













Pharma/Med-tech Sector Deck

India – The pharmacy of the world



Supplies

20%

of Global demand

60%

Global Vaccine Demand

Global Generic Drug

Cost of production is 33% lower than in USA; Setting up cost is 55% cheaper and labour cost is at least 60% lesser than in western countries.

3rd largest Pharma industry in the world by volume and contributes 3.5% of total drugs and medicines exported globally to over 200+ countries.

3rd largest destination for biotechnology in Asia Pacific.

India's Biotechnology industry has crossed \$ 80.12 **billion**, growing 14% from the previous year.

The pharmaceutical industry in India is expected to reach **\$65 Bn** by 2024 & to \$130 Bn by 2030



India has more than ~3,000 pharma companies with over 10,500 manufacturing facilities



India is one of the **biggest suppliers** of low-cost vaccines and the largest provider of generic medicines globally



Out of the 3000 drug manufacturing units in India



\$25.4 Bn Export of Pharmaceuticals (FY 22-23)



10-11% CAGR till 2030



\$21.58 Bn FDI (Apr 2000-Sept 2023)



22% share in India's exports (Medical Devices)

- 1400 units are WHO good manufacturing practice approved
- 1105 have Europe's certificate of suitability (CEPs)
- 950+ match therapeutic goods administration guidelines
- 584 sites are approved by the **USFDA**

Maharashtra - The pharmaceutical capital of India

Contribution to India's pharma exports 20%

Total number of Pharma Clusters 40 (Highest)

Percentage of Drugs and Pharma in FDI 20-20%

US FDA approved plants 59

EU approved facilities 47

WTO GMP Holding Pharma units 468

Accounts for more than 3800 pharma units out of the 7673 industries in the pharma clusters of India*

Largest exporter of pharmaceuticals and medical devices in the country.

8 Key Pharmaceutical and Medical Devices hubs like Pune, Mumbai, Aurangabad & Nashik

Pharma Export Promotion Council, **2 SEZs and** 935 Pharmacy colleges

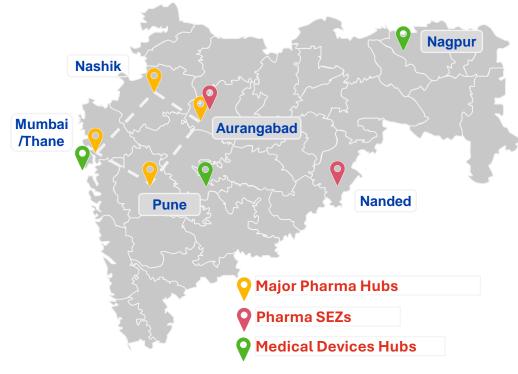
Serum Institute of India, India's largest vaccine manufacturer located in the state



Maharashtra contributes to 14% of the domestic pharmaceutical production



Contributes 11% to the Indian Pharma market (IPM) and the growth in sales is above industry average.



347 bulk drug units, **693** formulation units and various manufacturing units with major Pharma hubs in Pune, Nashik, Aurangabad and Mumbai forming state's **Pharma quadrilateral**

Maharashtra - A holistic destination for investment



Transport Connectivity

The state's robust infrastructure will boost connectivity, reduce the transportation costs and make it easier for business units to sell their products, even promote exports

Sound Industrial Background

Well-established industrial base of the for pharma and MedTech.

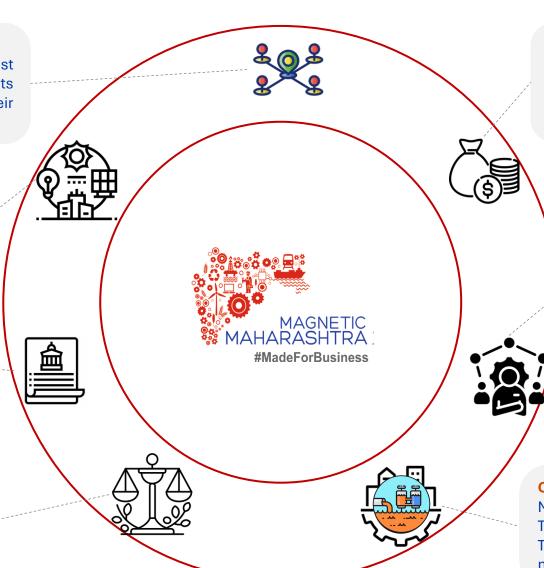
Matured Pharma ecosystem with significant infra and R&D capabilities

Conducive policies

The State promotes Biotechnology and Medical and Diagnostic Devices through PSI 2019 providing an edge over other companies

Regulatory Environment

First state to set up an independent Intelligence Branch with a separate wing to facilitate and speed up investigations under acts enforced by the FDA.



