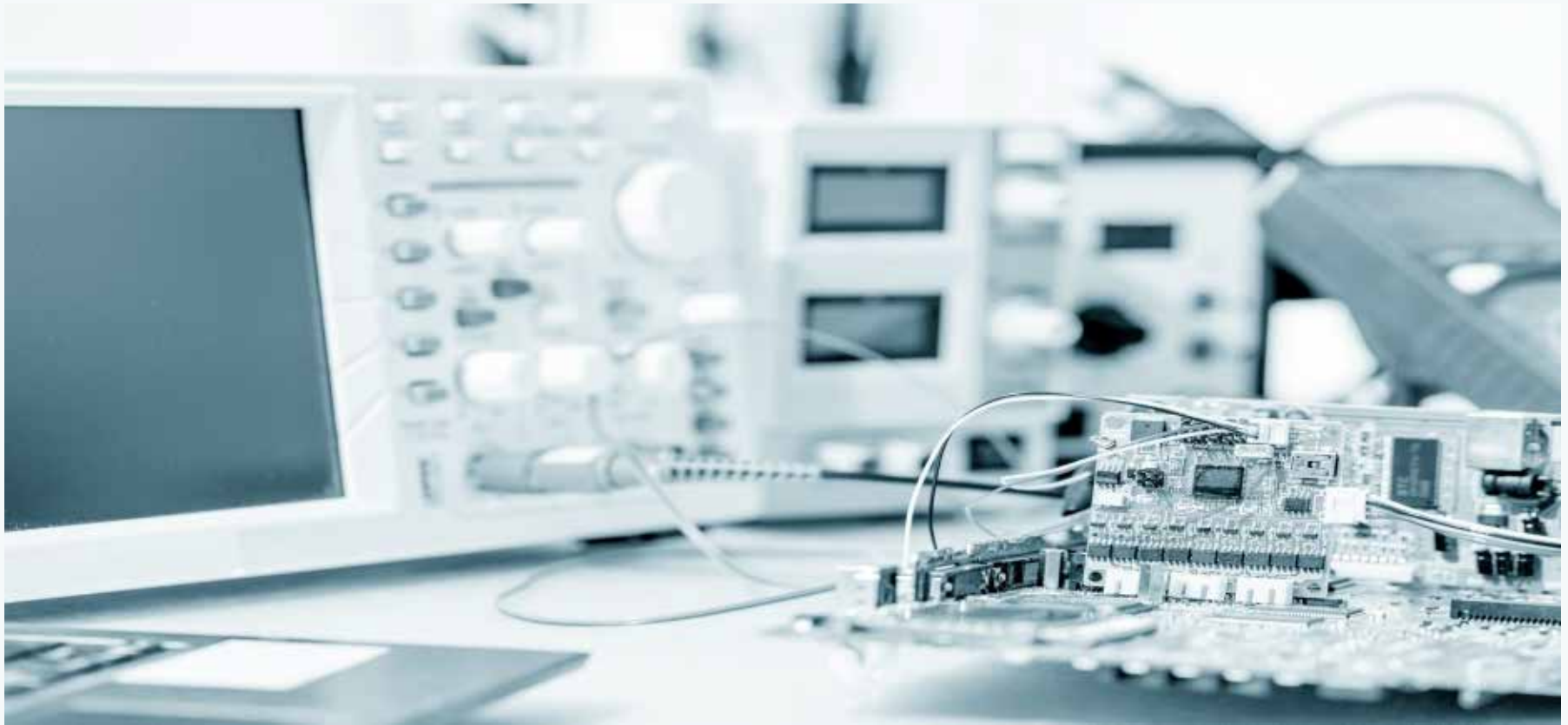


Medical Devices



September 2021

For updated information, please visit www.ibef.org

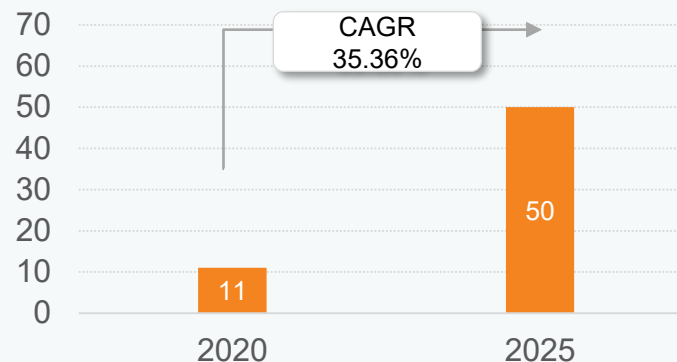
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Executive summary

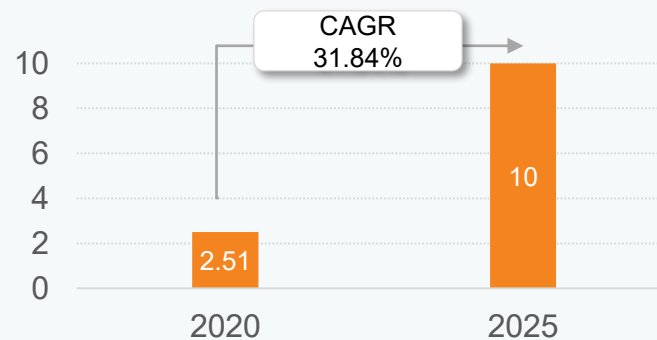
- By 2025, the Indian market for medical equipment is predicted to increase from US\$ 11 billion to ~US\$ 50 billion.
- The Indian medical devices sector is estimated to be worth ~US\$ 10 billion in 2021.
- The FY22 medical devices market is expected to reach US\$ 11.86 billion.
- India has an overall 75-80% import dependency on medical devices, with export at Rs. 14,802 crore (US\$ 2.1 billion) in 2019 and is expected to rise at CARG of 29.7% to reach Rs. 70,490 (US\$ 10 billion) in 2025.
- The US, Germany, China, Brazil, Iran, etc., are a few key countries that import Indian medical devices.
- Gujarat, Maharashtra, Karnataka, Haryana, Andhra Pradesh, Telangana and Tamil Nadu are the manufacturing hubs for medical devices in India.
- In BioAsia 2021, key stakeholders in the panel discussion on medical technologies stated that India would become self-sufficient in the domestic medical devices manufacturing by 2025-26.
- Panel observed that the government is taking supportive measures such as promoting indigenous manufacturing of high-tech medical devices, production-linked incentive schemes (PLIs) on medical devices, boosting new medical devices park, etc., to boost overall growth of the domestic medical devices market in India.

