Indian Pharmaceutical Industry

Overview and Way Forward

August 2023
Indian Pharma: Global Manufacturing Powerhouse

**Global Trade**
- 20% of total global exports of generic drugs
- 3rd largest Volume Terms
- 14th largest Value Terms

**Economic Outcomes**
- 2.7 Mn Jobs created directly and indirectly
- USD 17.5 Bn Annual trade surplus; One of the top 5 sectors reducing trade deficit
- USD 50 Bn Total market size in 2021-22
India has played a significant role in global healthcare

- **36%** Lower per person disease burden in India (DALY, 1990-2016)\(^3\)
- **95%** Lower treatment costs of life-threatening diseases (Hep-C, Leukemia)\(^1\)
- **100%** Eradication of Polio by collaboration between all stakeholders\(^2\)
- **60%** Global vaccine demand Supplied by India\(^5\)
- **37%** With access to affordable AIDS treatment in Africa in 2009 through ARVs V/s 2% in 2003\(^6\)
- **1 of 3** Pills taken in the US are by Indian manufacturers\(^4\)

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The pharma industry has evolved over a period of time

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<tbody>
<tr>
<td>Prior to process patent regime</td>
<td>Post impln. of process patent</td>
<td>Post reform &amp; product patent</td>
<td>The next decade</td>
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<td>- Limited penetration; market dominated by innovators</td>
<td>- Decades of strong growth and penetration, driven by low cost process reengineering and manufacturing</td>
<td>- Gradual rerating of growth from 8-9% to 13-15% levels</td>
<td>- Innovation and Quality</td>
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<td>- Balance tilted towards local players</td>
<td>- Driven by growth in affordability and some progress in access</td>
<td>- Building API Self-reliance</td>
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<td>- Export initiatives taken</td>
<td>- Liberalized market -Indian companies going beyond India</td>
<td>- Ease of Doing Business</td>
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<td>- Significant build-up in accessibility and acceptability</td>
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<td>- Global strategic alliance</td>
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COVID-19: Most unprecedented humanitarian crisis

- Indian Pharmaceutical industry showed resilience, supplied quality-assured medicines to over 150 countries.

- The Industry, Government and Regulators worked together and constantly adapted to meet the challenging environment: Collaboration among all stakeholders across the world.

- Biggest vaccination program in the world -

  - 44.9 Million Total Cases in India
  - 0.53 Million Total Deaths in India
  - 2.2 Billion Total Vaccination in India

Note: Data as on 12 August 2023
India ensured an uninterrupted supply of medicines

- Industry stepped up to the plate to meet the challenges posed by COVID-19 with thrust on digitalisation and collaboration

- High-level of engagement with the Government of India: Pharmaceuticals recognized as Essential Goods; Permissions granted for ensuring continuity of Transport and Logistics

- Coordination with industry associations in India and with WHO, IGBA, AAM and others
Ensuring employee safety and wellbeing at facilities

Successful implementation of safety protocols across the industry has limited the spread of COVID-19
Integrated efforts to upgrade and share the best practices

**Reviving the domestic API industry**

- White paper on Reviving the domestic API Industry
- Policy initiatives for self-reliance on API

**C+WIN**

Winning Over Covid-19

- A benchmark for digital infrastructure for world’s largest vaccination drive
- E-governance for faster approvals of drugs, vaccines

**Reviving the Pharma Ancillary Industry**

- White paper on Reviving the Pharma Ancillary Industry
Key initiatives by the Government of India

Policy to boost manufacturing of APIs/KSMs and thrust on value-added formulations

R&D Policy to enable an innovation ecosystem in the country:
• Industry-Academia Collaboration
• Regulatory Reforms
• Building Infrastructure
• Funding Mechanism in progress

High-level Regulatory Committee Setup for regulatory reforms and ease of doing business

National Digital Health Mission announced for building a digital health ecosystem
The global healthcare ecosystem is undergoing a paradigm shift

**Shift in disease burden:** from acute to chronic and in future degenerative diseases

**Technology Advancement:** Convergence and emergence of newer innovative research platforms across drugs, devices, delivery

**Volatility in the environment** because of the changing geopolitical landscape; Uncertainty in pricing

**Consumerization of holistic health:** physical, mental and spiritual well being

**Environmental, Social and Governance (ESG) Agenda**
Opportunity in India: Robust healthcare ecosystem

- Demographic, Digital and Democratic Advantage
  - Demographic advantage with largest working population (65% of India’s population less than 35 years) to continue for next 30 years

- STEM Talent graduating every year: 110,000+ doctors (Current 1.4M + Doctors); 400,000+ pharmacy (Current 1.7M+ Pharmacists); 15,00,000+ engineers

- Conducive Policies: Regulatory Reforms with focus on quality, Self-reliance in API, Thrust of R&D through incentivizing innovation and industry-academia collaboration

- Service Delivery: CDMO, Clinical Trials and IT Services

- Global Lighthouse Network: Cipla and Dr Reddy’s plants declared by World Economic Forum
Way Forward: Building resilient & sustainable global supply chains

- Creating a **global cooperative framework** among nations with **investments in critical areas**, technology exchange and procurement commitment:
  - **Health emergency prevention, preparedness and response** with a focus on antimicrobial resistance and the One Health framework
  - **Strengthening cooperation in the pharmaceutical sector** with a focus on access and availability to safe, effective, quality and affordable medical countermeasures (VTDs)
  - **Digital health innovations and solutions** to aid universal health coverage and improve healthcare service delivery
Way Forward: Building resilient & sustainable global supply chains

- **Augmenting digital infra**: Tech-enabled platforms for disease profiling and better flow of goods and services etc.

- Developing **Government-2-Government information-sharing and crisis-response mechanisms**: Address supply chain vulnerabilities

- Strengthening **supply chain & logistics infras**: Integrating land, air, waterway, the maritime and port facilities

- Establishing **transparency in the supply chain**: Balance between corporate risks and ESG agenda
Thank you