Access to finances

Mumbai, Maharashtra's financial capital, provides easy access to funding and investment opportunities for pharmaceutical companies, both domestic and foreign.

Talent and Skilled Manpower

The state has a large pool of skilled professionals, including scientists, researchers, engineers, and technicians, essential to all pharmaceutical companies.

Educational institutions catering to Biotech, Pharma, and allied industries are in abundance in all major districts of the state.

Common Waste Treatment

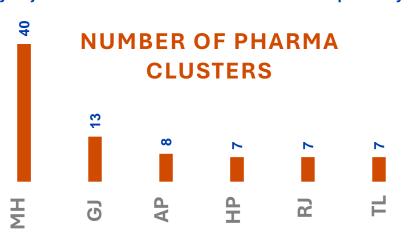
Maharashtra has 4 working Common Effluent Treatment Plants, 7 Common Hazardous Waste Treatment Plants and are planning to establish more,

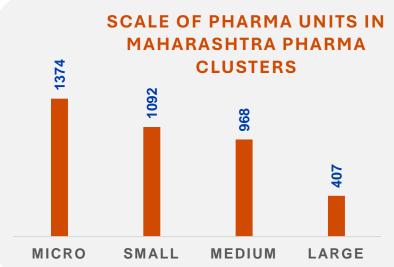
Maharashtra - Ecosystem



Pharma Clusters

State has highest number of pharma hubs at 40 followed by Gujarat and Andhra Pradesh with 13 and 8 respectively





The state has **highest number of US FDA approved plants** in
India and highest number of
Pharma units.

More than **90**% of the units in Maharashtra are **MSME's**

The MSMEs operate in the local market, and mainly manufacture and market formulations based on less complex molecules



Research and Development Parks for major players are based in and around Mumbai like Glenmark in Sinnar and Taloja, Ajanta Pharma R&D Lab in Mumbai, Mankind Pharma in Thane and Reliance Life Sciences is coming up with a new facility in Nashik.

Maharashtra has a hub of Active Pharmaceutical Ingredient (API) manufacturers



- Centered around Roha, Mahad, Patalganga and Nashik
- Proximity to Vapi Valsad region (in Gujarat) which is an important chemical industry area

API manufacturers include Zydus Cadilla, UniChem Ltd., Satyam Pharma Chem Ltd. etc.



Maharashtra has presence of the best Pharma Consultants in the World with its office in Mumbai and Pune. For example: - Jacobs India and Worley.



Medical Devices and Equipment

16% share in India's GVA in Medical and Surgical equipment manufacturing.

Appx 20% of factories in India are located in Maharashtra

Biggest exporter of Medical and Surgical Instruments within India with \$ 324.75 M Exports in 2019-20

Maharashtra has a robust logistics network that eases access to major industrial hubs



Cities	Pune	Aurangabad	Nashik	Mumbai/Thane
Industrial Areas	Jejuri	Waluj	Sinnar	Tarapur
	Kurkumbh	AURIC	Dindori	Ambernath
Ports	JNPT	Jalna Dry Port	JNPT	Mumbai
	230 Kms	30 Kms	170 Kms	130 Kms
Airports	Pune	Aurangabad	Nashik	Mumbai
	70 Kms	30 Kms	20 Kms	100 Kms
Railways	Pune	Aurangabad	Nashik Rd.	CSTM
	70 Kms	20 Kms	30 Kms	30 Kms
Roads	NH-48	Samruddhi SCE	NH-160	NH-48
	84 Kms	40 Kms	20 Kms	20 Kms

6200+ KMs of Railway
Network &18
National Highways

2 Major Deep-water &
53 non-major ports

3 International +
7 Domestic Airports,
15 Airstrips & 4
Upcoming airports



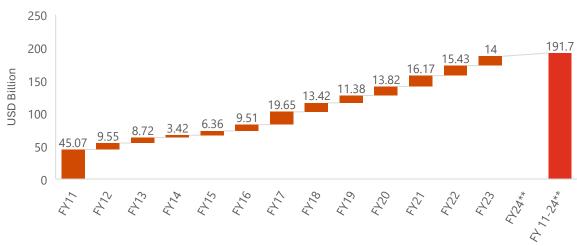
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Maharashtra – Key trends

