

THE INDIA OPPORTUNITY: PHARMACEUTICALS & MEDICAL DEVICES

5th April 2023



INVEST INDIA
NATIONAL INVESTMENT PROMOTION
& FACILITATION AGENCY

SECTOR OVERVIEW - PHARMACEUTICALS

Key Highlights

Market size FY2022
(US\$ 50 Bn)

Market size
FY2030F
(US\$ 130 Bn)

Expected CAGR
FY20-FY30
(~11-12%)

Exports
FY21-22
(US\$ 24.6 Bn)

Exports
To Countries
(200+)

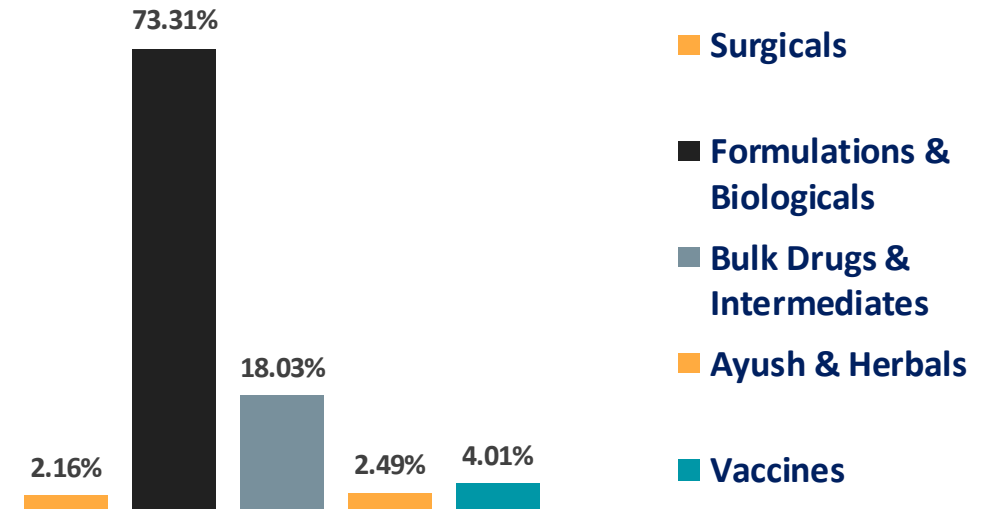
FDI
Apr'00-Sep'22
(US\$ 20.10 Bn)

Contribution to
Manufacturing GDP
(~10%)

Jobs
(Direct & Indirect)
2.7 Mn

3rd Largest Globally
By volume

Exports – by Segments



Indian pharmaceuticals industry earns more than 50% of its revenues from exports

- World's largest provider of generic medicines
- Account for 20% of global generic drug exports

Every 3rd tablet consumed in the US is Indian.
India supplies ~62% of all vaccines globally and has highest number of USFDA plants outside the US.

