



## Boosting the Pharma Sector

This editorial is based on "[Budgetary Support Could Propel Our Quest For Pharma Innovation](#)" which was published in Livemint on 28/01/2022. It talks about the steps that can be taken to boost the pharmaceutical industry of India.

**For Prelims:** Indian pharmaceutical industry, Active Pharmaceutical Ingredients.

**For Mains:** India's Pharma Sector - associated challenges and steps that can be taken to boost the sector, Making India the world's pharmacy in terms of value.

The [Indian pharmaceutical industry](#) has been **playing a key role in improving global health** through its affordable and high-quality generic medicines.

However, the Indian pharma industry still faces numerous challenges, in terms of R&D, adequate funding, domestic manufacturing of raw materials for drugs etc. in becoming one of the world's largest pharmaceutical producers in terms of value.

For India to move into advanced therapies and biopharma products, the government needs to **incentivize the shift to a discovery-oriented and science-driven approach** by providing fiscal incentives and enabling policies.

It also **needs to build the necessary infrastructure** that supports breakthrough advances in science and technology to drive innovation and give the India pharma and biopharma industry its rightful place under the sun.

### India's Pharma Sector

- **The World's Pharmacy:** India is the **world's third-largest pharmaceutical producer** and is considered '[pharmacy to the world](#)'. It is the largest provider of generic drugs globally.
  - The Indian pharmaceutical industry **meets over 50% of global demand for various vaccines**, 40% of generic demand in the U.S. and 25% of all medicine in the U.K.
  - Presently, over **80% of the antiretroviral drugs used globally to combat AIDS ([Acquired Immune Deficiency Syndrome](#))** are supplied by Indian pharmaceutical firms.
- **Share in the Economy:** The Indian pharmaceutical industry is a strategic industry for the nation, with the advantage of scale (at \$37 billion in 2019-20, it contributed **1.5% to the GDP directly**, with another **3% coming indirectly**).
  - The industry also has global reach, and is a net **foreign exchange earner of more than \$10 billion annually**.
- **Progress in Global Share:** In 1969, Indian pharmaceuticals had a 5% share of the market in India, and global pharma had a 95% share. By 2020, it was the reverse, with Indian pharma having

an **almost 85% share and global, 15%**.

- India already contributes over **20% by value to the global generics market**, with Indian products contributing over 40% (by volume) of US drugs.

## Challenges

- **Complex Drug Development Process:** Developing the new, cutting-edge therapies is a complex and lengthy process.
  - The scientific, technical and regulatory bars are considerably higher, making drug development **difficult, more time-consuming and very expensive**.
- **Low R&D Expenditure:** India's current public expenditure on Research & Development (R&D) remains low, at less than 1% of gross domestic product (GDP). Whereas, among the BRICS countries - China spends 2.1% of its GDP on R&D, Brazil 1.3%, and Russia a little over 1%.
  - Moreover, R&D incentives only accounted for 7.5% of total tax incentives and those for **pharma were just 2.3% of this in 2018-19**.
- **Lack of Funding:** Despite the availability of several government instruments, many **brilliant ideas from entrepreneurs often do not come to fruition** because of their inability to access adequate funding.
- **Heavy Dependence on China:** Despite being a leading supplier of high-quality medicines to several countries, the Indian pharmaceutical industry is highly **dependent on China for pharmaceutical raw materials** i.e **Active Pharmaceutical Ingredients**.
  - Indian drug-makers **import around 70% of their total bulk drug requirements** from China.
- **Price Capping:** The Indian pharmaceutical Industry is facing pressure from both the government and the civil society to make generic medicines more affordable for a large section of the population of the country. However, it is important to note that the **medicine prices of India are already among the lowest in the world**.
  - The emphasis on low price of generic medicine **impacts the net profits of pharma companies**.

## Way Forward

- **Increasing Value Share in Global Basket:** Besides the volume share, India now needs to capture value share as well. To move up the pharma value chain, it needs to focus on **emerging opportunities across novel biologics, biosimilars, mRNA and other new-generation vaccines**, orphan drugs, antimicrobials, precision medicines, cell and gene therapies, among others.
  - To rank among the top five countries in value terms and No. 1 in volume terms, the Indian pharma industry will need to **grow from \$44 billion currently to \$120-130 billion by 2030** and \$500 billion by 2047.
- **Boosting R&D Investments:** Studies suggest that a 1% increase in R&D investment, on average, leads to a rise in output of between 0.05-0.15%.
  - India will need to make **exponential investments in R&D**, manufacturing and digital transformations to become a global pharmaceutical innovation hub.
  - The government needs to urgently explore mechanisms to incentivize investment in R&D and evaluate various funding mechanisms that can help the industry. The **Budget for FY 2022-23 offers a great opportunity** to give the pharma industry a shot in the arm.
  - **Research-linked incentives (RLIs)** can provide an impetus for the industry to increase R&D investments, as well as encourage it to forge much-needed linkages with academia to co- innovation.
- **Targeted Financial Incentives:** In order to increase production, the government needs to launch targeted financial incentives **to promote the manufacturing of diagnostic kits and other medical devices** — especially given that the raw material for manufacturing of these devices is heavily dependent on imports.
  - This is also an **opportunity to bring a much larger proportion of manufacturing of APIs back into India**, so that the country is not dependent on imports of critical inputs.
- **Better Drug Pricing Policy:** The Indian pharma industry is now at the cusp of developing new molecules for treatment of various medical conditions at scale.
  - Developing new drugs costs money, and the government needs to **provide the**

- conditions for sufficient profits for investment in new molecules** while holding the firms accountable for producing new drugs for India and the world.
- At this time when Indian medicine prices are already amongst the lowest in the world, there is a need to **fine-tune the drug pricing policy** to generate **enough surpluses to invent new molecules** while **keeping the price levels reasonable** with the objective of providing affordable healthcare.

***Drishti Mains Question***

Discuss the measures that can be taken to boost the pharmaceutical industry of India.

PDF Refernece URL: <https://www.drishtias.com/printpdf/boosting-the-pharma-sector>