Update and Validate Showcase to Rajul and Vaibhav







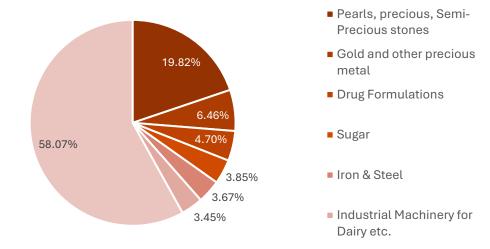
Financial Year

- The Total exports from the state was USD 72.43 billion in FY 2023
- According to DPIIT, between Oct '2019 June '2023, the FDI inflow stood at USD 58.43 billion, ranking 1st for highest FDI inflow
- In 2021 22, the tertiary sector **contributed 59.02% of the state's GSVA**, followed by the secondary sector with a contribution of 25.18%
- From 2011-12 to 2021-22, the tertiary sector grew at the CAGR of 10.83%, while the secondary sector grew at the CAGR of 5.46% in the same period.

Export Trend (USD Billion)



Principal Commodities Exported in FY23



Maharashtra's Package Scheme of Incentives (2019)



Ultra Mega & Mega Projects

Qualification Criteria Project Minimum Direct Area Classification FCI (INR Cr.) Classification **Employment Ultra Mega Entire State** 4000 4000 **Industrial Unit** A & B 1500 2000 C 1000 1500 750 1000 D **Mega Industrial** Unit D+ 500 750 VMRSD# 350 500 NID, NAA, AD 200 350

Large
Scale
ndustrie
(LSI)

Scale of Industries

	Area Classification	Min FCI (INR crore)	Minimum Direct Employment	Max as % of FCI	Incentive period (Yr)
	A & B (Only LSI)	750	1000	25%	7
	С	500	750	40%	7
es	D	250	500	60%	7
	D+	150	400	70%	7
	VMRSD#	100	300	80%	9
	NIA, NAA, AD	100	250	100%	9

MS	ME

Area Classification	Max FCI	Ceiling as % of FCI	Eligibility Period (yrs)
A	MSME shall	-	-
В	B include units as C per the MSMED D Act, 2006, as well D+ as the units with	30%	7
C		40%	7
D		50%	10
D+		60%	10
VMRSD# FCI of upto INR	80%	10	
NIA, NAA, AD	IA, NAA, AD 50 crore	100%	10

Policy Highlights

- 100% Captive Process Vendor (CPV) investment to be considered as part of admissible FCI
- CPV and Captive Power Plant won't be counted for determining qualifying criteria
- HPC to recommend customized Package of Incentives on case-to-case basis
- Projects of Special Importance (may or may not be Mega/Ultra-Mega projects) may get customized package of incentives on case-to-case basis via HPC
- State government will be equity partner of 9% through MVRPL in projects with FCI of more than 500 crores
- Allocation of MIDC land to on priority basis
- 100% stamp duty exemption in C,D,D+, Talukas, Aspirational Districts, NID regions and in A, B region only for BT manufacturing and IT parks in Public(100%) and Private (75%)
- IPS on Gross SGST paid by units
- LSI units in Food Processing, Green Energy and Industry 4.0 to get additional fiscal support
- Thrust sectors to get additional incentives
- Incentives to promote quality competitiveness, R&D, technology up-gradation, water & energy conservation, cleaner production and credit rating
- In New MIDC industrial estates, 20% area to be reserved for MSMEs; Up to 100% stamp duty exemption.
- Electricity duty exemption for Eligibility period; IPS on Gross SGST paid by the units.
- Power tariff subsidy (except A zone) to an extent of Rs 1 per unit for 3 years.
- MSMEs in Food Processing, Green Energy and Industry 4.0, will get added fiscal support
- \bullet Interest subsidy @ 5 % p.a. (except A zone), maximum upto electricity bills paid for the year; Marketing Assistance scheme
- Fiscal assistance to SC/ST/women entrepreneurs

Investment Opportunities in the Pharma/Med-tech sector



In India, pharma sectors covers a wide spectrum, including the development of generic drugs, over-the-counter (OTC) medicines, biosimilars, and biologics, bulk drugs, contract research and vaccines