INDIAN PHARMA INDUSTRY – CURRENT STATUS

Pharmacy of the World

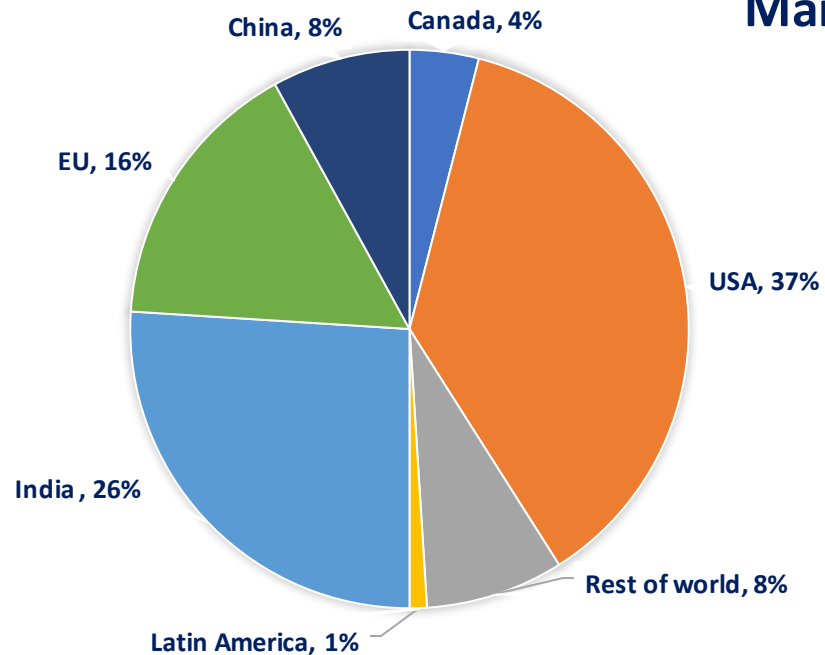
Exports to 200+ countries

3rd by Volume

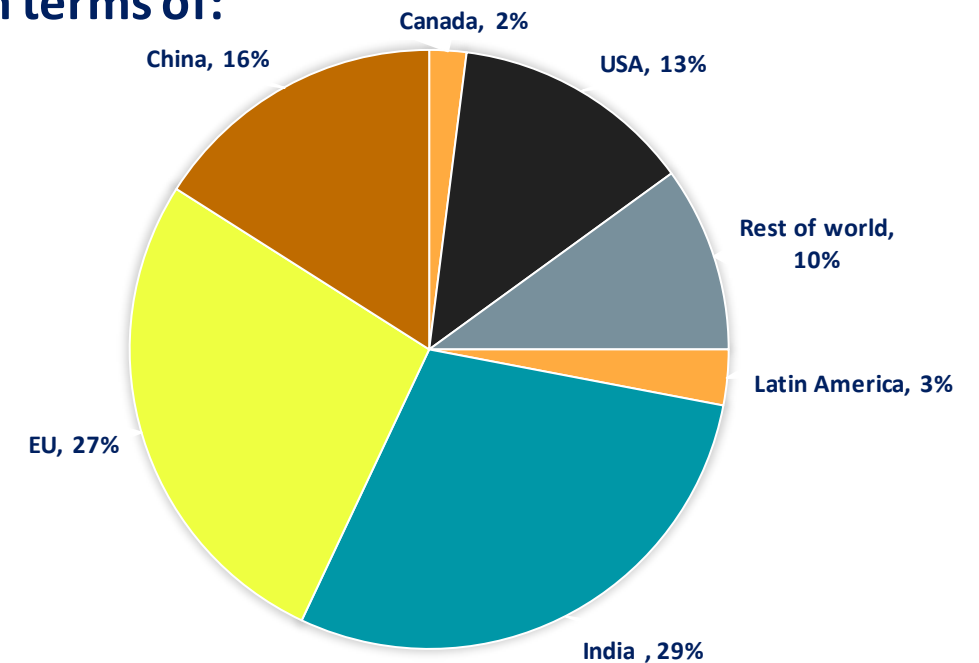
14th by Value

741 US-FDA approved plants (2021)

Manufacturing facilities in terms of:



Finished Dosage Forms (FDFs) for Generic Drugs

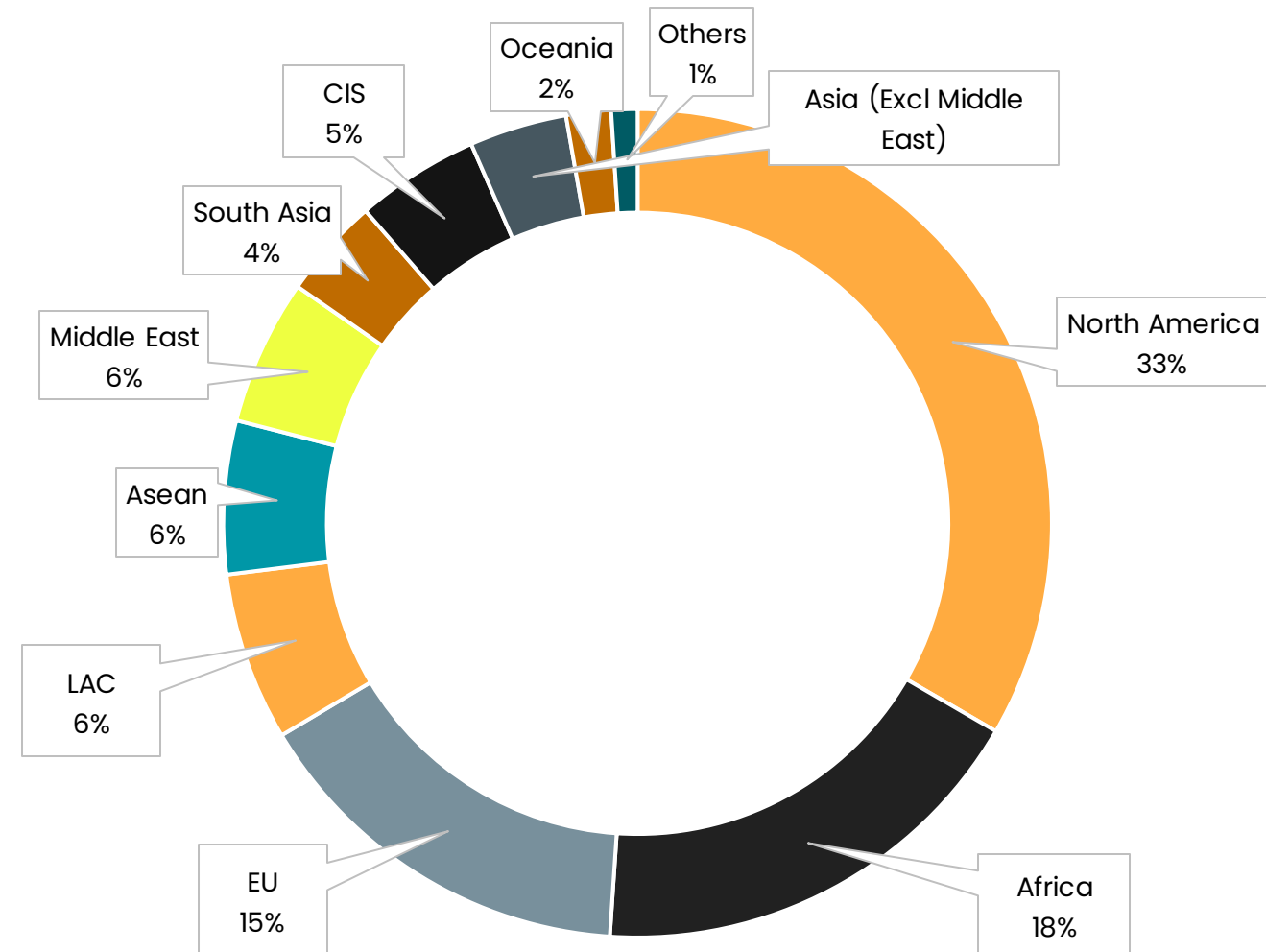
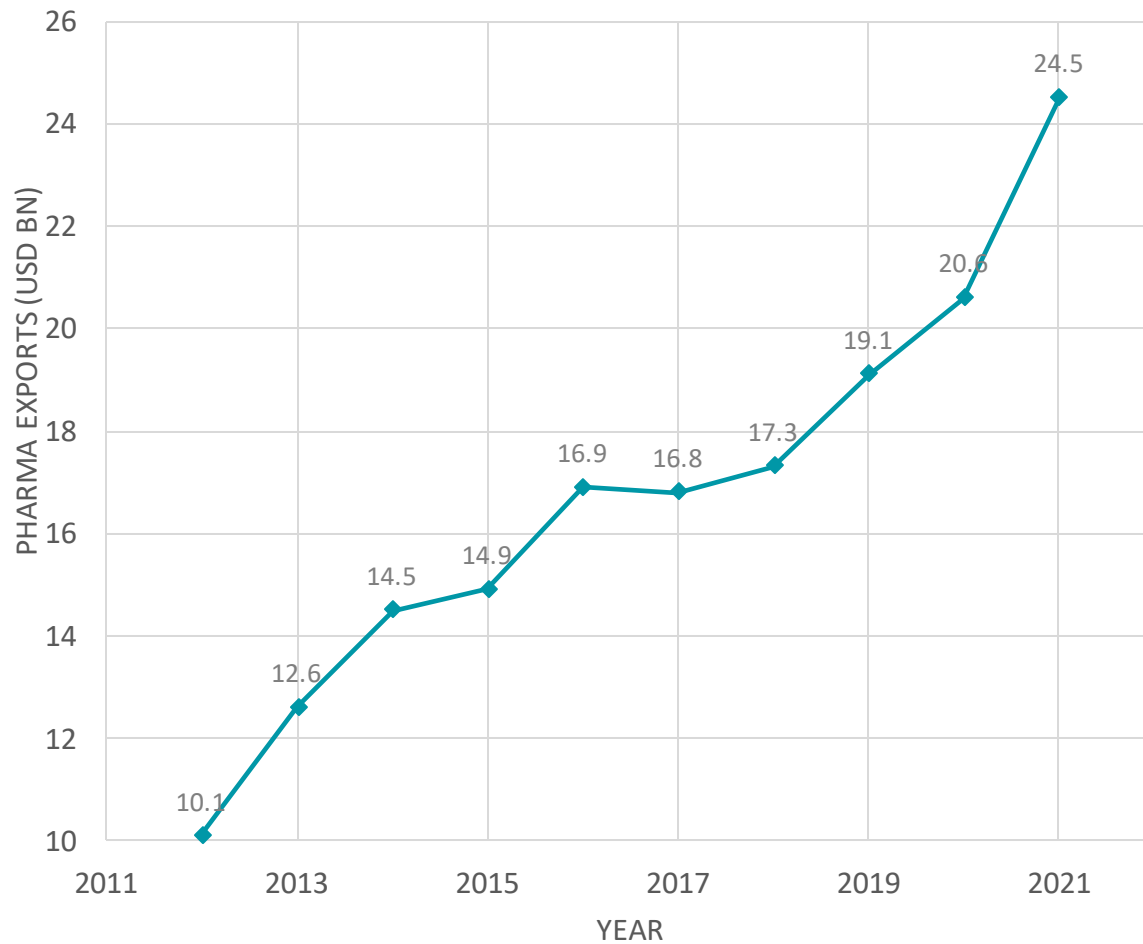