Source: Government Website, WHO and AMTZ Report 'Medical Device - Manufacturing in India - A Sunrise 2017

Medical Devices Market in India (2020-25, in US\$ billion)



Medical Devices Export Market in India (2019-25, in US\$ billion)





2. OPPORTUNITIES IN EXPORT

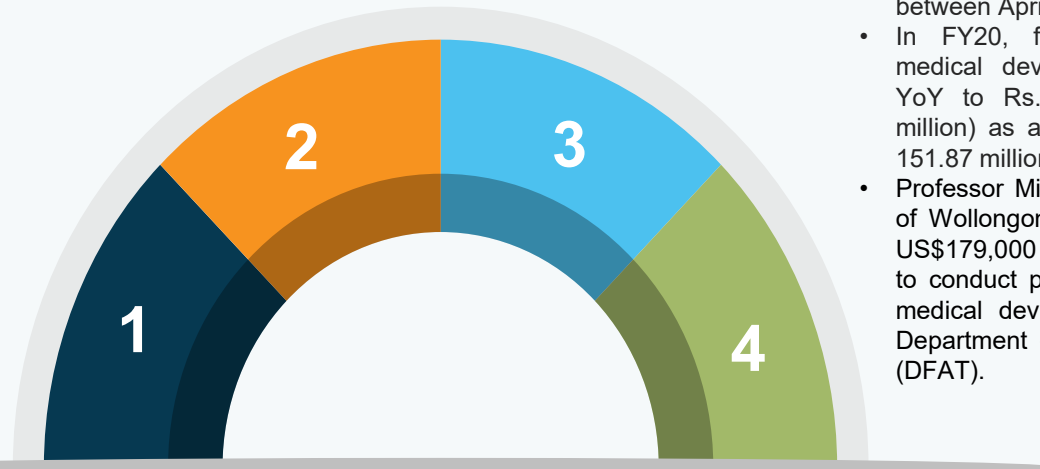
- The Indian medical device is driven by 75-80% imports from countries such as the US, China and Germany.
- India and Russia have set the bilateral trade target at US\$ 30 billion by 2025. Trade is expected to increase by an additional US\$ 5 billion per annum, with opportunities in pharmaceuticals & medical devices, minerals, steel, and chemicals.
- Medical devices are a highly attractive export area for US firms.

3. POLICY SUPPORT

- 100% FDI is allowed in the medical devices sector In India.
- Categories such as equipment and instruments, consumables and implants attract the most FDI.
- In July 2021, the government announced to build medical park in Uttar Pradesh, which is expected to generate an estimated Rs. 500 crore (US\$ 67.13 million) business in the state.
- In February 2021, a production-linked incentive (PLI) scheme was announced with an outlay of Rs. 3,420 crore (US\$ 468.78 million) for FY21-FY28 for promotion of domestic manufacturing of medical devices.
- In September 2021, the Ministry of Health and Family Welfare, stated that the government has decided to form a committee to prepare the 'New Drugs, Cosmetics and Medical Devices Bill' to frame new drugs, cosmetics and medical devices.

1. INCREASING DEMAND

- Rising number of medical facilities will boost the demand for medical devices in the market.
- The medical technology sector in India is projected to reach US\$ 50 billion by 2025.
- Various government initiatives such as 'Production Linked Incentives (PLI) Scheme for Medica Devices 2020' and establishing medical parks will augment demand.



4. INCREASING INVESTMENT

- FDI inflow in the medical and surgical appliances sector stood at US\$ 2.23 billion between April 2000 and June 2021.
- In FY20, foreign investments in the medical devices sector increased 98% YoY to Rs. 2,196 crore (US\$ 301.01 million) as against Rs. 1,108 crore (US\$ 151.87 million) in FY19.
- Professor Michael Lerch of the University of Wollongong (UOW) has been given a US\$179,000 Australia-India Council grant to conduct pre-clinical testing on a novel medical device for neurosurgery by the Department of Foreign Affairs and Trade (DFAT).

Market Overview



Medical devices market is split into 4 key categories in India

Under the medical device and IVD regulations, the Health Ministry of India has divided medical devices into the following four categories:

CLASS B (LOW MODERATE RISK)

- Medical devices such as endoscopic forceps, vial adapters, suction cups and catheters, Sengstaken-Blakemore tube, feeding tubes, gastrointestinal tubes etc. are included in this category.

CLASS C (MODERATE HIGH RISK)

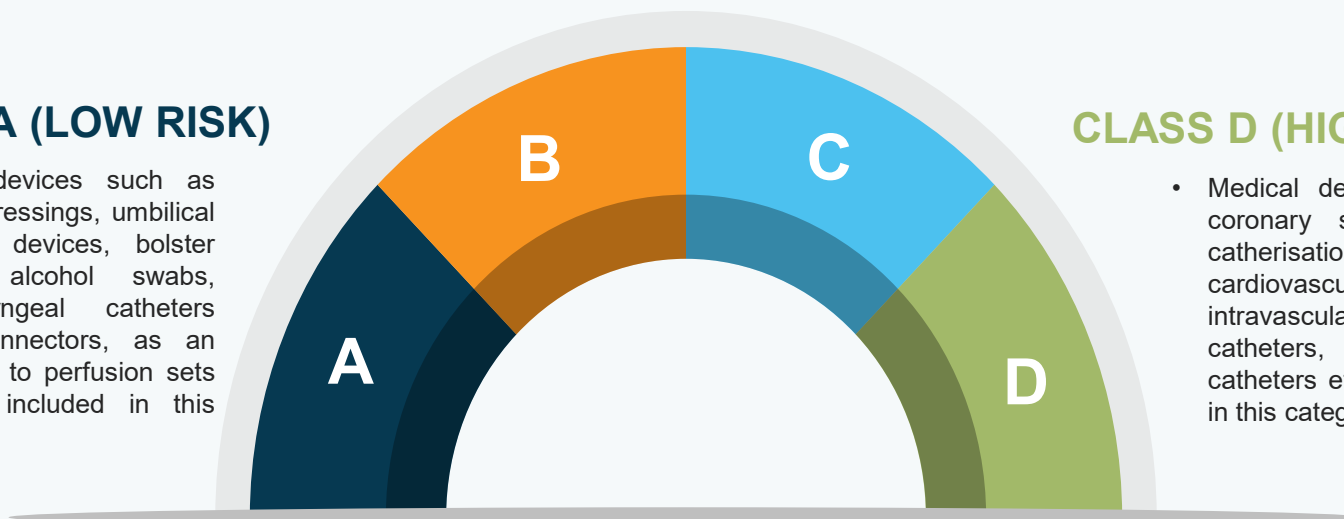
- Medical devices such as anesthesia conduction filter, introducer sheath, microcatheter, imaging catheter colonic stents, pancreatic instruments etc. are included in this category.