 Generic Drugs It manufactures about 60,000 different generic brands across 60 therapeutic categories Accounts for 20% of the global supply of generics 	 Biosimilars India has the highest number of biosimilars approved globally and CAGR of 22%. The market could exceed USD 60 billion by 2030. 	
OTC medicines	Bulk Drugs	
 The OTC drug market in India was valued at INR 448,19 billion (US\$5.38 billion) in 2022 Pharma spend in India is projected to grow 9-12% over the next 5 years. 	 India is the 3rd largest player in drugs and pharmaceuticals by volume Anticipated to reach ~US\$130 billion by 2030 	
Vaccine	API	
 India contributes to 60 percent of global vaccine production It is the largest supplier of vaccines globally supplying to over 150+ countries 	 API contributes to around 35 per cent of the pharma market. There are 500 API manufacturers in India contributing about 8% in the global API Industry 	
 CRAM Globally, it will grow from \$132.8 billion in 2023 to \$145.37 billion in 2024 at CAGR of 9.5% 	Innovators Drug Substance/ Medical Devices Intermediaries	

Pharma Segments with High Potential of Growth in Maharashtra are –

- 1. CRAMS
- 2. Biosimilar
- 3. Medical Devices

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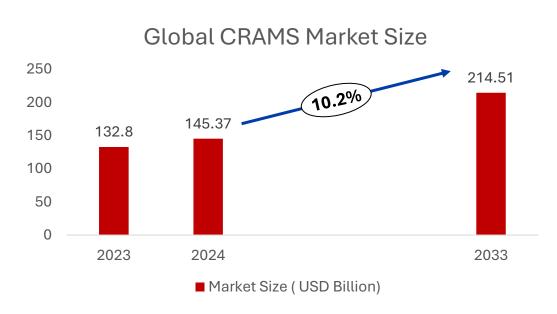
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Source: India Briefing





Contract Research and Manufacturing Services (CRAMS) involve outsourcing product development and research to businesses offering cost-effective solutions, wherein the parent firm does not produce the item themselves.



The India market of CRAMS is worth eight billion U.S. dollars in 2020 and is expected to rise to 12 billion U.S. dollars by 2024

- Escalating expansion of the ageing demographic, coupled with a surge in chronic ailments, is poised to significantly bolster the CRAMS market within the projected timeframe
- Asia-Pacific region is expected to grow at a faster pace in the forecast period compared to the west

1200 CRAM units According to available data, there are around 1,200 contractual research and manufacturing services (CRAMS) units located in Maharashtra.

Startup Ecosystem Maharashtra has the **highest number of startups in India** (3,000) and leads with largest number of startups in biotech sector, with 966 startups.

Talent Pool

The state is **home to many institutions of international repute** such as the National Institute of Virology, National Centre for Cell Science and National AIDS Research Institute.

These provide ample talent in terms of data analytics, research and regulatory affairs, bioinformatics, clinical research and sales and more.

R&D

Maharashtra has the **maximum number of R&D institutions** i.e. 1392 (20.3%) in the country

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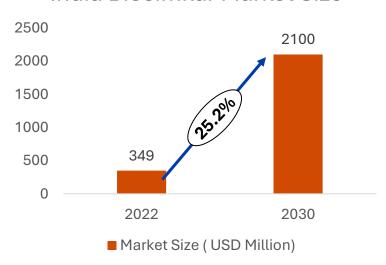




Indian biopharmaceutical industry is one of the fastest growing globally & currently valued at US \$60 billion

The country's Biosimilar market is poised to reach to reach US \$2.1 billion by 2030





The global biosimilars market is fast evolving, with biosimilars gaining good adoption in Europe and the US.

Between now and 2030, biologic products worth some \$170 billion will lose patent protection, opening the window of opportunity for Indian biopharma to explore more biosimilar products.

Biosimilars are biologic drugs that are 'similar' in chemical composition to costly name-brand drugs with similar therapeutic and clinical results

Highest number of Biosimilar Products According to a BIRAC report, There are 98 approved biosimilars in India, with at least 50 on the market, the most of any country in the world.

