



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 48th 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 **1st among South-Asian countries** compared to 6th 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.**

Biotechnology	
Pros	Cons
<ul style="list-style-type: none">▪ 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	<ul style="list-style-type: none">▪ 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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