Active Pharmaceutical Ingredients (APIs) for Generic Drugs

Source: The White House Report, June 2021³³

INDIAN PHARMA INDUSTRY – CURRENT STATUS

Exports



PHARMACEUTICALS – MARKET POTENTIAL

Affordable generics	Quality bulk drugs	Leader in vaccines	Biosimilars
20% global generics supplied by India.	\$ 3 Bn Production Linked Incentive schemes for APIs, KSMs, and DIs	Vaccines supplied to 150+ countries.	200+ biosimilars in pipeline.
60,000 generics brands covering 60 therapeutic areas.	3 dedicated bulk drug parks	60% of global vaccine supply	98 biosimilars approved in FY'19, greater than US or EU.
Supplies over 40% of the generics to US.	State-of-the-art common infrastructure facilities.	Competitive timelines for regulatory approvals	Streamlined R&D pathway: New drugs and Clinical trial rules 2019
India shares 45.5% of Africa's Generic market value of \$8K Mn.	Strengthening of Pharmaceutical Industry scheme: Support to Pharma clusters	India supplied 201 Mn+ COVID-19 vaccine doses to 100 countries.	

KEY INDUSTRIAL CLUSTERS

Northern Zone

Clusters: Baddi, Patnagar, Haridwar, and NCR
Institutes: NIPER-Mohali, NIPER Raebareli and CRI Kasauli
Companies: Panacea Biotech, Mankind Pharma, Eli Lilly, Teva, J&J, Abbott

Central Zone

Clusters: Indore, Pithampur and Gwalior
Companies: Ajanta, Piramal, Viatris/Mylan