Has a strong experience related to production and export of pharmaceutical products around the world

Highest FDA approved plants

The state contributes to around 20% of India's pharma sector turnover and has the highest number of US FDA approved plants in India,

Highest share of biotech companies

The state accounts for 55% of the biotechnology companies in India, making it the country's top destination for biotechnology companies

Key Biosimilar Companies in Maharashtra

The current momentum in the segment can perhaps be gauged by the fact that India has around 127 approved biosimilars, propelled by companies like Reliance Life Sciences, Zydus Cadila, Intas, Biocon, Dr.Reddys, Sun Pharma, Lupin. Several of these companies have their biosimilar manufacturing units in Maharashtra like Lupin

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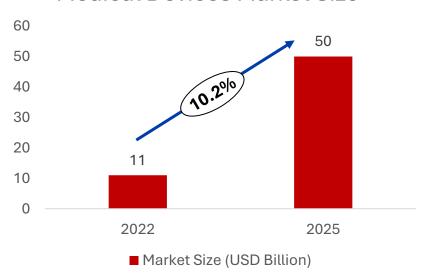




India is among the top 20 global medical devices markets globally

India is the 4th largest medical devices market in Asia after Japan, China, and South Korea

Medical Devices Market Size



India is amongst world's fastest emerging Medical Device market with exports from the sector growing steadily at a CAGR of around 14% since FY 2019-20

Current Ecosystem and Key Growth Areas

Growth Areas

In the medical devices and equipment segment, expansion of diagnostic and pathology centers as well as miniaturized diagnostics have high potential for growth.

Medical Devices Clusters

Out of 21 clusters in India, Maharashtra has the 2nd highest number with 4 medical devices clusters in

- Ambarnath
- Satpur
- Sinnar
- Bhiwandi

New Medical Devices Plants in Maharashtra

- At Khed by Philips Global Business Services LLP for MRI Coils
- At Raigad by Trivitron Healthcare Private Limited for X Ray Equipment, C-Arm, mammography and Ultrasonography
- At Satara by Nipro India Corporation Private Limited for Dialyzer

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Source: Invest India

Thank you

Maharashtra
Industrial
Development
Corporation















Annexure

Major Industry Players



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S.No	Name of the Company	Market Capitalization as of 2019 (Rs. Cr)			
1	Sun Pharma	121418.35			
2	Divis Labs	84758.81			
3	Dr Reddys Labs	73870.42			
4	Cipla	59854.13			
5	Torrent Pharma	48390.93			
6	Aurobindo Pharm	47929.78			
7	Lupin	45367.52			
8	Cadila Health	38395.47			
9	Abbott India	35805.07			
10	Alkem Lab	34095.16			
11	GlaxoSmithKline	30124.63			
12	Ipca Labs	27369.61			
13	Pfizer	22581.08			
14	Sanofi India	19870.82			
15	Alembic Pharma	18210.59			
16	Natco Pharma	14408.86			
17	Laurus Labs	14385.57			
18	Glenmark	13923.59			
19	Ajanta Pharma	13176.45			
20	Jubilant Life	12702.67			

Global

S.No	Name of the Company	Market Capitalization as of 2019
1	Roche	\$ 289.115 B
2	Novartis	\$ 224.503 B
3	Pfizer	\$ 205.382 B
4	Merck & Co.	\$ 212.987 B
5	Bristol Myers Squibb	\$ 134.177 B
6	Johnson & Johnson	\$ 390.579 B
7	Sanofi	\$ 111.718 B
8	AbbVie	\$ 160.441 B
9	GlaxoSmithKline	\$ 76.505 B
10	Takeda	JPY 6.238 T
11	AstraZeneca	\$ 145.087 B
12	Amgen	\$ 145.457 B
13	Gilead Sciences	\$ 82.997 B
14	Eli Lilly	\$ 143.547 B
15	Bayer	Euro 56.047
16	Novo Nordisk	\$ 159.612 B
17	Boehringer Ingelheim	N/A
18	Allergan	Acquired by AbbVie Inc
19	Astellas Pharma	JPY 2.999T
20	Biogen	\$ 44.082 B