CLASS A (LOW RISK)

- Medical devices such as surgical dressings, umbilical occlusion devices, bolster sutures, alcohol swabs, nasopharyngeal catheters and Y-connectors, as an accessory to perfusion sets etc. are included in this category.

CLASS D (HIGH RISK)

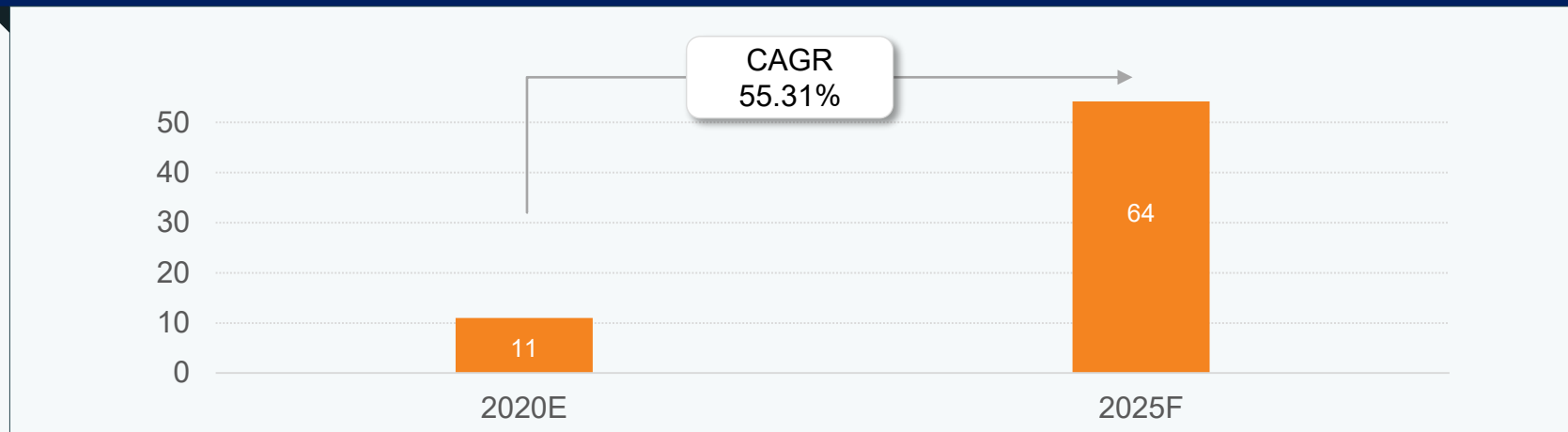
- Medical devices such as coronary stents, cardiac catheterisation kits, cardiovascular, intravascular diagnostic catheters, occlusion catheters etc. are included in this category.



Source: Drugs Controller General (India) Directorate General of Health Services 2017 notice

Growth in medical devices

Medical Devices Market in India (2020-25, in US\$ billion)



- India's medical device market is the fourth-largest in Asia, following Japan, China and South Korea. However, it has the potential to surpass its peers in terms of size and scale; this based on the government's support the sector has received over the past several years.
- India's medical devices market stood at US\$ 11 billion in 2020 and is expected to reach US\$ 65 billion in 2024.
- Between 2020 and 2025, diagnostic imaging is likely to expand at a CAGR of 13.5%.
- The medical devices sector in India comprises large multinationals, small and mid-sized companies. This sector, which is growing faster amid the pandemic, offers great opportunities for domestic players, particularly engineering MSMEs, to further penetrate the global markets.
- The Government of India (GOI) has commenced various initiatives to strengthen the medical devices sector, with emphasis on research and development (R&D) and 100% FDI for medical devices to boost the market.
- India added significant production capacity for various critical care items such as PPE kits, surgical gloves, sanitisers and N95 masks, and emerged as a significant destination for manufacturing of healthcare products and services.
- Hindustan Syringes & Medical Devices Ltd (HMD), a manufacturer of medical syringes, has reached a milestone of producing over one crore units of various sizes of syringes in August 2021.

List of medical devices manufacturers... (1/3)

The Indian medical devices market comprises >800 manufacturers, of which 65% companies have a turnover of <Rs. 10 crore (US\$ 1.5 million), 25% companies have a turnover of Rs. 10-50 crore (US\$ 1.5-6 million) and 2% companies have a turnover of >Rs. 500 crore (US\$ 73 million).

