India: Pharmacy to the World

A Healing Touch with Healthy Profits

Authored by: Ankita Sharma
Strategic Investment Research Unit, Invest India

Srividhya
Pharma Team, Invest India

Art Direction: Sanya Datt
Brand Communications, Invest India
India’s booming pharmaceuticals industry is not only a great source of innovation and employment generation, but it has also become a global healthcare provider in need. During the COVID-19 pandemic, India has shown exemplary work on international cooperation by sending valuable medicines to many countries. India is now world renowned for its pharma innovation and for producing high quality medicines at a low cost. This sector is a sunrise industry in the country. I congratulate Invest India for meticulously supplementing the effort to unlock the enormous potential of pharma industry.”

Mansukh Mandaviya
Minister of State for Shipping (Independent Charge) and Chemicals & Fertilizers, Government of India
By sending vital medicines to the world during the Covid-19 pandemic, India has, more than ever before, proved that it deserves to be called the ‘Pharmacy of the World’. India’s pharmaceutical sector is not only growing at a healthy rate and contributing to growth of the economy but also it contributes significantly to India’s exports. I congratulate Invest India for producing a definitive report on pharmaceuticals showing phenomenal potential of the sector. With the launching of four schemes by Government of India, it is expected that India will move in the direction of becoming self-reliant in critical APIs and Medical Devices.

Dr. P. D. Vaghela
Secretary, Department of Pharmaceuticals,
Ministry of Chemicals & Fertilizers,
Government of India
Prime Minister Narendra Modi has aptly described India as the ‘pharmacy of the world’, sending much-needed medicines to scores of countries during the COVID-19 pandemic. Over the years, India’s famed pharmaceutical companies have created path-breaking innovation, especially in getting life-saving medicines at the most affordable prices to regions that need them the most. India’s pharmaceuticals sector is set to attain new heights in a post-pandemic world as the world turns towards India to make the best medicines available to millions at the most accessible cost. This report details the myriad achievements and opportunities in India’s pharmaceutical sector, and I hope you enjoy reading it.

Deepak Bagla
MD & CEO, Invest India
India’s booming pharmaceutical sector has had a long and distinguished history in innovating and distributing life-saving medicines at the most affordable cost around the world. The COVID-19 pandemic has shown that India can not only innovate but also rapidly distribute time-critical drugs to every part of the globe that needs it. India is the world’s largest supplier of low-cost generics, vaccines and affordable medicines, is among the largest producers of drugs both in value and volume terms, and has the second-largest number of Food and Drug Administration (FDA) approved medicine manufacturing plants. This report explains how the COVID-19 pandemic has not only highlighted the strengths of India’s pharmaceutical industry but also examines several key government initiatives to boost investment in the sector following the pandemic including the creation and promotion of bulk drug manufacturing parks, and production linked incentives schemes.
Introduction

India's pharmaceutical sector forms a major component of the country's foreign trade, with attractive avenues and opportunities for investors. India supplies affordable and low-cost generic drugs to millions of people across the globe and operates a significant number of United States Food and Drug Administration (USFDA) and World Health Organization (WHO) Good Manufacturing Practices (GMP)-compliant plants. India ranks 14th globally in terms of value and third in terms of volume. This mismatch can be attributed to the increasing demand of Indian pharmaceutical products in the international markets, and their lower costs. Therefore, India is increasingly called the 'pharmacy of the world', exporting its pharmaceutical products globally.

Since the past 50 years, Indian pharmaceutical firms have been successful not only in meeting its domestic needs but also in achieving a leading position in the global pharmaceuticals landscape. From having a five per cent share of the market in India, and global pharma at 95 per cent in 1969, Indian pharma is at 85 per cent share and global pharma at 15 per cent in 2020, thanks to several market segments like generics, vaccines, biologics and others.

With a well-established domestic manufacturing base and low-cost skilled manpower, India is emerging as a global hub for pharmaceutical manufacturing and the industry continues to be on a growth trajectory. There is an opportunity for the Indian pharmaceutical industry to play a larger role in global drug security. Fiscal and non-fiscal incentives, strong infrastructure and growing research and development ecosystem will help make this happen.

