



# Global Bio-India-2021

## Why in News

Recently, the **Union Minister for Health & Family Welfare** inaugurated the **second edition of Global Bio-India-2021** in New Delhi through virtual mode.

- It showcases the **strength and opportunities of India's [biotechnology](#) sector** at national level and to the global community.
- The minister unveiled the “**National Biotech Strategy**” and also inaugurated the **Virtual Exhibition of Global Bio-India** at the occasion.

## Key Points

### ▪ About:

- It is a **mega international congregation of Biotechnology**, with stakeholders including international bodies, regulatory bodies, Central and State Ministries, SMEs, large industries, bioclusters, research institutes, investors, and the startup ecosystem.

### ▪ Aim:

- It aims at **facilitating the recognition of India** as an **emerging Innovation Hub** and the bio-manufacturing hub globally.

- India was ranked 48<sup>th</sup> in the [Global Innovation Index Report 2020](#).

### ▪ Objectives:

- Bio- Partnering, Policy Discussions, CEO's plans for India and **connecting Indian Biotech ecosystem with international ecosystem** and creating platforms for **new idea evaluation and investments**.
- Showcase and identify **key biotechnological innovations, products, services, technologies** from national and international companies, start-ups and research institutes.
- **Attracting major contract projects** from international companies as well as major global venture funding into India.
- According to the [World Bank's Ease of Doing Business Report 2020](#), India is now ranked **1<sup>st</sup> among South-Asian countries** compared to 6<sup>th</sup> rank in 2014.

### ▪ Organisers:

- Co-organised by the Department of Biotechnology, Ministry of Science & Technology along with its Public Sector Undertaking [Biotechnology Industry Research Assistance Council \(BIRAC\)](#) in partnership with industry association [Confederation of Indian Industry \(CII\)](#), [Association of Biotechnology Led Enterprises \(ABLE\)](#) and [Invest India](#).
- **ABLE** is a **not-for-profit pan-India forum** that represents the Indian **Biotechnology** Sector.

## Biotechnology

- Biotechnology is technology that **utilizes biological systems, living organisms or parts of this to develop or create different products.**
- Biotechnology **deals with industrial scale production** of biopharmaceuticals and biologicals using genetically modified microbes, fungi, plants and animals.
- The **applications** of biotechnology include **therapeutics, diagnostics, [genetically modified crops](#) for agriculture, processed food, bioremediation, waste treatment, and energy production.**

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### Biotechnology

#### Pros

- High-quality food
- Less herbicides or pesticides have to be used
- More efficient farming
- Higher output levels
- Efficient use of our natural resources
- Mitigation of vitamin and nutrient deficiencies
- Products will have a longer shelf-life
- Effective measure to reduce the starvation problem
- Especially suitable for areas with extreme weather conditions
- Mass production of important medicines
- Diseases related to genetic disorders can be treated more effectively
- Lower level of dependence on other countries
- Increase in efficiency in industrial processes

#### Cons

- Involves the use of genetic engineering and GMOs
- GMO characteristics can unintentionally be adapted by other plants
- The soil may become less fertile
- Problems with hybrids through cross pollination
- Small farmers who don't use GMOs may go out of business
- High levels of local unemployment
- Increase of poverty in some poor countries
- Overproduction may become a big problem
- Food exports may shrink
- Biodiversity loss
- Health problems related to GMOs
- Excessive amounts of artificial flavors in our food
- Epidemics or pandemics
- Spread of plant diseases

## Biotechnology Sector of India

### ▪ About:

- Biotechnology sector is recognized as one of the key drivers for contributing to India's USD **[5 Trillion economy target by 2024.](#)**
- Policy initiatives of the Government of India (GoI) such as the **[Make in India](#)** program are **aimed to develop [India as a world-class Biotechnology and Bio-manufacturing hub.](#)**
- India is among the **top-12 destinations** for biotechnology in the world, with approximately **3% share in the global Biotechnology industry.**
- Indian **Biotechnology industry's economy was valued at USD 70 billion** in 2020 and is expected to **grow to USD 150 billion by 2025.**

### ▪ Biotechnology Parks:

- The Department of Biotechnology has established **[Biotechnology Parks](#)**/Incubators across the country to translate research into products and services by providing necessary infrastructure support.
- These Biotechnology Parks offer facilities to Scientists, and **[Small and Medium sized Enterprises \(SMEs\)](#)** for technology incubation, technology demonstration and pilot plant studies for accelerated commercial development of Biotechnology.

### ▪ Draft National Biotech Development Strategy 2020-24:

- **About:**

- It has called for **more engagement with startups and to leverage the [public-private partnership \(PPP\) model](#)** to take the industry to **USD150 billion by 2025**.

- **Aim:**

- To build and nurture a vibrant startup, entrepreneurial, and industrial base, connecting academia and industry.

- **Focus:**

- **Strengthening and nurturing of a strong basic research and innovation driven ecosystem** across research institutes and laboratories, both public and private sector, with complete engagement of startups, small industry, and large industry.

**[Source:PIB](#)**

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