

# **White Paper on India's Biotechnology Start-up Ecosystem**

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# INSIGHT INTO INDIA'S BIOTECH START-UPS

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**With 1,022 start-ups, India's biotech ecosystem has crossed an important milestone at the end of 2016.**

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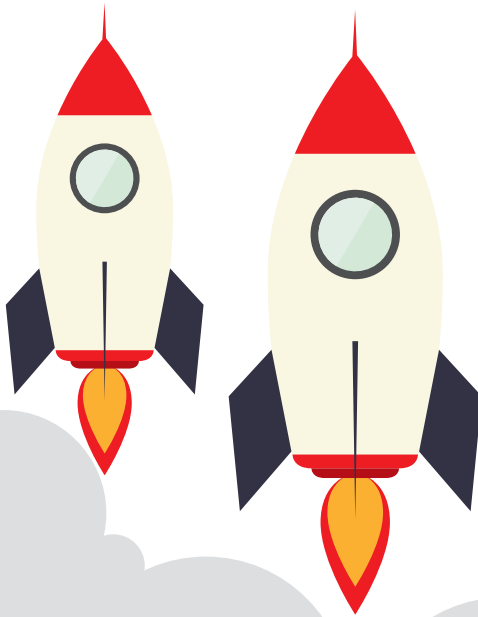
**The ecosystem today has aided the first major step of fostering 2020 biotech start-ups by 2020.**

A preliminary study was undertaken by ABLE to understand the density of biotech start-ups (as per the definition prescribed by Start-up India policy). A key finding of the study is that the number of start-ups in the biotechnology space between January 1, 2012 and December 31, 2016 is over 1022.

It maybe recalled that industry, policy makers, and the other stakeholders in the country, a few years ago around 2012-13, had identified "start-ups" as one of the important drivers for biotech's growth in future. At one of the deliberations between industry and the Department of Biotechnology (DBT), the participating leaders did a quick calculation and suggested a target of creating 2000 biotech start-ups by 2020. This was to promote innovation and R&D. This was accepted as a guidance number. ABLE decided to do a quick study to find out the status of start-ups and check if the industry is on track?

Highlights of this exercise are presented in the ensuing pages.

# NUMBER OF BIOTECH START-UPS



# 1022

The total number of biotech  
**companies formed** during the  
last five years

## TOTAL INVESTMENTS BY BIOTECH START-UPS



### **The total biotech investments**

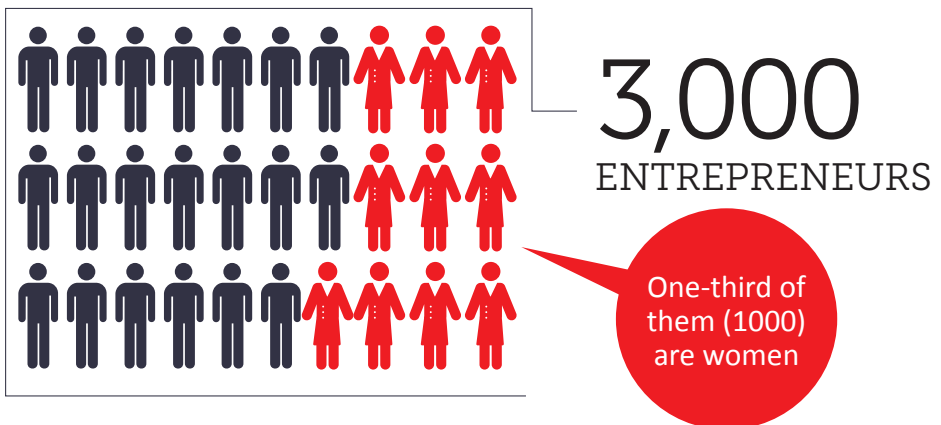
in the country is estimated to be in excess of Rs 18700 crore. This includes Private Equity, Grants, and loans from families and friends. The average paid up capital was Rs 7.5 Lakh