Western Zone

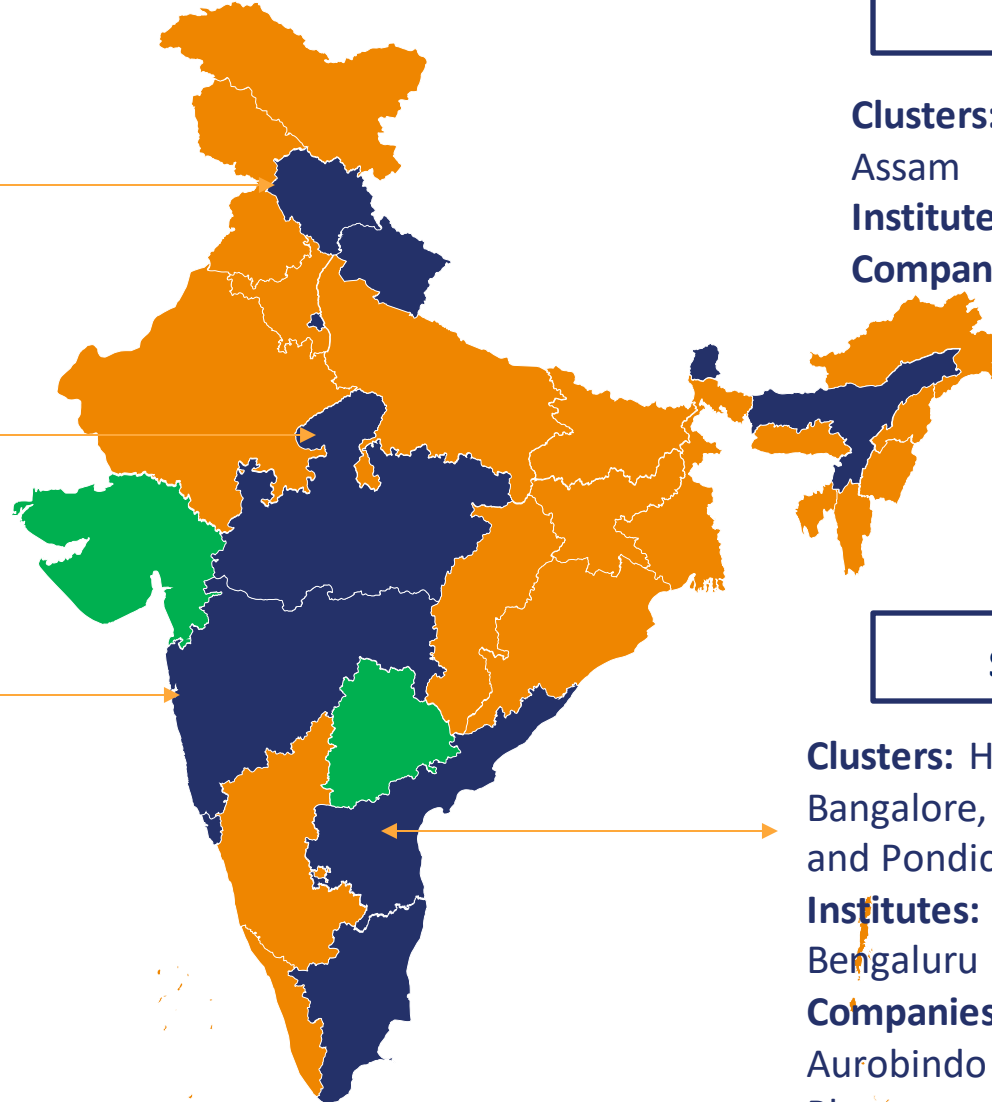
Clusters: Ahmedabad, Ankleshwar, Vapi, Baroda, Aurangabad, Mumbai, Pune, and Goa
Institutes : NIPER- Ahmedabad, WHO Global Centre for Traditional Medicines (TBP)
Companies: Zydus Cadilla, Sun Pharma, Amneal, Cipla, Lupin, Merck, J&J, Sanofi, Pfizer

North-East Zone

Clusters: South & East Sikkim and Assam
Institutes: NIPER Guwahati
Companies: IPCA, Lupin and Hetero

Southern Zone

Clusters: Hyderabad, Visakhapatnam, Bangalore, Mangalore, Mysore, Chennai, and Pondicherry.
Institutes: NIPER Hyderabad and IISC Bengaluru
Companies: Dr. Reddy's Laboratories, Aurobindo Pharma, Roche, Eisai Pharmaceuticals, Novartis, Pfizer



INITIATIVES OF DEPARTMENT TO SPUR INVESTMENTS

Name of the Scheme	Nature of Projects	Details
PLI Scheme for Bulk Drugs	Greenfield	Scheme overlay: US\$ 1bn; 49 projects for 33 products approved; employment ~9,943 persons
PLI Scheme for Medical Devices	Greenfield	Target Segments: Cancer care/ radiotherapy, Radiology and imaging, Anesthetics and cardio-respiratory, Implants
PLI Scheme for Pharmaceuticals	Greenfield & Brownfield	Scheme overlay: US\$ 2bn; Contributing to product diversification towards high value goods, creating global champions having potential to grow in scale and penetrate global value chains.
Bulk Drug Parks	Greenfield	Upcoming dedicated 3 bulk drug parks Grant-in-aid to state implementing agency upto US \$ 12.5 Mn per park

POLICY TO CATALYZE R&D AND INNOVATION: Objective



Strengthening regulatory framework



Incentivizing investments



Creating a facilitatory ecosystem for Innovation

R&D and Innovation culture supplemented with the upcoming R&D policy in India for Pharma sector can be leveraged to innovate and develop cutting – edge technologies.

INDIA AS A PREFERRED R&D DESTINATION: PHARMA

Key R&D Centers from different Countries in India:



R&D Centers in **Gurgaon and Hyderabad**, engaged in R&D in Gastrointestinal, Respiratory, Skin and Pain medications



Opened a **Lilly Capability Center in Bangalore** to focus on building unique drug development capabilities