Global pharma multinational corporations are also looking at new growth drivers within Indian's domestic market to capitalise on this growing opportunity. World class capabilities and favorable market conditions over the past many years have ensured that India continues to be one of the most lucrative pharmaceutical markets in the world.
PHARMACEUTICAL SECTOR: AN OVERVIEW

Market Size:
USD 41 Bn
(2018-19)

Market Size Expectation:
USD 100 Bn
by 2025

Over 65% of WHO Demand for DPT & BCG and 90% measles vaccines supplied by India

FDI Inflows:
USD 16.4 Bn
(April 2000 – March 2020)

60,000+ generic brands across 60 therapeutic categories

4 Indian companies are among top 10 global generic companies

Market Growth Rate:
10-12%

Largest
generic provider globally — exports 20% generics by volume

Pharma Exports:
USD 19.13 Bn
(2018-19)

SECTOR RANKING: INDIA RANK

1st
Largest supplier of low cost Generics, Vaccines and Affordable HIV medicines

2nd
Highest FDA approved plants

3rd
Largest in terms of volume

14th
Largest in terms of value
As the Minister of Chemicals and Fertilizers D. V. Sadananda Gowda has said, “The potential of India’s pharma sector is very high. The growing population, increasing prosperity and rising awareness towards health provide a very good incentive to make further investment in this sector. If these opportunities are seized properly, the market size of the Indian pharma industry can reach to more than USD 100 Bn by 2025 while Medical Devices industry can reach to USD 50 Bn by 2025.”

Indian pharmaceutical industry aspires to become the world’s largest supplier of drugs by 2030 and aims to increase its industry revenue to USD 120 Bn-130 Bn by 2030 from current revenue of USD 41 Bn at a compound annual growth rate (CAGR) of 11-12 per cent.

Source: IPA McKinsey report 2019

2. IPA Way Forward Report
India: Pharmacy to the World

Industry Clusters/Zones: Pharmaceutical Clusters

- Captive R&D Units
- Contract R&D Units
- Established Bulk Drug Cluster
- Established Formulation Cluster
- Emerging Bulk Drug Cluster
- Emerging Formulation Cluster

Locations:
- Baddi
- Pantnagar
- Delhi NCR
- Sikkim
- Ahmedabad
- Ankleshwar
- Vapi, Baroda
- Tarapur, Mumbai
- Aurangabad
- Pune
- Hyderabad - Medak
- Vizag
- Bengaluru
- Mysuru
- Chennai
- Puducherry
COVID-19 Crisis: Impact and Response of India’s Pharma Industry

The COVID-19 pandemic has had a significant impact on nearly all spheres of the Indian economy. Due to restricted connectivity during the lockdown, supply-chains, exchange and transfer of essential goods and services, movement of people and distribution of various commodities have all been affected.

Secretary of Department of Pharmaceuticals (DoP), Dr. P.D. Vaghela has stated that DoP is in constant touch with the industry, states and the other departments through email, WhatsApp groups, control room set up in the DoP as well as the National Pharmaceutical Pricing Authority (NPPA) and through video conference (VCs), in order to get to know their issues and quickly address them. Industry gave its feedback on typical issues faced by them at Baddi (HP), Zirakpur (Punjab), Daman, Silvassa and in the North East. Zirakpur is the main distribution center from where medicines are supplied to the whole of Punjab, Haryana, Himachal Pradesh, Jammu and Kashmir and Ladakh. Similarly, Baddi, Daman and Silvassa are important centers of pharmaceuticals production. The coordinated efforts of various departments of the union and state government ensure that there were no major issues in the supply of medicines to the North East.
The government of India has allocated INR 100 crore from the PM-CARES Fund to support the initiative to develop a vaccine for COVID-19. Over 100 vaccine attempts are being made worldwide out of which around 30 have been in India, according to Dr. K. VijayRaghavan, Principal Scientific Advisor to the Government of India. At least 10 vaccine projects are getting support, both monetary and regulatory, under Department of Biotechnology (DBT) - Biotechnology Industry Research Assistance Council (BIRAC) consortium. Research teams from IIT-Guwahati, Indian Institute of Chemical Technology, CMC Vellore and private firms such as Zydus Cadila, Auro Vaccines, Bharat Biotech and Serum Institute are at various stages of developing a vaccine.

