2005. This trend contrasts with the non-SC/ST category, whose proportionate share in enterprise ownership was much higher vis-à-vis their share in the population (Table 4, p 48; Iyer et al 2013). Extending Iyer et al's (2013) work, additional data from the most recent Economic Census of India (MoSPI 2013) and 15th Census of India (Office of the Registrar General and Census Commissioner 2011) have been incorporated in this paper. The data suggest that although the share of SCs and STs in enterprise ownership has improved over time, these groups remain under-represented. SCs and ST collectively owned 16.8% of enterprises[3] in 2013, while accounting for 25.2% of the total population in 2011 (Table 4). At the given rate, it will take decades for SCs and STs to achieve proportionate representation. This further highlights that India's political and legislative reforms, over the past decades, have been unable to adequately deliver economic justice for these communities.

The SC and ST share of ownership of agricultural establishments (21%), including farming, livestock, fishery, and forestry, were higher than that of non-agricultural establishments (15.5%). The divide was starker for the ST community, which owned only 4.3% of non-agricultural establishments but 8.6% of agricultural establishments, highlighting their dependence on agriculture and allied activities. Similarly, members of SC and ST communities owned more rural enterprises than urban ones (Table 5). Of the enterprises owned by the SC communities, 65% were located in rural areas. For the ST community, it was even greater, at 77%. Further, a majority of these enterprises operated without any hired workers, highlighting that a significant number of these enterprises were need-based undertakings that did not significantly contribute to job creation at the community level. Although the firm-level data for all DPIIT-recognised start-ups is not available, the data from the Sixth Economic Census (MoSPI 2013) highlights the representation problem that SC and ST communities in the Indian entrepreneurial ecosystem face (employing a broad definition of entrepreneurship).[4] This under-representation could be due to multiple factors, such as caste-based economic exclusion, urban and rural divides, lack of access to quality education (Monsen et al 2012), and relatively small social networks (Iyer et al 2013).

Table 5: Categorisation of Enterprises Owned by the SC, ST, and Non-SC/ST Communities

2013	Rural	Urban	Total
SC			
Agriculture	14,53,959	1,08,168	15,62,127
Non-agriculture	24,08,588	20,01,956	44,10,544
Handloom and handicraft	1,77,132	73,843	2,50,975
Total	40,39,679	21,83,967	62,23,646
%	65	35	100
ST			
Agriculture	10,60,470	40,310	11,00,780
Non-agriculture	10,92,752	6,19,320	17,12,072
Handloom and handicraft	97,600	20,192	1,17,792
Total	22,50,822	6,79,822	29,30,644
%	77	23	100
Non-SC–ST			
Agriculture	93,19,793	8,70,808	1,01,90,601
Non-agriculture	1,54,98,829	1,78,15,570	3,33,14,399
Handloom and handicraft	8,12,143	6,28,840	14,40,983
Total	2,56,30,765	1,93,15,218	4,49,45,983
%	57	43	100

Source: MoSPI (2013).

The Startup India policy focuses strongly on nurturing innovation and technology enterprises. The words "innovation," "technology," and "patent" occur 46, 31, and 15 times, respectively, in the policy document. Given the strong focus on technology, a central online Startup India hub has been set up to facilitate networking opportunities. However, the reliance on technological delivery fails to account for India's digital divide. As of June 2019, only 36% (45.1 crore) of India's population has access to the internet (Ahaskar 2019). Further, a disproportionately high number of internet users in India live in urban areas. The 31% of India's population residing in urban areas make up 42.5% (19.2 crore) of the total internet base as of June 2019 (Ahaskar 2019; Ministry of Social Justice and Empowerment 2018). This urban–rural divide in internet access is amplified in the SC and ST communities, the majority of which are settled in rural areas. As per the 2011 Census, 76.4% of the SC population and 90% of the ST population live in rural settlements (Ministry of Social Justice and Empowerment 2018).