List of Medical Devices Manufacturers in India

3M Corporation	ATLAS Surgical	Chemical Resources (Chereso)	GE Healthcare
3S Corporation	B Braun	Coral Laboratories Ltd.	Genex Pharma
Adonis Medical Systems Pvt. Ltd.	Banuline Pharma Pvt. Ltd.	Cura Healthcare Pvt. Ltd.	Gepach International
Aligens International	Bayer AG	Danaher Corp.	GOLDEN Nimbus INDIA Pvt. Ltd.
Ananta Medicare Ltd.	Bigtec Labs	Deluxe Scientific Surgico Pvt. Ltd.	GRIPORTHO Surgicals Pvt. Ltd.
Anchor Plus LLP	Becton Dickinson India	Dynamic Ortho Industries	GST Corporation Ltd.
Antila Life Sciences Pvt. Ltd.	Biocon	East African India Overseas	Gujarat HEALTH Care
Appaswami Associates	BIO Polymer Systems	Ethinext Pharma	Harsoria Healthcare Pvt. Ltd..
Arommac Industries	Biotrol Laboratories Pvt. Ltd.	Eucare Pharmaceuticals Pvt. Ltd.	Hexagon Nutrition Pvt. Ltd.
Arrow Medical Devices,	Boston Scientific Corp.	Fab Pharmaceuticals Pvt. Ltd.	Hindustan Syringes & Medical Devices Ltd.
Arthon Implants Pvt. Ltd.	Cachet Pharmaceuticals Pvt. Ltd.	Flagship Biotech International Pvt. Ltd.	Hiral Labs Ltd.
ASOJ Soft Caps Pvt. Ltd.	Caremax Healthcare	GANGAR Electronics	Hi-tech Medicare Devices Pvt. Ltd.

Source: Company Websites

List of medical devices manufacturers... (2/3)

List of Medical Devices Manufacturers in India

Hospi Line Equipment Pvt. Ltd.	MEDI Tech Devices Pvt. Ltd.	Mrk Healthcare Pvt. Ltd.	Palakkad Surgical Industries Pvt. Ltd.
Impact Labs Pvt. Ltd.	Medicare Hygiene Ltd.	Nandu Chemical Industries	Paramount Surgimed Ltd.
Jk Medirise	Meditek India	Nature's Global Service	Perfint Healthcare
Johnson & Johnson	Medived	Nebula Surgical Pvt. Ltd.	Pharmacrest Company Pvt. Ltd.
Johnson & Smit Co.	Medsorce Ozone Biomedicals	Nice Neotech Medical Systems Pvt. Ltd.	Pharmexcil
Kanam latex Industries Pvt. Ltd.	Medtronic	Nipro Corp	Philips Healthcare
Kenoor Organics Pvt. Ltd.	MEHTA Tubes Ltd.	NIRAJ Industries (P) Ltd.	Prasad Meditech
Lamar Healthcare Pvt. Ltd.	Meril Life Sciences	Nosch Labs Pvt. Ltd.	Preci Turn Pvt. Ltd.
Livealth Biopharma Pvt. Ltd.	Metal Gems	Nulife Global Medical Devices Pvt. Ltd.	Precision Coatings Pvt. Ltd.
MAESTROS Electronics & Telecommunications Systems Ltd.	Microtrack Surgicals	OM Surgical	Premium Serums & Vaccines Pvt. Ltd.
Magnatek Enterprises	Miracalus Pharma Pvt. Ltd.	Opto Circuits	Proactive Health Inc.
Magnus Analytics	Morepen Laboratories Ltd.	Ortho Care	Prognosys HEALTH Care

Source: Company Websites

List of medical devices manufacturers... (3/3)

List of Medical Devices Manufacturers in India

Prognosys Medical Systems	Sai Krishna Pharmaceuticals/Kings Global Biotech Ltd.	Swiss Parenterals Pvt. Ltd.	Wellmed International Industries Pvt. Ltd.
Raajratna Metal Industries Ltd.	Samay Surgical	Terrace Pharmaceuticals Pvt. Ltd.	West-coast Pharmaceutical Works Ltd.
Roche	Skarray	Thea-Tex Healthcare (India) Pvt. Ltd.	Xcellance Medical Technologies Pvt. Ltd.,
Radiant Pharma	Schiller	Triviron Healthcare	Yashica Pharmaceuticals Pvt. Ltd.
Remi Laboratories	Sceptre Medical India Pvt. Ltd..	Udaipur Health Care Pvt. Ltd.	Zenova BIO Nutrition Pvt. Ltd.
Relysis	SGPHARMA Pvt. Ltd.	Unilab Chemicals and Pharmaceuticals Pvt. Ltd.	-
RHR Medicare Pvt. Ltd.	SHAILI Endoscopy	United Poly ENGINEERING Pvt. Ltd..	-
Rishabh Exim	Shaimil Laboratories	Vaansari Marketing Services	-
Ruby Surgical & Allied Products Pvt. Ltd.	Smith & Nephew	Vascular Concepts	-
Saboori Collezione International Pvt. Ltd.	Siemens	Verve Human Care Laboratories	-
Saboori Collezione International Pvt. Ltd.	SON'S & Daughter's	Vinod Medical Systems Pvt. Ltd.	-
Sahjanand Medical Technologies	Swipha Exports Pvt. Ltd.	Vins Bioproducts Ltd.	-

Source: Company Websites



100% FDIs and various government initiatives boost demand

1

100% FDI

- 100% FDIs—under the automatic route for both brownfield and greenfield setups in the sector—are expected to boost the industry. Strong FDI inflows also reflect confidence among global players on the Indian medical devices market.
- Over the last five years (2015-2020), India received US\$ 600 million with key investments from countries such as Singapore, United States, Europe and Japan.
- Categories such as equipment and instruments, consumables and implants have attracted the most FDIs.
- From April 2000 to June 2021, FDI inflow in the medical and surgical appliances sector stood at US\$ 2.23 billion.

2

Government Initiatives

Incentive Schemes:

- To boost domestic manufacturing of medical devices and attract huge investments in India, the department of pharmaceuticals launched a PLI scheme for domestic manufacturing of medical devices, with a total outlay of funds worth Rs.3,420 crore (US\$ 468.78 million) for the period FY21-FY28.
- The government also approved applications for nine eligible projects that are expected to lead to a total committed investment of ~Rs. 729.63 crore (US\$ 100.01 million) by the companies (e.g., Siemens Healthcare Private Limited, Allengers Medical Systems Limited (AMSL), Allengers OEM Private Limited (AOPL), Wipro GE Healthcare Private Limited, Nipro India Corporation Private Limited, Sahajanand Medical Technologies Private Limited, Innvolution Healthcare Private Limited, Integris Health Private Limited) and generate ~2,304 jobs.