“\nThe pandemic has thrown unprecedented challenges at us. However, I believe that it has also given us, the pharmaceutical industry, the opportunity to rise to the occasion and ensure access to quality and affordable medicines to people across the world. The right policy push can augment India’s position as the pharmacy of the world. To boost the industry further, there should be an increased focus on innovation, quality, and expansion of our global footprint. “

Dr. Satish Reddy
Chairman
Dr. Reddy’s Laboratories

Zydus Cadila has worked extensively on the coronavirus, having ramped up production of hydroxychloroquine and developed a rapid diagnostic kit. Now, the company is working on developing a vaccine. The company has launched a plasmid DNA vaccine candidate for COVID-19 (ZyCoV-D) developed indigenously at its vaccine technology centre in Ahmedabad, Gujarat and also has successfully completed the pre-clinical phase.

Bharat Biotech has received a nod for the clinical trial of its vaccine - Covaxin. This is the first indigenous vaccine being developed by India. The vaccine is derived from a strain of SARS-CoV-2 isolated by ICMR-National Institute of Virology, Pune. ICMR and Bharat Biotech are jointly working for the preclinical as well as clinical development of this vaccine.

Serum Institute of India (SII), the world’s largest vaccine manufacturer by number of doses produced and sold globally, has partnered with US-based Codagenix Inc. to develop a vaccine against the novel coronavirus. This is the first of its kind collaboration between India and US pharma, and the pair are working specifically to produce an ‘LAV’ or live-attenuated vaccine (a virus or bacteria weakened under laboratory conditions). SII has also signed a deal with Astra Zeneca to supply one billion doses of vaccine for low and middle-income countries before the end of 2020 to combat coronavirus.

In this prevailing situation, it’s most opportune for Indian companies to look at global partnerships and scale up their activities despite the impact of the slowdown on the supply of raw material. Although, India should aspire to become a significant player in this global supply-chain yet our focus should also remain on becoming self-reliant, as per Prime Minister Narendra Modi’s vision of ‘Atma Nirbhar Bharat’.

“This is the right time to focus on local manufacturing to become self-reliant. We must work towards expanding domestic market and making India an attractive manufacturing destination for global pharma companies.”

Dr Girish Dixit
Executive Director
Eisai Pharmaceuticals

India received requests for Hydroxychloroquine (HCQ), paracetamol APIs and tablet supply from over 100 countries. India supplied paracetamol and HCQ to all neighbouring countries and also agreed to supply essential drugs to other nations who have been badly affected by the pandemic. Thus began India’s international response to rise up to the challenges brought by COVID-19 which still continues as India demonstrates global leadership, and has proved itself to be a reliable partner.

In recognition of its continuous and effective efforts to scale up the global supply of this much-needed medicine, India has attracted widespread praise and acknowledgement across continents. US President Donald Trump was one of the first in the world to congratulate and thank India for sending the life-saving supply of HCQ to America. He was joined by other global leaders and heads of states like the Brazilian President Jair Bolsonaro and Israeli Prime Minister Benjamin Netanyahu, who also thanked


Dr Girish Dixit
Executive Director
Eisai Pharmaceuticals

India’s COVID-19 Cooperation with the World

India received requests for Hydroxychloroquine (HCQ), paracetamol APIs and tablet supply from over 100 countries. India supplied paracetamol and HCQ to all neighbouring countries and also agreed to supply essential drugs to other nations who have been badly affected by the pandemic. Thus began India’s international response to rise up to the challenges brought by COVID-19 which still continues as India demonstrates global leadership, and has proved itself to be a reliable partner.

In recognition of its continuous and effective efforts to scale up the global supply of this much-needed medicine, India has attracted widespread praise and acknowledgement across continents. US President Donald Trump was one of the first in the world to congratulate and thank India for sending the life-saving supply of HCQ to America. He was joined by other global leaders and heads of states like the Brazilian President Jair Bolsonaro and Israeli Prime Minister Benjamin Netanyahu, who also thanked

the Indian prime minister for shipping the drug to their countries in these testing times. India also went a step ahead in fulfilling its global role as an emerging power and supplied HCQ and paracetamol tablets to several Latin American and African countries on humanitarian grounds.
The Indian Advantages

In a post-coronavirus global order, India’s comparative advantage can rely heavily on becoming a major provider for global public-goods and services (i.e., in healthcare, education and tech-support capacity for innovation), given how the demand for these is likely to go up in the years to come. In the current scenario, India’s strong advantage lies in:

- Fueling pharmaceutical exports and strengthening research & development ecosystem.
- Investing in large-scale production of pharma products and expanding ancillary units.
- Enhancing access to quality and affordable secondary/tertiary health services.
- Strengthening India’s ‘soft power’ through capacity building and provision of technical knowledge and support to other developed and developing nations.