Opened a **Pharmaceutical Development Centre in Mumbai**



R&D Centres in **Noida & Ambernath** in India



India hosts **one of the three Global Drug Development Centers in Hyderabad**



1 MILLION+

**INDIA'S STEM
WORKFORCE**



9

**BIOTECH
PARKS**

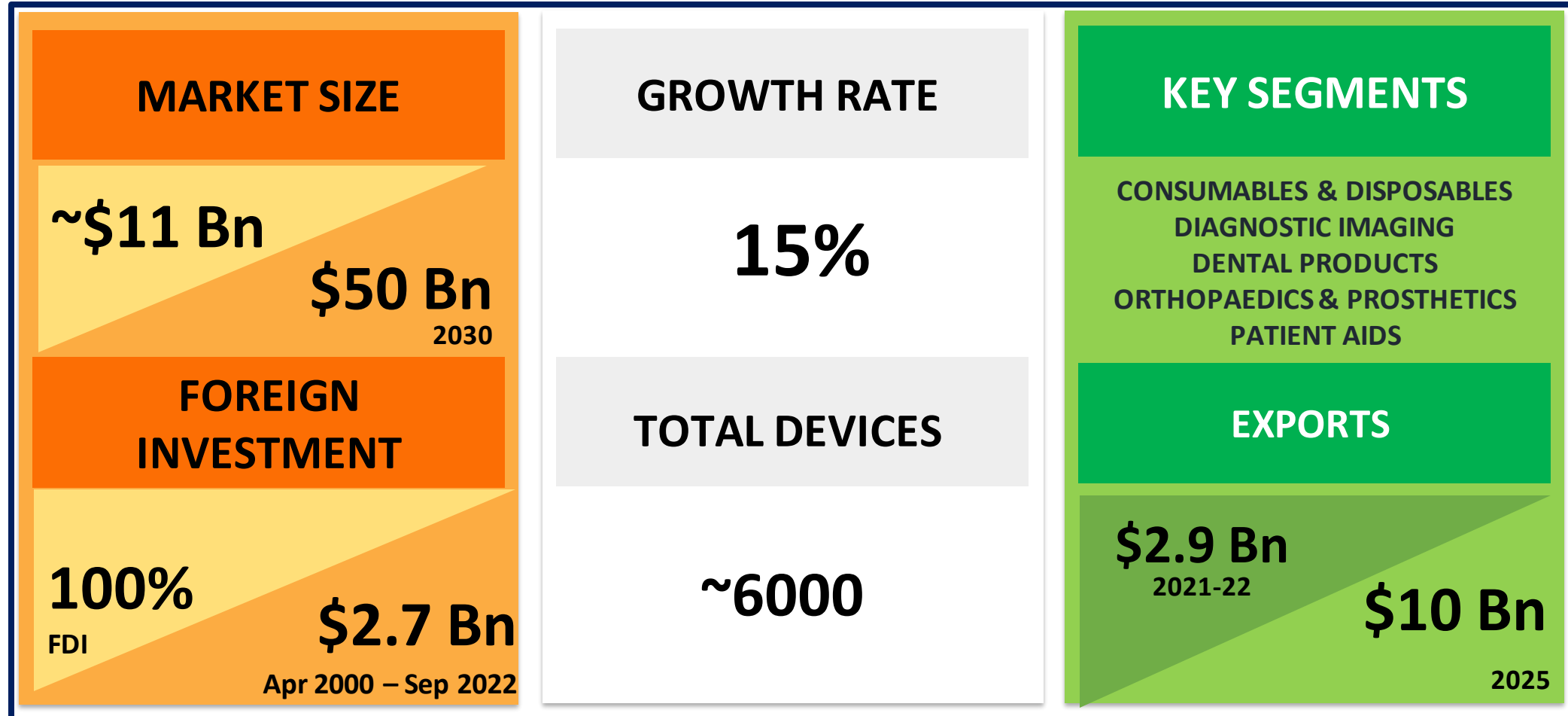


60+

BIO- INCUBATORS

SECTOR OVERVIEW - MEDICAL DEVICES

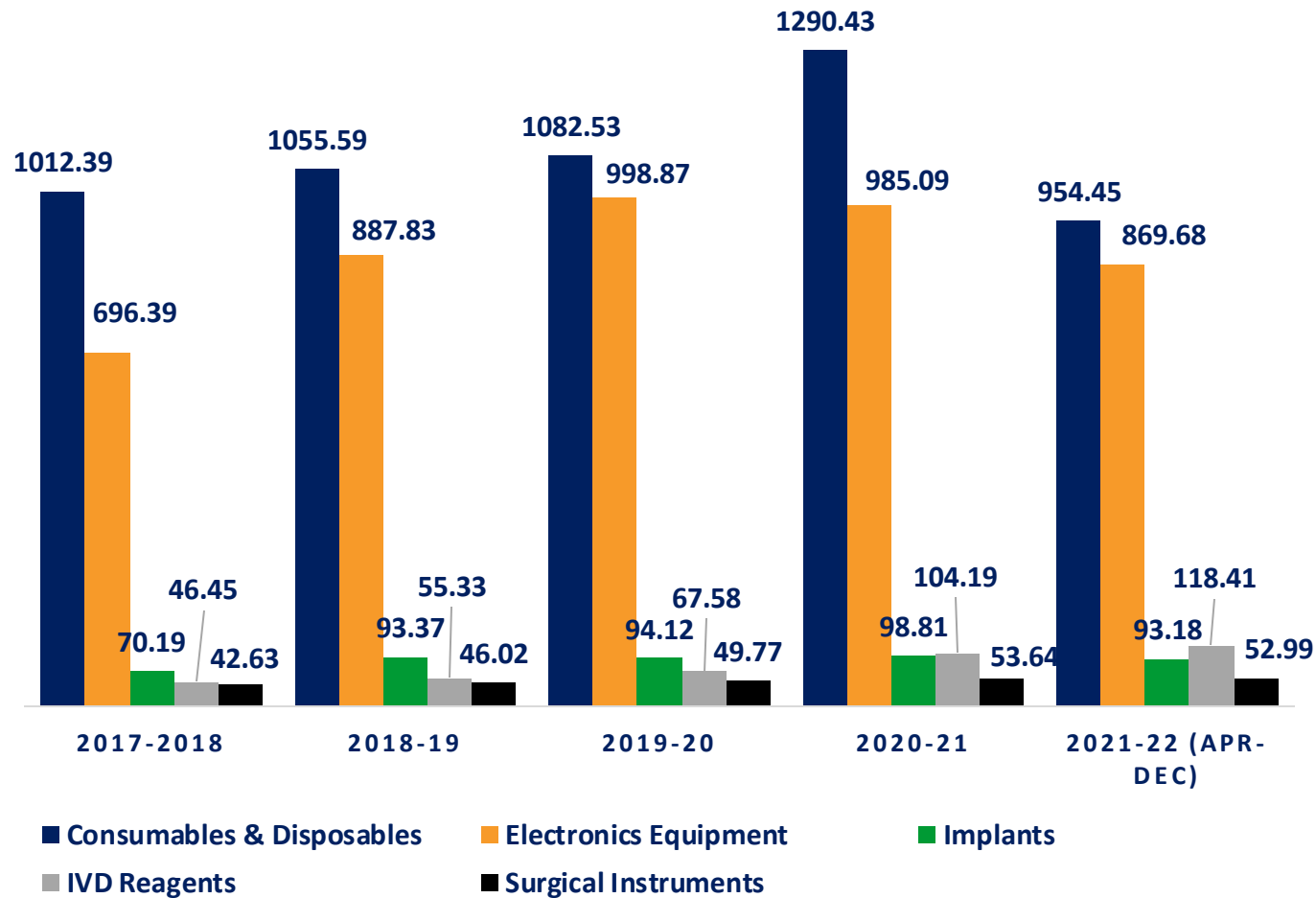
India's Medical Devices market is the **4th largest in Asia, amongst the top 20 globally**