Introduction of Medical Parks:

- The medical device parks are expected to reduce manufacturing costs, as these will be equipped with the necessary infrastructure where companies can plug and play.
- A vast medical device park is planned to open in Noida, bringing in a total investment of Rs. 5,250 crores (US\$ 705.38 million) by the government, and employ >20,000 people.
- In September 2021, the government sanctioned a proposal worth Rs. 5,000 crore (US\$ 674.36 million) to build a medical devices park in Himachal Pradesh's industrial township, Nalagarh, in the Solan district.
- In September 2021, the government approved the construction of a medical devices park near the Noida International Airport at Jewar in Sector 28.
- In September 2021, the government announced a scheme worth Rs. 400 crore (US\$ 53.95 million) to promote medical device parks, until FY25. The scheme is expected to reduce the cost of manufacturing medical equipment, making it more affordable in the domestic market.

International Collaborations:

- In November 2020, the Union Cabinet, chaired by Prime Minister, Mr. Narendra Modi, approved an MoU between the Central Drugs Standard Control Organisation (CDSCO), India, and the United Kingdom Medicines and Healthcare Products Regulatory Agency (UK MHRA) to cooperate in the field of medical product regulations.

Source: Government Website, News Articles

3

Introduction of Medical Device (Amendment) Rules 2020

- In 2017, the Central Drugs Standard Control Organisation (CDSCO) published the 'Medical Devices Rules 2017', which came into effect in 2018 and comprised regulatory structures that were required to obtain registration and licence by importers and manufacturers of medical devices.
- In February 2020, two new amendments were introduced, i.e., a new chapter for registration of medical devices by their respective manufacturers and importers, and exemption of the 37 categories of already regulated or notified medical devices from the requirement of registration introduced by the new chapter.

4

National Medical Devices Promotion Council

- In January 2020, the government set up a National Medical Devices Promotion Council to promote local manufacturing of high-end medical devices and attract investments in the sector.
- The council will be headed by the secretary of the Department for Promotion of Industry & Internal Trade (DPIIT).

5

Revised Public Procurement Order (PPO)

- On March 25, 2021, the Department of Pharmaceuticals (DoP) released a revised notice on the Public Procurement Order (PPO), incorporating 19 medical devices in the revised guidelines of the PPO, which is expected to improve domestic medical devices manufacturing (and strengthen 'Make in India') and reduce import bills by ~Rs. 4,000 crore (US\$ 538.62 million).

6

Introduction of 'Health and Wellness ATMs'

- To expand the primary healthcare industry and clinical centers in the country, in July 2021, the government of Uttar Pradesh announced to introduce automatic medicine dispensing machine. The state health department has been initiated to design an action plan and install 'Health ATMs' walk-in medical kiosks with combined medical devices for fundamentals, basic laboratory testing, emergency offerings, cardiology, neurology, pulmonary testing, gynaecology, etc., operated by a medical assistant in all 75 districts of Uttar Pradesh.

Source: Government Website, News Articles



Notable trends in the medical devices sector...(1/3)

1

Big Data

- Numerous companies have been utilising predictive analytics models by gathering key patient vital signs, along with other observations from devices, to make decisions about the overall health of patients
- For example, in 2019, Medtronic and IBM created a mobile personal assistant application that provides real-time glucose insights for individuals with diabetes. This management system helps understand the links between glucose readings, lifestyle choices and drug administration and thereby, aiding patients to make an informed decision about their medication

2

Robotics

- Selective Compliance Articulated Robot Arm (SCARA) robots can be easily mounted on a tabletop and fit well in small confined spaces; this is typical of a medical device manufacturing facility.
- In February 2021, Siemens Healthineers introduced Corindus, a robotic system, to drive cardiovascular interventions with robotic assistance in India.
- New Delhi-based SS Innovations, promoted by renowned robotic cardiothoracic surgeon Dr. Sudhir P Srivastava, will commercially launch India's first and cheapest robot surgical system in the next 4-6 months. The company plans to manufacture 100 units in 2021 of its new 'Mantra' multi-arm surgical robotics system, which was indigenously developed over the last three years, and sell >1,000 units in the next five years.

3

New Devices

- In July 2021, Abbott announced that it has launched pea-sized, life-saving device for babies with hole-in-the-heart malformations. The company has launched the device in India with emphasis on centres having an active neonatal intensive care unit (NICU).
- In June 2021, Trivitron Healthcare announced the launch of two innovation-driven products for HbA1c (Hemoglobin A1c) and Hb variant detection. These HbA1c analysers will be used for monitoring diabetes, thalassemia and hemoglobin variants.
- In June 2021, Medtronic India Private Limited announced the launch of Micra AV - a miniaturised, fully self-contained pacemaker that delivers advanced pacing technology to atrioventricular (AV) block patients via a minimally invasive approach.
- In June 2021, Wipro GE Healthcare announced that it has commenced local production of its Versana Ultrasound range in India.

Source: Government Website, News Articles

Notable trends in the medical devices sector...(2/3)

4

Start-ups

- The medical devices market is evolving at a fast pace on the back of constant innovations and research that are making medical devices affordable and accessible. Several Indian start-ups and SMEs have entered the medical devices market and are contributing with innovative solutions.
- With the entry of start-ups in this sector, new investments are being observed in the market.
- In June 2021, AstraZeneca India signed a memorandum of understanding with Docon Technologies, a Bengaluru-based health start-up, to digitise 1,000 clinics across India by implementing customised Electronic Medical Record (EMR) systems in clinics to offer doctors access to complete patient history.
- In April 2021, Anthill Ventures announced a collaboration with Kanfit3D (an Israeli health tech company) to help the company (Kanfit3D) expand in India and produce custom-made medical implants and market access to healthcare providers in the country.

5

Wearables

- Wearables such as glucose monitors, exercise trackers and wearables for mental health are becoming popular among consumers in India because of their ease of usage
- In December 2020, Central Drugs Standard Control Organisation (CDSCO) has granted medical device registration to three wearable devices from GOQii, a California-based fitness technology company. These devices offer measurements of body temperature and a pulse oximeter, as well as of vitals such as electrocardiography (ECG), blood pressure and heart-rate.