**GROWTH DRIVERS**

1. DEMAND-SIDE FACTORS

**Accessibility**
- Over USD 200 Bn to be spent on medical infrastructure in the next decade.
- Over 160,000 hospital beds expected to be added each year in the next decade.

**Affordability**
- **Rising income** ~73Mn households expected to shift to the middle class over the next 10 years.
- **Ayushman Bharat** – The National Health Protection Scheme is the largest government-funded healthcare program in the world, which is expected to benefit 100 Mn poor and vulnerable families in the country by providing a cover of up to USD 7000 (INR 500,000) per family per year for secondary and tertiary care.
- **Availability of affordable medicines** under the Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP) has led to 50-90% savings for Indian citizens and made generic medicines easily available through the PMBJP Kendras across the country.
Epidemiological Factors
• Patient pool expected to increase over 20% in the next 10 years, given population growth and lifestyle changes.
• New diseases and lifestyle changes to boost demand for drugs and devices.

Medical Tourism
• Medical tourism industry expected to grow to **USD 13.3 Bn** by 2022.

2. SUPPLY-SIDE FACTORS

Patented Drugs
• Following the introduction of product patents, several multinational companies are expected to launch patented drugs in India.
• Patents for branded molecules with cumulative global sales of over **USD 251 Bn** are expected to expire between 2018 and 2024, giving opportunities to Indian pharmaceuticals.

Cost Efficiency
• India’s cost of production is nearly 33% lower than that of the US with labour costs 50–55% lower than western countries.

Medical Infrastructure
• Pharma companies have increased spending to tap rural markets and several state governments have launched medical device and pharma parks.

Talent Pool
• India is the 2nd largest provider of pharma and biotech professionals in the world, after China. Other leading countries include US and Brazil.
## RECENT GOVERNMENT MEASURES

- On 21 March 2020, the Union cabinet chaired by Prime Minister Narendra Modi approved the following schemes for the pharmaceutical sector.\(^6\)

<table>
<thead>
<tr>
<th>Promotion of Bulk Drug Parks</th>
<th>Production Linked Incentive (PLI) Scheme</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aim:</strong></td>
<td><strong>Aim:</strong></td>
</tr>
<tr>
<td>To finance common infrastructure facilities in three Bulk Drug Parks with financial implication of INR 3,000 crore (USD 400 Mn) for next five years.</td>
<td>To promote domestic manufacturing of critical KSMs/Drug Intermediates and APIs in the country with financial implications of INR 6,940 crore (USD 925 Mn) for next eight years.</td>
</tr>
<tr>
<td><strong>Details:</strong></td>
<td><strong>Details:</strong></td>
</tr>
<tr>
<td>- Decision is to develop three mega Bulk Drug parks in India in partnership with states.</td>
<td>- Financial incentive will be given to eligible manufacturers of identified 53 critical bulk drugs on their incremental sales over the base year (2019-20) for a period of six years.</td>
</tr>
<tr>
<td>- Government of India will give Grants-in-Aid to states with a maximum limit of INR 1000 crore (USD 133 Mn) per Bulk Drug Park.</td>
<td>- Out of 53 identified bulk drugs, 26 are fermentation based bulk drugs and 27 are chemical synthesis based bulk drugs.</td>
</tr>
<tr>
<td>- Parks will have common facilities such as solvent recovery plant, distillation plant, power and steam units, common effluent treatment plant etc.</td>
<td>- Rate of incentive will be 20 per cent (of incremental sales value) for fermentation based bulk drugs and 10 per cent for chemical synthesis based bulk drugs.</td>
</tr>
<tr>
<td>- A sum of INR 3,000 crore (USD 400 Mn) has been approved for this scheme for next five years.</td>
<td>- A sum of INR 6,940 crore (USD 925 Mn) has been approved for next eight years.</td>
</tr>
<tr>
<td><strong>Implementation:</strong></td>
<td><strong>Implementation:</strong></td>
</tr>
<tr>
<td>The scheme will be implemented by State Implementing Agencies (SIA) to be set up by the respective state governments and the target is to set up three mega Bulk Drug Parks.</td>
<td>The scheme will be implemented through a Project Management Agency (PMA) to be nominated by the Department of Pharmaceuticals. The scheme will be applicable only for manufacturing of 53 identified critical bulk drugs (KSMs/Drug Intermediates and APIs).</td>
</tr>
<tr>
<td><strong>Impact:</strong></td>
<td><strong>Impact:</strong></td>
</tr>
<tr>
<td>The scheme is expected to reduce manufacturing cost of bulk drugs in the country and dependency on other countries for bulk drugs.</td>
<td>To boost domestic manufacturing of critical KSMs/Drug Intermediates and APIs by attracting large investments in the sector to ensure their sustainable domestic supply and thereby reduce India's import dependence on other countries for critical KSMs/Drug Intermediates and APIs.</td>
</tr>
</tbody>
</table>