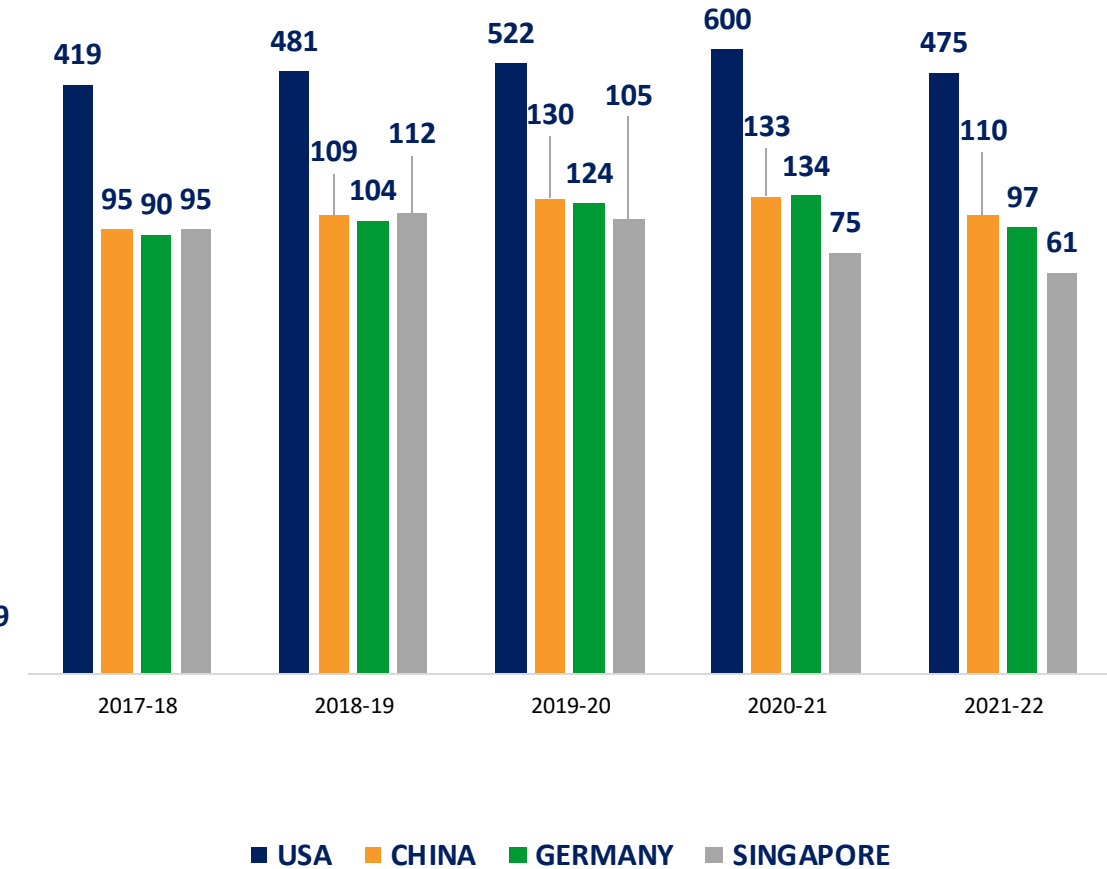


INDIAN MEDICAL DEVICES INDUSTRY- CURRENT STATUS

Category wise Exports from India (\$ Mn)



Top Export destinations for India (\$ Mn)



MARKET POTENTIAL OF MEDICAL DEVICES IN INDIA

Therapeutic Trends



Life Expectancy to touch 70 years by 2025, leading to increased health requirements for **geriatric care & treatment**



NCDs account for **50% of the disease burden** and **60% of all deaths in India**



Rise of **point-of-care** & **miniaturized diagnostics** after **COVID-19**

Therapeutic Products Evolution



Consumables & Disposables



Diagnostic Imaging



Dental Products



Orthopedics & Prosthetics



Patient Aids

Emerging Technologies

Telemedicine

Artificial Intelligence

Virtual Reality

Internet of Medical Things

m-Health

INDIA AS R&D HUB FOR GLOBAL COMPANIES: MEDTECH

Company

India focus



- **Innovation Center in Pune** for Imaging businesses, housing **2,000+ personnel**
- **Digital Accelerator Lab** to accelerate internal innovation across AI, blockchain, analytics
- **Global Business Services hub** in Chennai and Bangalore for IT, analytics, finance & other enabling functions



- **4,000+ IoT and data experts in India** to conceptualize, develop, and test digital business solutions
- **Bangalore R&D Centre Global digital hub**, housing **50%+ software and R&D employees**
- India positioned as **export base for LATAM, Africa and China**, with an investment of ~Rs. 200Mn in addition to ~Rs. 25 billion invested in R&D in India so far



- **6,000+ employees** across R&D and software
- Inaugurated **3rd R&D center in Bengaluru** in 2015 and **declared India a global hub for high-end R&D**



- **2,000+ engineers** at Bengaluru R&D center
- Bulk of investment in the GE's AI Healthcare AI platform "Edison" is in India, with **India as the Global hub**



- **India Development Centre in Bangalore & Hyderabad** to focus on product, design & development
- Medtronic has set up the **largest R&D center outside the US in Hyderabad** with an investment of \$160 Mn
- Established **Global IT Center facility in Bangalore** in 2014



- **Institute for Advancing Science** established in Gurgaon in 2016, **largest R&D shop outside the U.S**
- Inaugurated **2nd India R&D Centre in Pune in 2022** spread across 45000 sq. feet, employing 170+ employee



FDI upto 100% under automatic route for Greenfield projects in Pharma



FDI upto 74% under automatic route & >74% to 100% under Govt. route allowed for Brownfield projects in Pharma