The evidence thus suggests the need for targeted measures to promote technology- and innovation-driven entrepreneurship among SC and ST communities. However, the Startup India policy document in its present form does not address this issue. In their comparative analysis of policy documents related to women entrepreneurship in the US and Sweden, Ahl and Nelson (2015) argue that the language in policy documents is neither innocent nor passive, but rather indicates how a subject (in their case, women entrepreneurs) is positioned in the policy discourse. The 40-page "Startup India Action Plan" document has no mention of the words "caste," "tribe," "marginalised," "indigenous," or "social group." These omissions contradict the initiative's vision of building an inclusive entrepreneurial ecosystem.

Under-representation of women entrepreneurs: Women's participation in the workforce is integral to a nation's economic development (Duflo 2012; Mehra 1997). Women's entrepreneurship is crucial to poverty reduction, especially in developing economies (Minniti 2010; Yunus 2006). Bruin et al (2006), in their work on female entrepreneurship, assert that female entrepreneurs contribute significantly to innovation as well as job and wealth creation. However, despite this evidence, entrepreneurship has largely been, and continues to be, dominated by male entrepreneurs globally (Ahl and Nelson 2015). Research on female entrepreneurship also suggests that most women-owned enterprises are necessity-based enterprises. Necessity-based or subsistence entrepreneurship refers to tiny

businesses run informally and through self-employment; a large number of these are set up due to a lack of employment opportunities for owners in the formal sector (Beck 2013). These enterprises are often involved in occupations with a lower earning potential (Arum and Müller 2009).

Data from the Sixth Economic Census of India 2013 suggests that women accounted for 48.5% of the population in 2011 and owned 13.8% of all Indian enterprises in 2013 (Table 6; MoSPI 2013). The majority of women-owned enterprises were single-person enterprises (83.1%), due to which their share in total employment was relatively lower than their share in enterprise ownership. The data also shows that most women-owned enterprises were based in rural areas (65.1%) and engaged in small-scale retail such as food and beverages. For instance, selling homemade rice beer is a common occupation for women from the Munda tribe in Jharkhand (Bhattacharya 1993).

In its report for 2019–20, GEM highlights that 12.7% of the adult female population of India was engaged in total early-stage entrepreneurial activity (TEA), compared to 17.1% of the adult male population (GEM 2020). Though the share of early-stage female entrepreneurs has improved marginally, rising from an all-time low of 4.58% of the total adult female population in 2013 to 12.71% in 2019 (GEM 2016, 2020), it remains lower than that of males. Further, the share of females in TEA has increased in tandem with their share in necessity-based entrepreneurship. In 2015, 15.30% of women-owned early-stage entrepreneurial establishments were necessity-driven, which increased to 49.90% by 2018 (Figure 1). Meanwhile, opportunity-driven establishments reduced from 82.1% in 2015 to 40.2% in 2018, signifying that there has been a steady decline in career-enhancing entrepreneurial opportunities for women in India.

Table 6: Categorisation of Women-owned Enterprises Based on Employment, Location, and Sector

(In Millions)	No of Enterprises	Employment	Rural	Urban
Overall	58.50	131.29	34.80	23.70
%	100.00	100.00	59.50	40.50
Women-led	8.05	13.45	5.24	2.810
%	13.80	10.20	65.10	34.90
	Agriculture	Non-agriculture	No Worker*	One or More Workers
Overall	45.36	13.13	41.97	16.53
%	77.50	22.40	71.70	28.30
Women-led	2.76	5.29	6.69	1.35
%	34.30	65.70	83.10	16.80

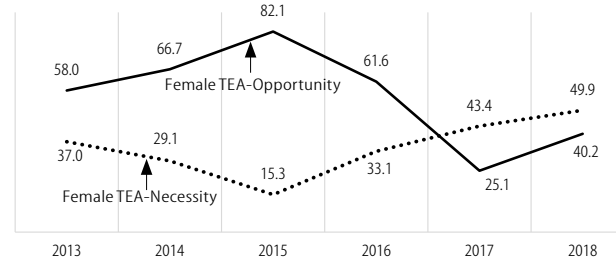
* No worker refers to enterprises which are owned and run by only one person.
Source: MoSPI (2013).

Table 7: Female TEA as a Percentage of the Total Adult Female Population in Asia and West Asia

Region	Countries	Female TEA (% of Adult Female Population)	
		Score	Rank/49
Asia	Thailand	19.3	6
	Indonesia	14.1	12
	Korea	12.2	16
	China	9.3	18
	Taiwan	8.8	20
	India	8.7	21
	Japan	4	41
West Asia	Lebanon	17.4	8
	UAE	10.1	17
	Israel	9.1	19
	Saudi Arabia	8.5	23

Source: GEM (2019).