Maharashtra has the highest number of pharma clusters



Sr. No.	District	Cluster Location	Sr. No.	District	Cluster Location
1	Ahmednagar	Juna Mangalwar Bazar,	21	Ratnagiri	Khed
		Maliwada	22	Kolhapur	Shahupuri
2	Akola	Ramdaspeth	23	Latur	Moti Nagar
3	Nashik	MIDC Ambar	24	Ratnagiri	Lote
4	Thane	Ambernath	25	Raigad	Mahad MIDC
5	Amravati	Amravati		-	
6	Mumbai	Marol & Andheri	26	Nanded	Anand Nagar
7	Pune	Baramati	27	Navi Mumbai	TTC MIDC
8	Ch. Sambhajinagar	Beed Bypass Rd	28	Ch. Sambhajinagar	Paithan
9	Pune	Bhosari	29	Raigad	Patalganga
10	Palgarh	Boisar	30	Pune	Pimpri
11	Buldhana	Buldhana Area	31	Raigad	Roha
			32	Sangli	MIDC Miraj
12	Ch. Sambhajinagar	MIDC Chikalthana	33	Satara	Chandan Nagar, Addl, MIDC
13	Pune	Chinchwad			
14	Ratnagiri	Chiplun	34	Ch. Sambhajinagar	Shendra
15	Dhule	Shivaji Nagar, Wadibhokar	35	Nashik	Sinnar
16	Mumbai	Dombivali	36	Solapur	MIDC Rd, Shivaganga Nagar
17	Nagpur	Hingna	37	Raigad	Taloja
18	Jalgaon	Old MIDC	38	Palgarh	Tarapur
19	Jalna	Dhangarpura	39	Ch. Sambhajinagar	MIDC, Waluj
20	Nagpur	Kalmeshwar	40	Wardha	MIDC

Sector Associations (1/2)



Association	Job	Contact	Status
AIMED	 Umbrella association of Indian manufacturers of medical devices covering all types of medical devices including consumables, disposables, equipment, instruments, electronics, diagnostics and implants. With a Primary Membership of over 300 Manufacturers and additionally of over 200 Associate Members representing the interest of over 1200 Manufacturers of Medical Devices to address the manufacturer's problems. 	Mr. Rajiv Nath, Forum Coordinator forumcoordinator@aimedindia.com 0129-4289000, 0129-4061164 Mr. Subhash Vashisth, subhash.vashisht@aimedindia.com 7507500225, 0129-4289000	Email Sent
IPA	 National body representing over 1 Mn pharmacists and pharma scientists from industry, academia, regulatory, hospital and community pharmacy and work to meet the India's health care needs. NGO in official relations with the FIP and WHO. Member of Drug Technical Advisory Board (DTAB), Ministry of Health and Family Welfare, GoI. 	info.ipa@gmail.com	Email Sent
Bulk Drug Manufacturers Association (BDMA)	 Platform for encouraging discussion among the member of industries on various subjects concerning the bulk drugs with a focus on formulating views on matters such as national, technical, economic and commercial policies. Assists, cooperate and represent the collective opinion of the association members in formulation and execution of legislative measures by state or Central government authorities/regulators that affect, directly or indirectly, the industry, trade or commerce of the Bulk Drug sector. 	bdma.hyd@gmail.com	Email Sent
Association of Biotechnology Led Enterprises (ABLE)	 A not-for-profit pan-India forum that represents the Indian biotech sector. Has over 400 members from across India representing all verticals of the sector (agribiotech, bio-pharma, industrial biotech, bioinformatics, investment banks and venture capital firms, leading research and academic institutes and law firms and equipment suppliers). Events like BioEconomy Conclave, Voice for BT public speaking contest, brings out India BioEconomy Report, reports for states like Karnataka and sets up the India Pavilion at the BIO International event in the USA annually. 	info@ableindia.org.in	Email Sent

Sector Associations (2/2)



Association	Job	Contact	Status
Biotechnology Industry Research Assistance Council (BIRAC)	 BIRAC is a government body under the DBT that serves as a bridge between academia, industry, and government to promote innovation and entrepreneurship in the biotechnology sector. It provides funding, support, and guidance to biotechnology startups and facilitates collaborations between stakeholders 	Birac.dbt@nic.in	Email Sent
Federation of Asian Biotech Associations (FABA)	 The Federation of Asian Biotech Associations (FABA), established in 2004, is a non-profit organization registered under the Indian Societies Act, 1860. FABA has launched two main wings, FABA Academy and FABA Entrepreneurship. FABA Academy, officially launched on 19th February 2020, empowers the students in Life Sciences with career guidance and skill development activities. FABA Entrepreneurship launched on 18th August 2022, with inaugural event to raise awareness of big-ticket investments in health-tech startups. FABA Entrepreneurship launched on 18th August 2022, with inaugural event to raise awareness of big-ticket investments in health-tech startups. 	Info@Biofaba.Org.In	Email Sent