FDI upto 100% under automatic route (both Greenfield & Brownfield) for Medical Devices



Production Linked Incentive Scheme (PLI)

- Financial incentives worth ~\$456 Mn to promote domestic production



Medical Devices Parks

- New Medical Devices Parks upcoming in Himachal Pradesh, Uttar Pradesh, Madhya Pradesh, & Tamil Nadu to provide plug & play infrastructure



National Medical Devices Policy

- Released to enable strong collaborations for boosting medical devices ecosystem



R&D Policy for Pharmaceuticals & Medical Devices

- Released to foster interdisciplinary collaborations to develop translational skills & start-up ecosystem

INCENTIVES OFFERED BY MEDICAL DEVICES PARKS IN INDIA

Parameters	Himachal Pradesh	Madhya Pradesh	Uttar Pradesh	Tamil Nadu
Land Rates	Land @ ₹ 1/ sqm Lease period: 33 years	Land @ ₹ 20/ sqm Lease period: 33 years	Land @ ₹ 4050-6670/ sqm Lease period: 90 years	Land @ ₹ 2970/ sqm
Power Rates & Concessions	Power @ ₹ 3/ Kwh Electricity Tariff @ ₹ 3/ unit Electricity Duty Exempted	Power @ ₹ 4.36/ Kwh Power Tariff @ ₹ 1/ unit for 5 years (Greenfield projects)	Power @ ₹ 3.95/ Kwh for 10 years 100% Exemption from electricity duty for 10 years permissible	Electricity tax exemption for a period of 5 years on power purchased from Tamil Nadu Generation & Distribution Corporation Ltd. (TANGEDCO) or generated & consumed from captive sources
Concessional Utilities	Zero charges on: Water Warehouse Park Maintenance	Water: ₹ 25.00/ KL Warehouse: ₹ 90.00/ sqm per month Park Maintenance: ₹8.00/ sqm per annum	Water: ₹ 4.00/ KL for 10 years Warehouse: ₹ 100/ sqmt per month for 10 years Park Maintenance: ₹ 0/ sqm per annum for 5 years	N.A.

INCENTIVES OFFERED BY MEDICAL DEVICES PARKS IN INDIA

Parameters	Himachal Pradesh	Madhya Pradesh	Uttar Pradesh	Tamil Nadu
Fiscal Support	<p>Capital Investment Subsidy @ 30% of P&M with max cap of ₹ 5 Cr</p> <p>Interest Subvention @ 7% subject to max ₹ 51 Lakhs per annum</p> <p>Transport Subsidy @ 3% of annual turnover subject to max ₹ 30 Lakhs per year</p>	<p>Capital Investment Subsidy @ 46.4% of P&M in 10 years (4.64% per year) for MSMEs & ~40% in 10 years for large industries</p> <p>Interest Subvention @ 5% on term loan with annual cap of ₹ 10 Cr for 10 years</p>	<p>Capital Interest Subsidy of 7.5% for 10 years with an annual cap of ₹ 2 Cr</p>	<p>Interest Subvention @ 5% rebate on interest for 6 years upto ₹ 5 Lakhs per annum for Sub-Large, ₹ 20 Lakhs for Large, & ₹ 1 Crore for Ultra Mega projects</p>
Proposed Common Infra Facilities	<ul style="list-style-type: none"> • 3D Design, Prototype, Tooling Lab • Mechatronics, Medical Robotic Lab • ESDM, EMC, EMI Component Testing & Design Facility Lab • Biocompatibility & Biomaterial Testing Lab • Gama Irradiation Lab, Data Analytics Zone & IoMT Lab • CoE, Skill Dev. & Incubation Centre 	<ul style="list-style-type: none"> • Electromagnetic Testing, Plastic Processing, 3D Printing & Prototype Development • Biomedical Testing Lab 	<ul style="list-style-type: none"> • 3D Design, Rapid Prototyping & Tooling Lab • Mechatronics Zone, Calibrations & Testing Facility • Electronics System & Design 	<ul style="list-style-type: none"> • EMI/EMC Testing Centre • Gamma Irradiation Facility • Bio Material & Compatibility Testing • Animal House with ETP • 3D Design & Printing • CoE, Incubation Center, R&D Facility, Skill Development Centre

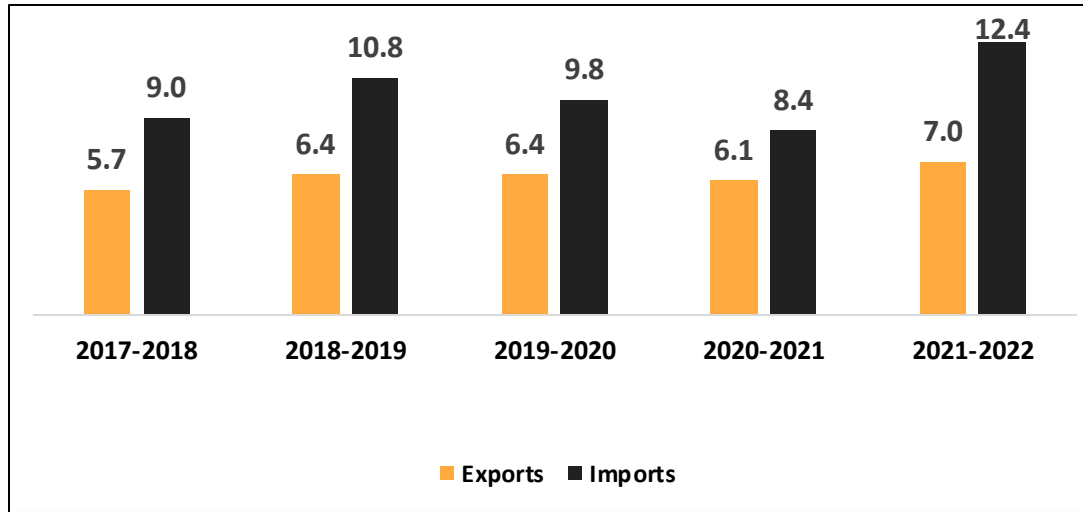
INCENTIVES OFFERED BY MEDICAL DEVICES PARKS IN INDIA