Figure 1: Necessity- and Opportunity-driven Entrepreneurship as a Percentage of the Total Female TEA (%)



Source: GEM (2014, 2015, 2016, 2017, 2018, and 2019).

More recent evidence from a variety of sources shows that little has changed since the last Economic Census in 2013. The Reserve Bank of India (2019) shows that only 5.9% of start-ups in India had a women-only founding team, 38.6% of all founding teams had at least one female founder, while 55.5% had no female founders. The under-representation of women in the Indian entrepreneurial ecosystem is also reflected in international rankings. India ranked 53rd in women's business ownership out of the 58 participating countries in the Mastercard Index for Women Entrepreneurs 2019 (Mastercard 2019). Similarly, in a GEM (2019) report, India scored much lower in TEA vis-à-vis other Asian and West Asian counterparts (Table 7), except for Saudi Arabia and Japan.

Several researchers outline the hardships and obstacles that hold women back from realising their entrepreneurial potential (Estrin and Mickiewicz 2011; Vossenberg 2013; Verheul et al 2006). Some of the most prominent concerns are limited access to financial resources, inadequate training, lack of technical expertise, lack of access to information, issues related to safety, gender-based violence, lack of societal support, and lack of enforcement of property rights leading to a low rate of property ownership (Korreck 2019). Despite this overwhelming evidence, the Startup India Action Plan includes no targeted schemes to promote female entrepreneurship in India.

Drawing on Ahl and Nelson's (2015) methodology, we analysed the language used in two documents of the Startup India initiative: "Startup India Action Plan, 2016" and "Startup India Status Report, 2018." Our analysis shows that the terms "woman," "women," "women entrepreneurship," "female," "female entrepreneurship," and "gender" are not mentioned (MoCI 2016, 2018). The absence of these words in the 8,570-word-long document reflects the lack of attention to the gender disparity in the Indian entrepreneurial ecosystem.

Conclusions

The Startup India initiative, launched in 2016, was touted by the Indian government as a pillar of their vision to transform India into a land of innovation and enterprise. As of 2020, it has undergone little independent systematic evaluation. Our analysis of the policy and outcomes suggests that by encouraging state governments to formulate a dedicated start-up policy and

by creating a central online hub with e-learning, networking, and mentoring facilities, the initiative has made positive strides towards addressing regional entrepreneurial disparities in India. However, our analysis of the FFS created under the Startup India initiative shows that in four years, the scheme disbursed only 9% of the corpus of ₹10,000 crore and funded only 1.1% (320 out of 28,979 start-ups) of all DPIIT-recognised start-ups.

Our research also indicates that a major shortcoming of Startup India is its neglect of India's caste- and gender-based disparities. Despite the overwhelming evidence of the underrepresentation of SC, ST, and women entrepreneurs in India, the Startup India initiative does not attempt to address or even acknowledge the impediments to realising the entrepreneurial potential of these marginalised groups. These omissions exist despite the consensus in the literature that specific policy reforms and interventions are not uniformly effective for entrepreneurs of different genders (Beck 2013). We recognise that this study is based on limited data. A publicly available comprehensive database on Indian start-ups with establishment-level data would allow for a more robust investigation. However, we hope that the novel analysis in this paper will stimulate further research in the field.

Finally, we argue that it is time for policymakers to revisit Startup India and introduce measures to inculcate operational efficiency to improve the flow of funds to start-ups and to address the gender and caste disadvantages entrenched in the Indian ecosystem.

NOTES

1 $1 = ₹74 is the exchange rate used throughout the paper.

2 Economic resources, for instance, include income, asset ownership, wealth, and occupational mobility. Social resources include information, social integration, and equal opportunities.

3 The share of ownership reported in the paper is the aggregate of ownership share of SCs in agricultural establishments, non-agricultural establishments, and handloom/handicraft establishments.

4 Entrepreneurship is defined here as the act of setting up a business wherein the entrepreneur takes on either the majority or all the financial risks upon themselves.

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