6

Educational Programmes

- To fulfill the demand for trained professionals, several educational institutions are offering/introducing courses to provide training and research in the medical devices field.
 - National Institute of Pharmaceutical Education and Research introduced a course—Master in Technology in medical devices
 - IIT Hyderabad is offering Bachelor in Technology in biomedical engineering that will train students to design medical devices, develop 3D images and create bio-sensors on a chip.
- In June 2021, Lupin Limited announced the launch of its Digital Asthma Educator platform for guiding patients on the correct technique of using inhalers.

Note: AiMeD: Association of Indian Manufacturers of Medical Devices, PPE: Personal Protective Equipment, RT PCR: Reverse Transcription Polymerase Chain Reaction

Source: Government Website, News Articles

Notable trends in the medical devices sector...(3/3)

7

COVID-19

- According to AiMeD, before the outbreak of COVID-19, there were only 20 firms manufacturing 62 lakhs PPE kits per year, but within 2-3 months, the number of manufacturers listed with AiMeD increased to 140 with 25.55 crore annual capacity.
- In September 2021, Welspun India received the US Food and Drug Administration (FDA) 510 (k) clearance for its 3-ply surgical masks.
- In June 2021, the National Anti-profiteering Authority's (NAA) directed tax officials to ensure rate cut on Goods and Services Tax (GST) for COVID-19-related medical supplies to offer consumers tax relief on supplies.
- In June 2021, medical devices manufacturer Meril announced that it has received approval from the Indian Council of Medical Research (ICMR) for its COVID-19 self-use rapid antigen test kit.
- In April 2021, due to the unusual spike in covid infections and an increased number of patients requiring hospitalisation, the government allowed faster custom clearance for up to three months to import medical devices including nebulisers, oxygen concentrators, oxygen canister, cryogenic cylinders, oxygen generators and ventilators.
- Similarly, the number of Indian firms manufacturing ventilators increased from 8 to 17, mask manufacturers from 30 to 108, swab manufacturers from zero to five, sanitiser manufacturers from 35 to 49 and RT PCR kit manufacturer from zero to eight
- Hindustan Syringes and Medical Devices Ltd., the world's largest manufacturer of auto-disable syringes that are used for vaccination, plans to scale up production to 1 billion syringes a year (from 700 million) in the first-half of 2021, to push COVID-19 vaccination. In March 2021, the company announced its plan to produce 8,200 syringes per minute—40% more than its current capacity of 5,900 syringes per minute.
 - In April 2021, Hindustan Syringes and Medical Devices (HMD) announced to invest >Rs. 100 crore (US\$ 13.47 million) to increase its syringe production capacity from 2.5 billion to >3 billion syringes by the next quarter.

8

Initial public offering (IPO)

- In September 2021, Sahajanand Medical Tech filed its Draft Red Herring Prospectus (DRHP) with SEBI for its Initial Public Offering (IPO) worth Rs. 1,500 crore (US\$ 202.31 million).
- In June 2021, Skanray Technologies filed its draft red herring prospectus (DRHP) with SEBI for its initial public offering (IPO) worth Rs. 400 crore (US\$ 53.70 million). The IPO is expected to include sale of secondary share, wherein its promoters and Ascent Capital (an existing private equity investor) are expected to sell a part of their stake.

Note: AiMeD: Association of Indian Manufacturers of Medical Devices, PPE: Personal Protective Equipment, RT PCR: Reverse Transcription Polymerase Chain Reaction

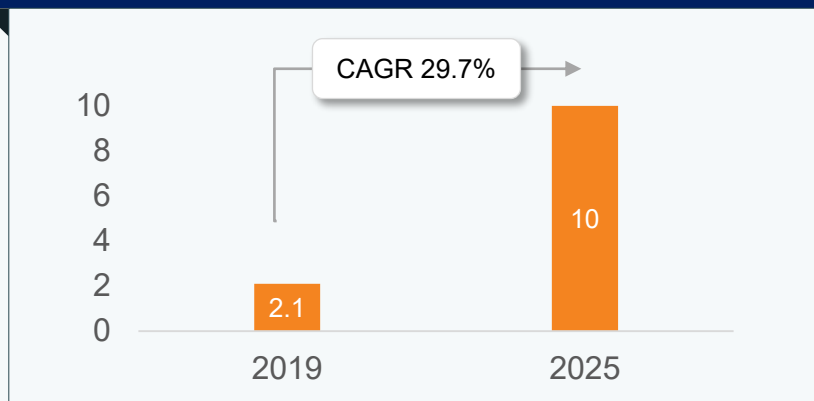
Source: Government Website, News Articles

Export Scenario



Export scenario of medical devices in India

Medical Devices Export Market in India (2019-25, in US\$ billion)