## AGE OF BIOTECH STARTUPS (2012-16)

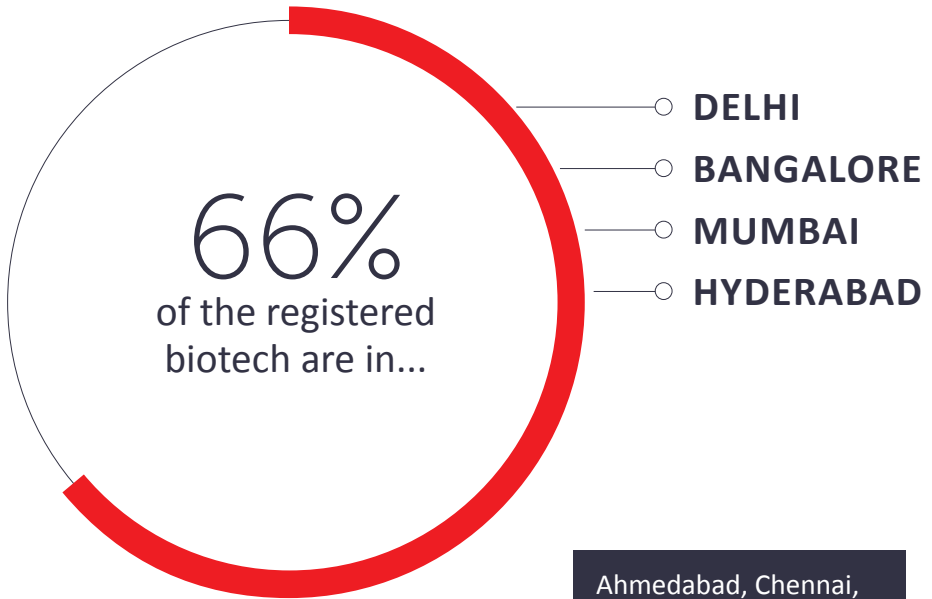


Nearly half (53.91%) of the total start-ups set up during 2012-2016 are between 3-5 years of age, while a tenth of them have been set up in the last 6-9 months.

## FOUNDERS



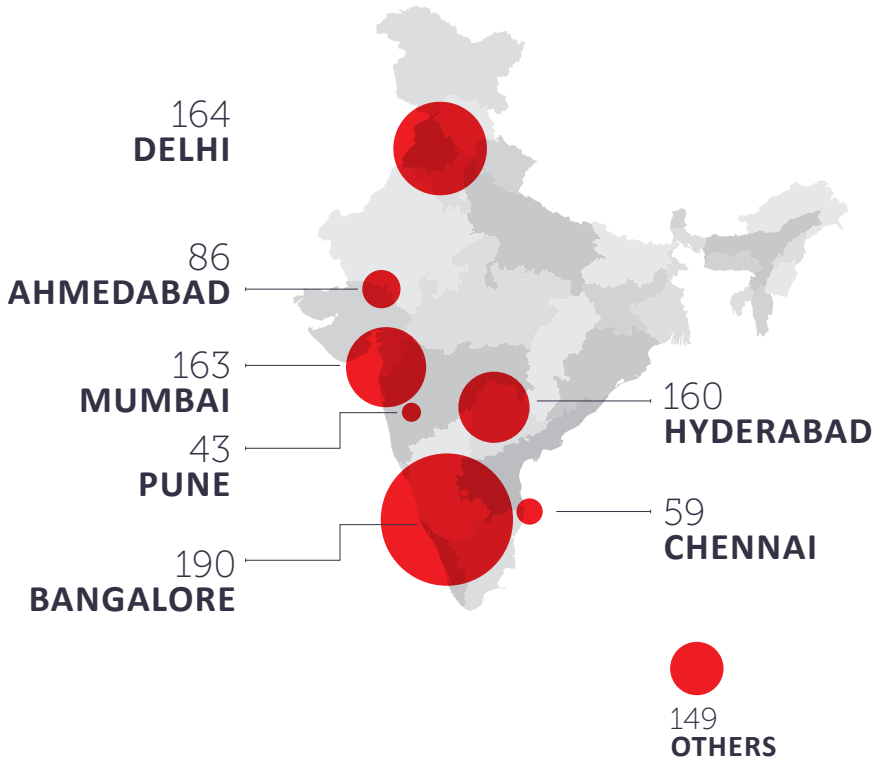
## LOCATION OF BIOTECH START-UPS



Ahmedabad, Chennai,  
and Pune are the other  
important destinations  
of start-ups.

SOURCE: ROC

## WHERE ARE THE START-UPS REGISTERED?



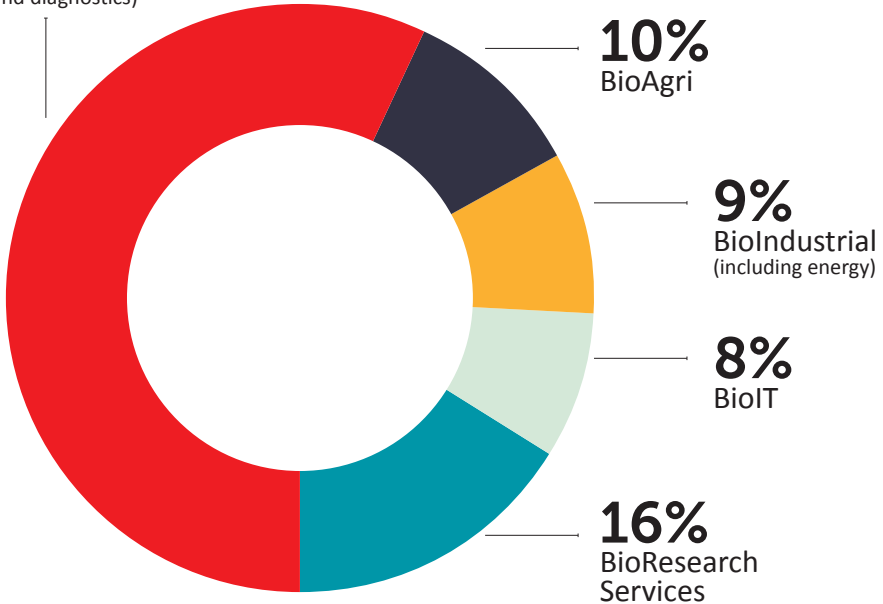
### Where have they been formed?