The Government of India’s step to promote domestic manufacturing of critical Key Starting Materials (KSMs)/Intermediates and Active Pharmaceutical Ingredients (APIs) is a welcome step and will encourage fermentation-based industry to help build self-reliance and healthcare security."

Pankaj Patel
Chairman and Managing Director, Zydus Cadila

We should work towards establishing India as an early adopter of innovative therapies, through increasing accessibility of innovative healthcare products and innovative Jan Aushadhi model for public procurement."

Gagan Singh Bedi
Managing Director, AstraZeneca

Pradhan Mantri Bhartiya Jan Aushadhi Pariyojana (PMBJP)

- Government of India is implementing Pradhan Mantri Bhartiya Jan Aushadhi Pariyojana (PMBJP) with the objective to realise Prime Minister Modi’s vision to make affordable medicines available to common people, especially to poor and disadvantaged. The product basket covered under this scheme includes more than 800 medicines and 154 surgicals and consumables. Generic medicines sold at dedicated Jan Aushadhi stores are cheaper by at least 50 per cent and for some, even by 90 per cent.

- In a pandemic like COVID-19, the role of Jan Aushadi Kendras has been very important. The 6,000 Jan Aushadi Kendras were operating day and night tirelessly to serve the poor and the needy.7

FDI Policy

- Greenfield Project: 100 per cent FDI allowed under automatic route.

- Brownfield Project: 74 per cent FDI allowed under automatic route; government route beyond 74 per cent.

Skill Development

- The transformation of National Institutes of Pharmaceutical Education & Research (NIPERs) as innovation hubs to become centers of excellence and advanced research in pharmaceutical studies.

- Currently, seven NIPERs are functioning in Ahmedabad, Guwahati, Hajipur, Hyderabad, Kolkata, Mohali, and Raebareli.

- NIPERs are regarded as top 10 institutes of higher education in the National Institutional Ranking Framework.

• The policy is entirely compliant with the WTO agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS).

Similar Biologics Guidelines (2016)
• Regulatory pathway regarding manufacturing process and safety, efficacy and quality aspects for similar biologics.
• Pre-market regulatory requirements including comparability exercise for quality, preclinical and clinical studies, and post-market regulatory requirements.

National Health Policy (2017)
• Aimed at attainment of highest possible level of health and well-being for all at all ages, through a preventive and promotive health care orientation in all developmental policies, and universal access to good quality health care services.
• Increasing access, improving quality and lowering the cost of healthcare delivery.

Pharmaceuticals Purchase Policy
• Union cabinet approved the extension/renewal of the extant Pharmaceuticals Purchase Policy (PPP) with the same terms and conditions while adding one additional product namely, Alcoholic Hand Disinfectant (AHD) to the existing list of 103 medicines till the final closure/strategic disinvestment of the pharma CPSUs.8

Ayushman Bharat
• The National Health Protection Scheme is the largest government-funded healthcare programme in the world, which is expected to benefit 100 Mn poor families in the country by providing a cover of up to USD 7000 (INR 500,000) per family per year for secondary and tertiary care hospitalisation. The programme was announced in the Union Budget 2018-19. It has the potential to turn India into the largest pharma manufacturer of the world in about three years.9

• Indian government’s thrust on universal healthcare through Ayushman Bharat and an estimated 140 Mn households expected to enter the middle class in the next decade, not only increases the consumption of healthcare services but also has an impact on healthcare demand and a significant uptake in patient volume.