Key Export Countries

The US	France
Germany	Singapore
China	Turkey
Brazil	The Netherlands
Iran	Belgium

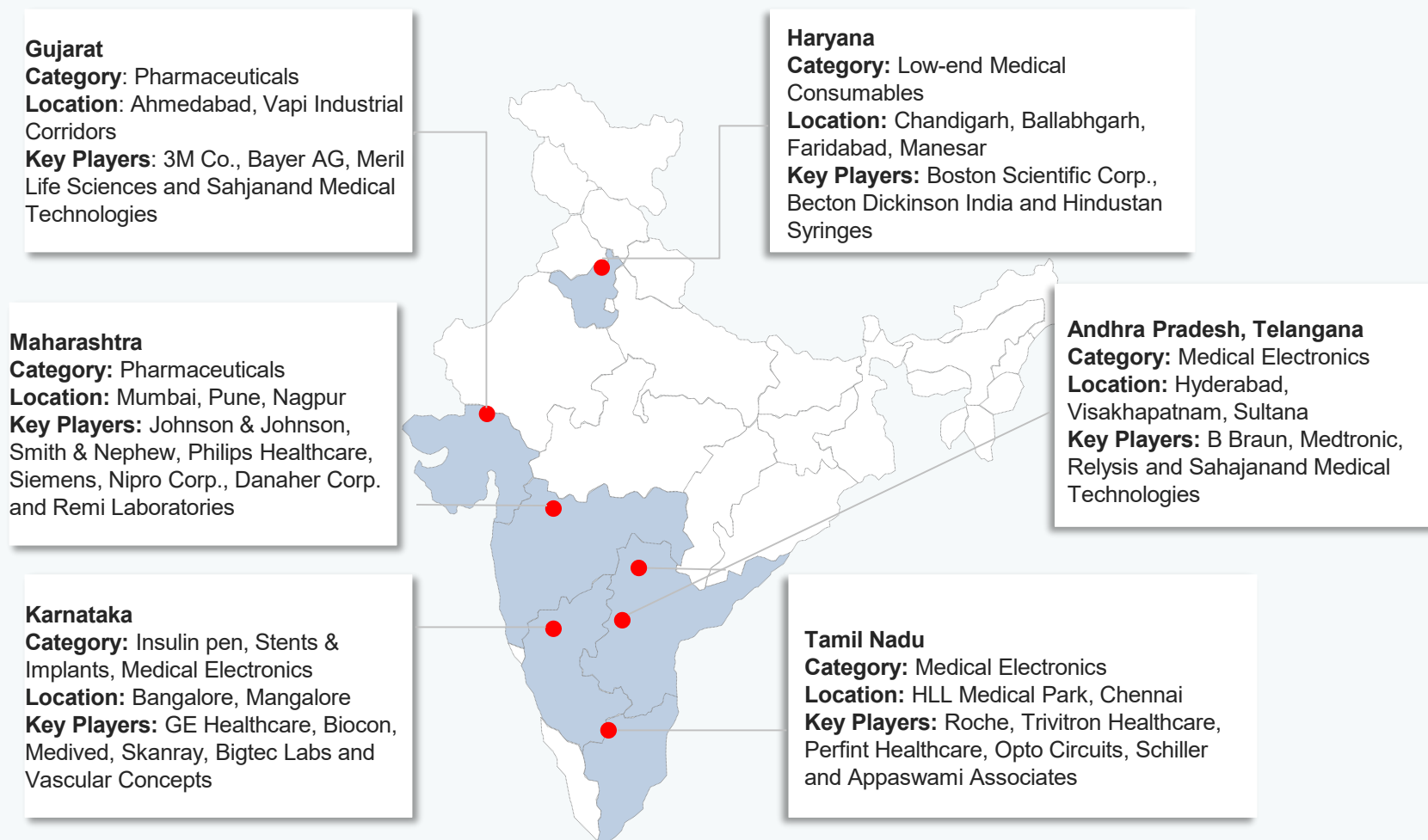
- India has a 75-80% import dependency on medical devices, with exports at Rs. 14,802 crore (US\$ 2.1 billion) in 2019 and is expected to increase at a CARG of 29.7% to reach Rs. 70,490 crore (US\$ 10 billion) in 2025.
- To increase the export of medical devices in the country, the Indian Ministry of Health and Family Welfare (MOHFW) and Central Drugs Standard Control Organisation (CDSCO) implemented the following initiatives:
 - The entities are re-visiting and implementing the Schedule MIII, which is a draft guidance on good manufacturing practices and facility requirements.
 - System for export labelling.
 - Clinical evaluation and adverse reporting clarification.
 - State licencing authority to extend free sales certificate validity from 2 years to 5 years to allow exports.
 - Create a list of manufacturers with export licencing and make this list easily accessible by different regulatory authorities worldwide.
- The Medical Devices Virtual Expo 2021 will showcase Indian products and enable direct interaction between Indian suppliers and buyers/importers from participating countries. Also, 300 foreign buyers from the healthcare sector are expected to participate in this event.

Source: Government Website, News Articles

Manufacturing Clusters



Manufacturing cluster for medical devices



Source: WHO and AMTZ Report 'Medical Device - Manufacturing in India - A Sunrise 2017', Government Website

Major investments in medical device sector... (1/2)

- As of March 2021, 40 companies signed up to establish their facilities in the Medical Devices Park of Sultanpur, Telangana. In total, the park received a commitment of >Rs. 1200 crores (US\$ 165 million) with a potential to generate 6500 jobs.
- By 2022, the Gautam Budh Nagar, Noida, is expected to have Northern India's first medical tools and system manufacturing park. The park is likely to be developed in Sector 28 of the Yamuna Expressway Industrial Development Authority (YEIDA) Space by the Yamuna Expressway Authority. In March 2021, YEIDA is expected to introduce a mission scheme worth ~Rs. 5,000 crore (US\$ 685.35 million), of which Rs. 100 crore (US\$ 13.71 million) is likely to be funded by the central authorities.
- In September 2021, the government approved a medical devices park in Oragadam (Tamil Nadu) that is expected to attract an estimated investment of Rs. 3,500 crore (US\$ 472.05 million) and offer direct and indirect employment to ~10,000 people.
- In January 2021, Tamil Nadu government proposed to build a medical devices park (spanning 350 acres) near Oragadam in Kancheepuram district. The proposed cost for developing this project is Rs. 430 crore (US\$ 58.92 million).
- Hyderabad is emerging as a medical devices hub. Establishment of the country's largest medical devices park in Sultanpur (near Hyderabad) in 2017 has attracted >40 companies to set up units so far (as of 2020).
- To further incentivise investments in the manufacturing of medical devices, in May 2020, the Central Government of India announced incentivisation plans of at least Rs. 3,420 crore (US\$ 469.19 million) over a period of five years, and these funds will be offered to manufacturers only if they invest in set-ups to produce key medical devices.
- In May 2020, AiMeD (an Umbrella Association of Indian Manufacturers of Medical Devices) invited Japanese investors who were interested in setting-up a manufacturing base for medical devices (including medical electronics & IVD) in India. As a part of the initiative, India is targeting 1200 technical collaborations with Indian investors for JPY 600 billion (US\$ 5746.7 million) and above, 200 joint ventures with foreign investors for JPY 200 billion (US\$ 1903.8 million) and above and 50 MNCs for JPY 200 billion (US\$ \$ 1903.8 million) and above.
- Metal Component Engineering Limited ("MCE" or the "Group"), based in Singapore, invested in MedTel, an India-based company, and formed a strategic partnership with its healthcare unit, GainHealth.