These companies have been registered with ROCs across the country. Bangalore accounted for 18.5 percent of the total new registrations during the period of the study. Delhi, Mumbai, and Hyderabad are very closely behind. Delhi and NCR region had 164 companies, Mumbai ROC has 163 companies, and Hyderabad saw 160 registrations. Ahmedabad, Chennai, and Pune were the other important centers with 8.41%, 5.77%, and 4.21% share of the ROC listings. Chandigarh, Ernakulam, Goa, Jaipur, Kolkatta, and Kanpur too had rise in company formations.

# SECTOR-WISE REPRESENTATION OF START-UPS

**57%**

BioPharma  
(including biomedical  
and diagnostics)



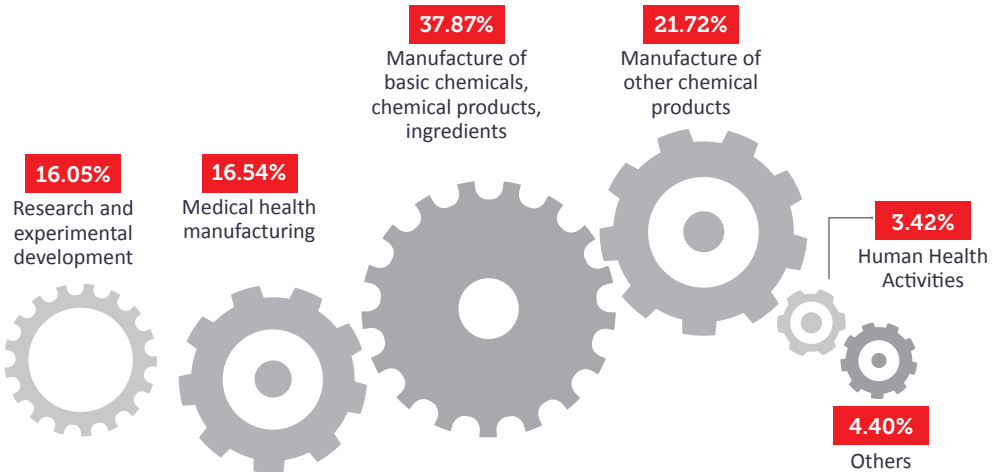
BioPharma sector including diagnostics and medical devices accounts for nearly 57 percent share of companies

The next big representation is with companies in Research Services.



## FOCUS OF START-UPS

The focus of start-ups on research services has been on the rise. Nearly 16% of the companies are focused on research activities. This share has grown to 18% during the last 1 year



One interesting model that most of the companies registered in India adopt is a combination of services and products offering. The start-ups have been focusing on a wide-spectrum of areas. These companies are there in medical devices, appliances, and diagnostic services; They have expertise in genomics, proteomics, and other IT healthcare areas. Some of them are into agrogenomics, CRAMS, energy, and devices sector too. Some of the products and services that start-ups are offering include anti-fungal products, antidiabetics, antidiarrheals, antisporiatic, antivirals, anti-cancer drugs and detection kits, biosimilars, genome data analysis, personal genomics, IOT products among several other areas.

While bulk of the start-ups have been working with basic biochemical processes, nearly (60%), the R&D kind of start-ups are on the rise too. Nearly 16 percent of the start-ups have showed their activity as research and experimental development. This a good sign that innovation culture is now getting set into the DNA of start-ups. It also testifies the fact that BIRAC and industry are now working closely and there is some support to start-ups for research.

## WHAT IS HELPING BIOTECHNOLOGY ...

- National Start-up policy
- Government funds for start-ups (support to companies through programs such as BIG, SBIRI, BIPP, and CRS)
- BIRAC was set up in 2012 with the mandate to nurture and grow the emerging biotechnology industry in India
- Start-up policies in several states (Andhra Pradesh / Telangana, Gujarat, Karnataka, Kerala, Maharashtra, Tamil Nadu, West Bengal, etc.)
- Presence of numerous bioincubators like C-CAMP Bioincubator, Bangalore Bioinnovation Center, IIT incubators, IKP, NCL Innovation Park, etc.

## ABLE'S ROLE ...

1

BEST (Biotechnology Entrepreneurship Student Teams) since 2009 with DBT

2

Select student entrepreneurs

3

# BEST SUCCESS STORIES OVER THE YEARS



Top 20 teams go through Entrepreneurs' workshop

4

Top 5 teams chosen annually for cash prize, start-up fund, and mentoring support

5

19 companies have emerged from BEST



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