

**GOVERNMENT OF INDIA
MINISTRY OF SCIENCE & TECHNOLOGY
DEPARTMENT OF BIOTECHNOLOGY**

LOK SABHA

**UNSTARRED QUESTION NO - 2100
ANSWERED ON 12-03-2025**

Bio-AI Hubs

2100. Shri Baijayant Panda:

**Will the Minister of SCIENCE AND TECHNOLOGY
be pleased to state:**

(a) the total number of bio-tech start-ups in the country as of January 2025 along with the year-wise growth in the number of such start-ups since 2014;

(b) whether the Government has launched any new policies to support bio-tech start-ups and investments in this sector and if so, the details thereof;

(c) whether the Government plans to set up Bio-AI Hubs and Bio-manufacturing facilities across the country; and

(d) if so, the details thereof including the timeline fixed for their implementation?

ANSWER

**MINISTER OF STATE (INDEPENDENT CHARGE) OF THE
MINISTRY OF SCIENCE AND TECHNOLOGY AND EARTH SCIENCES
(DR. JITENDRA SINGH)**

(a) As per the India BioEconomy Report (IBER) 2024, number of Biotech Start-ups has grown from 50 Start-ups in 2014 to 8,531 Start-ups in 2023.

| Year | Number of Biotech Startups |
|-------------|-----------------------------------|
| 2014 | 50 |
| 2015 | 732 |
| 2016 | 1022 |
| 2017 | 1732 |
| 2018 | 2662 |
| 2019 | 3397 |
| 2020 | 4237 |
| 2021 | 5365 |
| 2022 | 6755 |
| 2023 | 8531 |
| 2024 | Report under preparation |

Source: IBER Report 2024

(b) The Department of Biotechnology (DBT) established Biotechnology Industry Research Assistance Council (BIRAC) in 2012 as an interface agency to nurture and strengthen the start-up ecosystem in the country with a focus on biotech sector, addressing nationally relevant product development needs. It follows and aligns its activities in line with the National Policies announced by the Government from time to time. BIRAC supports biotech start-up ecosystem by establishing bio-incubators (95 centers established so far) as well as through various funding schemes such as:

i. Early-Stage funding scheme: Biotechnology Ignition Grant (BIG): BIG scheme provides financial support of up to INR 50 lakhs for a period of 18 months to early-stage start-ups and individual entrepreneurs to establish Proof of Concept (PoC) for their

innovative ideas. Close to 1000 start-ups and entrepreneurs have been supported through BIG programme

ii. Equity Funding Schemes:

- **Sustainable Entrepreneurship and Enterprise Development (SEED) Fund provides capital assistance (up to INR 30 Lakhs) to Start-ups with new innovations and technologies for PoC Stage Start-up**
- **Launching Entrepreneurial Driven Affordable Products (LEAP) Fund provides capital assistance (up to INR 100 Lakhs) to start-ups with new innovations and technologies (above TRL 5) for early-stage commercialisation.**

iii. Amrit Grand Challenge –जनCARE has supported 89 Digital Healthtech Innovations in Telemedicine, Digital Health, mHealth with Big Data, Artificial Intelligence (AI) Machine Learning (ML), blockchain and other technologies from Start-ups/Individuals/Companies for strengthening the Healthcare ecosystem in India, importantly in tier-2, 3 cities and rural settings.

iv. BioE3 Policy: The BioE3 (Biotechnology for Economy, Environment and Employment) Policy outlines guidelines and principles for enabling mechanisms for ‘Fostering High Performance Biomanufacturing’ in the country across diverse sectors. To implement this, the Biotechnology Research Innovation and Entrepreneurship Development (Bio-RIDE) scheme with a funding support of INR 1500 Cr was approved in September 2024. The scheme would facilitate setting up of Biofoundry and Biomanufacturing hubs and support start-ups. Initiatives like Biotech fund of funds-AcE under Bio-RIDE scheme would promote private investments.

BIRAC schemes and programmes are regularly assessed internally and updated in line with the evolving needs of the ecosystem. New programmes are launched as and when required. BIRAC also partners with several national and international agencies ensuring continuous support for the biotech start-up ecosystem.

(c) The DBT has recently launched BioE3 policy with the approval of the Cabinet for the development of bio-based products through setting up of BioEnablers that include Bio-Artificial Intelligence (Bio-AI) Hubs, Biofoundries and Biomanufacturing Hubs across the country.

(d) DBT and BIRAC announced a joint call inviting proposals for setting up of “मूलांकुर BioEnablers – Biofoundries and Biomanufacturing Hubs”, in both academia and industry. From over 253 applications, 24 projects on Biofoundries and Biomanufacturing Hubs have been recommended for support. These are being established across the country with two year implementation duration. Further plans for setting up of Bio-AI hubs and Biomanufacturing facilities are also under process.