“**Ayushman Bharat has been a watershed innovation in universal healthcare. More needs to be done. The focus must remain on being innovative and agile to implement new healthcare financing models that will expand healthcare access in the country.**”

S. Sridhar
Managing Director,
Pfizer

---

India: Pharmacy to the World

**National Biopharma Mission**

- Industry-academia mission to accelerate biopharmaceutical R&D in vaccines, biologics, and medical devices. Some examples include common shared facility to manufacture diagnostic kits and ventilators will be created at the Andhra Pradesh MedTech Zone (AMTZ). The mission is also funding the plasma treatment, following India’s first successful experiment on a critically ill COVID-19 patient on ventilator-support in New Delhi.

**OPPORTUNITIES IN THE AFTERMATH OF COVID-19**

**Active Pharmaceutical Ingredients/Bulk Drugs**

APIs, which are needed for drug manufacture (formulation), are now mostly imported from other emerging and developed markets. India’s share of API market is around eight per cent in the global market. API development and manufacturing or strategic sourcing partnerships are essential to India’s pharmaceutical industry’s success.

**Generics**

Generic drugs exports stood at USD 14.4 Bn in 2018-19. India continues to play a material role in manufacturing various critical, high quality and low cost medicines for Indian and global markets. It supplies 50-60 per cent of global demand for many vaccines (including ARVs), 40 per cent of generics consumed in the US and 25 per cent of all the medicines dispensed in the UK. Over the last five years, 35-38 per cent of total Abbreviated New Drug Applications (ANDAs) approved (including 25-30 per cent of total injectable ANDAs) have been filed from Indian sites).

**Vaccines**

India accounts for 60 per cent of global vaccine production, contributing 40-70 per cent of the WHO demand for Diphtheria, Tetanus and Pertussis (DPT) and Bacillus Calmette–Guerin (BCG) vaccines, and 90 per cent of the WHO demand for the measles vaccine.

**Contract Manufacturing and Research**

India has the largest number of US-FDA compliant pharma plants (more than 262 including APIs) outside of USA. We have nearly 1400 WHO-GMP approved pharma plants, 253 European Directorate of Quality Medicines (EDQM) approved plants with modern state of the art technology.

**Biosimilars and Biologics**

There are more than 100 Indian biopharmaceutical companies that are engaged in the manufacturing and marketing of biosimilars. Multiple biologic drugs are expected to go off patent, creating an opportunity for biosimilar products.
The Road Ahead

FOCUS ON EXPORTS

India’s pharmaceutical exports are directed to several developed and developing countries like US, UK, South Africa, Russia, Nepal, Bangladesh etc. In the midst of COVID-19, some of these nations have been sent critical drugs such as paracetamols and ritonavir. Many pharmaceutical firms in India have also extended support towards the possibility of also increasing the supply of essential drugs like hydroxychloroquine to these nations to counter COVID-19.

Professor Deepanshu Mohan, Director, Centre for New Economics Studies, O.P. Jindal Global University has argued that "...there is a much greater potential for India’s pharmaceutical sector now to increase trade partners both regionally and in other parts of the world. The government can encourage this by investing in more R&D for drug and pharma research within India (public medical colleges and universities can be used for this purpose) and provide for more incentives to the private sector to enhance its production for export channels."19

During US President Donald Trump’s recent visit to India, the Central Drugs Standard Control Organisation and the USFDA signed an MoU over safety of medical products. To put things into perspective, India is among the top 5 drug exporters to the US. It exported pharma products worth USD 5.82 Bn in 2018-19. India, being a bulk producer of affordable generics, has helped mitigate demand for generic prescription drugs. The MoU between the two countries will further enhance the scope of exports of such drugs to the US. These MoUs, coupled with the situation in China, may result in good equation with the USFDA, which may help Indian pharmaceutical companies, grappling with pricing pressure and competition, earn a certification (after meeting regulatory requirements) and further access into the US market.


Prime Minister Narendra Modi also recently said, "Pharma producers and distributors have a crucial role to play in combating the challenge of COVID-19. Not only does the industry need to ensure maintenance of supply lines of essential medicines, medical kits and equipments, but at the same time it should try to come up with new and innovative solutions.11"

**FOCUS ON R&D**

In these times of global distress, Indian pharmaceutical companies should consider recalibrating their approaches and invest in cutting-edge research and development. The key spheres in focus include development of new innovations and drugs, testing capabilities, essential drugs, vaccines and stronger supply chain frameworks.

By streamlining and accelerating research capacities, the Indian pharma companies can help usher in a new paradigm of drug manufacturing and testing. A lot will depend on the support from the state, funding availability, and closer collaborative mechanisms between public and private research and funding institutions.