Parameters	Himachal Pradesh	Madhya Pradesh	Uttar Pradesh	Tamil Nadu
Target Sub-Sectors	<ul style="list-style-type: none"> • Anaesthetics & Cardio-Respiratory Medical Devices • Renal Care Medical Device • Cancer care Medical Devices • Radiotherapy Medical Devices • Radiology & Imaging medical devices (Ionizing & Non-Ionizing) • Nuclear Imaging Devices • All Implants (including implantable electronic devices) • Operation & Maintenance of Common Infrastructure • Facilities in PPP 	<ul style="list-style-type: none"> • Medical Implants • IVD Reagents • 3D Bio Printing • Diagnostics & Consumables • Medical Electrical & Electronics Equipment • Surgical Equipment 	<ul style="list-style-type: none"> • Cancer Care/ Radiotherapy • Radiology & Imaging • Nuclear Imaging • Anesthetics & Cardio • Renal Care • All implants • In Vitro Diagnostics 	<ul style="list-style-type: none"> • Prosthetics • Patient Aids • Imaging Technologies/Equipment • Consumables • Dental Products

INDIA AND MALAYSIA

INDIA-MALAYSIA BILATERAL TRADE

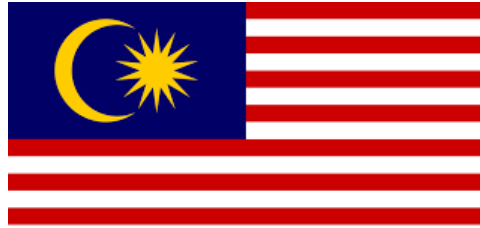
Total Bilateral Trade (2021-2022): USD 19.4 Bn



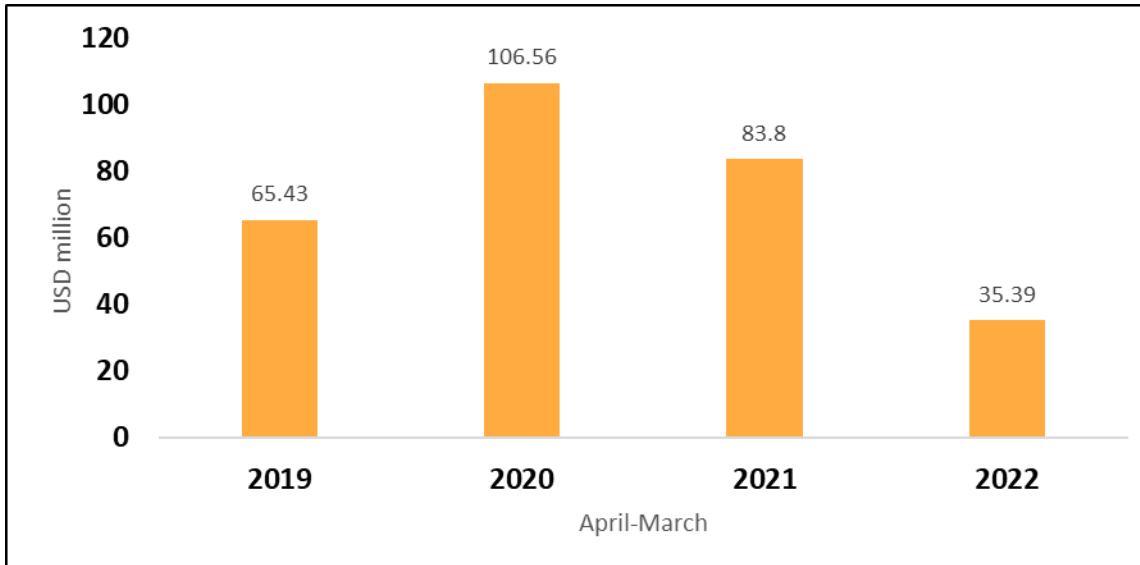
- Malaysia is the 13th largest trading partner of India.
- India is the 10th largest trading partner globally.
- The total trade between India and Malaysia is 34.57% growth in 2021-2022.
- Exports from India increased from USD 6.1 Bn in 2020-2021 to USD 7 Bn in 2021-2022, while the imports increased from USD 8.4 Bn in 2020-2021 to USD 12.4 Bn in 2021-2022.
- India exported 5,265 commodities to Malaysia in FY 2021-2022. India imported 2,814 commodities from Malaysia in FY 2021-2022.
- India's pharmaceutical exports to Malaysia for FY 2021-2022 is USD 76.21 million.

India's Top-Exports to Malaysia (2022) – USD Bn		India's Top-Imports from Malaysia (2022) – USD Billion	
Mineral Fuels	2.2	Animal/Vegetable Fats	4.2
Organic Chemicals	0.5	Mineral Fuels	1.4
Meat and Edible Meat Offal	0.4	Nuclear Reactors	0.9
Ships, Boats & Floating Structures	0.3	Electrical Machinery	0.9

INDIA-MALAYSIA INVESTMENT RELATIONS



FDI Equity Inflow from Malaysia to India



- USD 35.39 Bn of total FDI from Malaysia to India (Apr 2000-Dec 2022).
- Malaysia ranks 28th in FDI Inflows into India.
- Malaysia's share of total FDI Equity inflows to India is 0.1867% (Apr 2000-Dec 2022).

National Investment Promotion & Facilitation Agency under Government of India



END TO END VIRTUAL HANDHOLDING

Digital Platforms

Information Discovery

www.INVESTINDIA.gov.in



National Infrastructure Pipeline

Approvals & Registrations

 **National Single Window System**
(Investment Clearance Cell)

Issue Resolution & Monitoring

Empowered Group of Secretaries



Project Monitoring Group

Project Development Cell



#startupindia



WASTE TO WEALTH
Swachh Bharat Unnat Bharat

Technology Development Fund

PM-STIAC





THANK YOU



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