- In April 2021, the company announced that it has established a medical devices manufacturing plant in Visakhapatnam.
- In March 2021, Transasia Bio-Medical Ltd., a Mumbai-based in-vitro diagnostic company, announced plans to invest Rs. 150 crore (US\$ 21 million) to set up a manufacturing unit at the Medical Devices Park in Sultanpur, Telangana.
- The company plans to manufacture state-of-the-art high-technology analysers in the unit to address biochemistry, immunology, hematology, molecular testing in addition to COVID-19, HIV, dengue, and TB testing for domestic and export markets.



- In February 2021, Sunway Group, a Mumbai-based medium-sized pharmaceuticals company, signed a deal to acquire Inor Medical Products Ltd. (manufacture and seller of orthopaedic implants and instruments).
- As part of the contract, Sunway has also agreed to acquire Inor Medical's facility based in Valsad, Gujarat. The deal value of the transaction was not disclosed.

Source: Transasia Bio-medical Ltd. Website, News Articles

Major investments in medical device sector... (2/2)



- In March 2019, Sahajanand Medical Technologies (SMT), a manufacturer of coronary stent, announced an investment worth Rs. 250 crore (US\$ 34 million) to establish a stent manufacturing facility in Telangana.
- This facility will be Asia's largest stent manufacturing facility with a capacity to produce one million stents and two million balloon catheters per year.
- The facility is expected to be ready by 2020 and will generate employment for ~1,200-2,000 people.



- In September 2021, Medtronic India Private Limited collaborated with Stasis Health Private Limited to boost patient monitoring in India.
- In April 2021, Medtronic inaugurated a Medtronic Engineering and Innovation Centre (MEIC) in Hyderabad to leverage India's large pool of diverse and qualified talent to accelerate its innovative work in the medical technology space in the country.
- In August 2020, Medtronic, a global manufacturer of medical devices, announced an investment worth Rs. 1,200 crore (US\$ 163 million) to expand its R&D centre for medical device software and engineering solutions facility in Hyderabad, Telangana.
- The facility will be Medtronic's largest R&D facility, outside of the US, generating ~1,000 jobs in the next five years. The investment is planned over the next five years and is aimed at making Hyderabad the hub for medical devices in India.



- In September 2021, Siemens Healthineers announced that molecular testing kits will be manufactured in its Vadodara, Gujarat, unit.
- In September 2021, Siemens Healthineers extended its collaboration with SyntheticMR, with a new license agreement for distribution of the company's (SyntheticMR) products.
- In October 2020, Siemens Healthineers, a global medical technology company, announced plans to invest Rs. 1,300 crore (US\$ 177 million) over the next five years in Bengaluru, Karnataka, to make India one of its four key digital innovation hubs worldwide.



- Japan-headquartered Omron Healthcare, which established its Indian arm in 2010, is drawing growth plans for India that may include setting up a manufacturing unit in India and expanding its retail footprint.
- By the end of 2021, the company plans to have 10 retail outlets in India and plans to create a centre in Warangal as part of its expansion into Southern India, where it anticipates a potential contribution of 40% of its sales in FY 2020. The company expects a Rs. 220 crore (US\$ 30 million) turnover in India during that period.
- In September 2021, OMRON Healthcare India, announced the commencement of an AI-based joint trial program for remote patient monitoring.

Source: Transasisa Bio-medical Ltd. Website, News Articles

Key Industry Contacts



Key industry contacts

	Agency	Contact Information
	Association of Medical Device industry (AIMED)	901-902, Narain Manzil, 23, Barakhamba Road, New Delhi - 110001 Tele: 91-129-4289000 / 4061151 E-mail: forumcoordinator@aimedindia.com Website: www.aimedindia.com
	Medical Technology Association of India	B-17, Infocity, Sector-34, Gurgaon, Haryana 122001 Tel: 91-124 4382629 E-mail: info@mtaiindia.org Website: https://mtaiindia.org/
	Association of Diagnostics Manufacturers of India	C-123, Phase-1, Okhla Industrial Area, New Delhi - 110020 Tel: 91-11-41727222 / 41084222 E-mail: president@admi-india.org / secretary@admi-india.org / Website: www.admin-india.org

Source: Transasisa Bio-medical Ltd. Website, News Articles



Glossary

- AiMeD: Association of Indian Manufacturers of Medical Devices
- CAGR: Compound Annual Growth Rate
- CSDCO: Central Drugs Standard Control Organisation
- FDI: Foreign Direct Investment
- GOI: Government of India
- Rs.: Indian Rupee
- JPY: Japanese Yen
- Ltd: Limited
- MOHFW: Indian Ministry of Health and Family Welfare
- PLI: Production Linked Incentives Scheme
- Pvt Ltd: Private Limited
- R&D: Research and Development
- SCARA: Selective Compliance Articulated Robot Arm
- US\$: US Dollar
- Wherever applicable, numbers have been rounded off to the nearest whole number

Exchange rates

Exchange Rates (Fiscal Year)

Year	Rs. Equivalent of one US\$
2004-05	44.95
2005-06	44.28
2006-07	45.29
2007-08	40.24
2008-09	45.91
2009-10	47.42
2010-11	45.58
2011-12	47.95
2012-13	54.45
2013-14	60.50
2014-15	61.15
2015-16	65.46
2016-17	67.09
2017-18	64.45
2018-19	69.89
2019-20	70.49
2020-21	73.20

Exchange Rates (Calendar Year)

Year	Rs. Equivalent of one US\$
2005	44.11
2006	45.33
2007	41.29
2008	43.42
2009	48.35
2010	45.74
2011	46.67
2012	53.49
2013	58.63
2014	61.03
2015	64.15
2016	67.21
2017	65.12
2018	68.36
2019	69.89
2020	74.18
2021*	73.58

Note: As of September 2021

Source: Reserve Bank of India, Average for the year

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