"The COVID pandemic has posed innumerable challenges to the pharma industry. The industry’s performance at this time is testimony to its resilience. India has risen to the occasion and lived up to its status of the “Pharmacy of the World.” This is a critical time for us to enhance our trade relations with existing partners as well as forge new partnerships. The Pharma sector can contribute manifold times to the country’s exports but continuation and extension of additional support for exports will be essential to leverage the opportunities at hand."

![Nilesh Gupta](image)

**Nilesh Gupta**
Managing Director
Lupin

With growing demand for PPEs, test kits and alcohol-based sanitizers, this is the opportune time for the pharma sector to create a common platform to push joint research and development for affordable and accessible public healthcare.

"Strong and predictable regulatory framework in line with global standards are essential to promote a globally competitive and innovative pharmaceutical sector and encourage R&D activity to move up the value chain."

![G. Sathya Narayanan](image)

**G. Sathya Narayanan**
Managing Director
Galderma

---

India: Pharmacy to the World

India exported medicines worth USD 14,389 Mn in FY 2018-19. India also exported Bulk Drug/Drug Intermediates worth USD 3,911 Mn in Financial Year 2018-19. However, the country also imports various Bulk Drugs/Active Pharmaceutical Ingredients (APIs) for producing medicines.

Two-thirds of the total imports of Bulk Drugs/Drug Intermediates are from China. The imports from China are mainly due to economic considerations. The details of India’s imports of Bulk Drugs/Drug Intermediates (including from China) are as under: 12

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Imports (USD Mn)</th>
<th>Imports from China (USD Mn)</th>
<th>Percent of Imports From China</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018-19</td>
<td>3560.35</td>
<td>2405.42</td>
<td>67.56%</td>
</tr>
</tbody>
</table>

The pharmaceuticals sector is witnessing an era of unparalleled growth and innovation. Various measures are being taken under ‘Make in India’ initiatives including the Bulk Drug Park and Production Linked Schemes for facilitating investment, fostering innovation and thereby promoting robust business environment in the country.  

"Discussed measures taken under @makeinindia initiatives including Bulk Drug Park and Production Linked Schemes to facilitate investment & fostering innovation!"

Continuous supply of drugs is necessary to ensure delivery of affordable healthcare to the citizens. Any disruption in supplies can have a significant adverse impact on drug security, which is also linked to the overall economy of the country. Self-sufficiency in manufacturing of bulk drugs is highly required.

Mansukh Mandaviya  
Minister of State for Shipping (Independent Charge) and Chemicals & Fertilizers, Government of India

The Ministry of Tourism pegs the annual growth of the number of people coming to India for medical treatment at about 55 per cent in 2020, the medical tourism industry was valued at a whopping USD 9 Bn.

By introducing a range of measures aimed at boosting efficiency—such as issuing fast-track medical visas and rapid airport clearances—the government is keen on promoting India as a viable destination for medical tourism. However, realizing this vision requires enabling dedicated and focused capacity building and technical support to key players in the medical tourism space.
Conclusion

Healthcare is likely to remain at the forefront of public focus even in the aftermath of COVID-19 around the world. This is an opportune time for India to emerge as the global ‘medical superpower’ by providing essential drugs, medical expertise, treatment infrastructure and capacity building to other nations with limited prospects.

“Indian pharma is a strategic industry for the nation, with the advantage of both scale and reach. At this critical juncture, there is a need for a collaborative effort. We look forward to working with government and regulatory agencies to help build a resilient ecosystem which will help the industry grow by 11-12 per cent. India will continue to be the pharmacy of the world and will soon be the largest producer in the world by volume as well.”

Sudarshan Jain
Secretary General
Indian Pharmaceutical Alliance

“The pharma industry is a sunrise industry in India with a competitive advantage. India can leverage its strength in manufacturing, research and innovation for benefits of patients.”

Rajaram Narayanan
Managing Director
Sanofi

The demand for accessible medicine is likely to grow following the COVID-19 pandemic as climate change and other environmental issues trigger health concerns, and an ageing population in large parts of the world require active medical care. India is likely to play a pivotal role in providing medicinal support around the world especially where affordable healthcare is most needed. Already one of the biggest medicine-making countries in the world, India is pushing policy incentives to make healthcare manufacturing and delivery even better. Prime Minister Narendra Modi’s vision envisages not just a healthy India but a healthy world and sees India as a global caregiver.