Indian Institute of Public Administration (IIPA)

REPORT

Evaluation of Promotion of Medical Device Park Scheme

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---IIPA Team

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Dr. Pawan K. Taneja
Project Director

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EXECUTIVE SUMMARY:

Overview of the Scheme and Project Locations

The Government of India's Scheme for Promotion of Medical Device Parks aims to provide quality infrastructure with shared facilities to lower the cost of production and support the growth of domestic manufacturing in the medical device sector. Three parks have been approved and are operational under the scheme — one each in Tamil Nadu, Uttar Pradesh, and Madhya Pradesh.

Project Area and Infrastructure Scope

The Tamil Nadu Medical Device Park, located in Oragadam, Kancheepuram district, covers 350 acres and is being developed by SIPCOT. Its total project cost is ₹212.40 crore, including ₹153.33 crore for Common Infrastructure Facilities (CIFs).

The Uttar Pradesh park is situated in Sector 28, Gautam Buddha Nagar (Noida), also covering 350 acres, with the project being implemented by YEIDA. The total project cost is ₹435.94 crore, with ₹186.63 crore allocated for CIFs.

The Madhya Pradesh park in Ujjain, Vikram Udyogpuri Limited (Pitampura Dhar Mau Region) spans 360 acres and is being managed by MPIDC. The project has a total cost of ₹222.77 crore, with ₹155.63 crore allocated for CIFs.

Status of Common Infrastructure Facility (CIF) Construction

All three states have advanced significantly in constructing CIFs. Tamil Nadu has planned 12 CIF units, of which 11 civil tenders have been awarded, with one (Gamma Irradiation Centre) under review by BRIT. Uttar Pradesh has 16 planned units, with 14 tenders awarded, and the remaining two under preparation (Gamma Centre and Bio-material Lab). Madhya Pradesh has completed civil tendering for all 9 CIF units, making it the most advanced state in terms of CIF readiness.

Land Allotment and Unit Construction

Tamil Nadu has allotted 55.62 acres (21.11% of 263.5 acres reserved), with 24 allotments and 6 companies starting construction. Uttar Pradesh has allotted 60.14 acres (31.46% of 191.15 acres reserved) with 89 allotments, and 7 companies initiating construction. Madhya Pradesh leads with 157.56 acres allotted (78.19% of 201.52 acres), 55 allotments, and 11 companies commencing construction. Cumulatively, 168 allotments have been made over 273.32 acres, with 24 companies initiating physical work out of which 2 companies having commenced business.

Grant Disbursement and Utilisation

All three states have received ₹60 crore each as a central grant. In Tamil Nadu, ₹30 crore has been utilised, alongside ₹20.48 crore of the ₹32.01 crore released by the state, totalling ₹50.48 crore in utilisation. Uttar Pradesh has utilised ₹30 crore of central and ₹25.98 crore of ₹51.86 crore from the state, totalling ₹55.98 crore. Madhya Pradesh leads with ₹52.79 crore of central and ₹28 crore of ₹55.63 crore released by the state, totalling ₹80.79 crore in utilisation. Overall, the Centre has released ₹180 crore, of which ₹112.79 crore has been utilised. States have released ₹139.5 crore, with ₹74.46 crore utilised. The total scheme expenditure to date stands at ₹187.25 crore, with Madhya Pradesh showing the strongest performance.

Proposed Investments and Employment Projections

Tamil Nadu

The Medical Device Park in Tamil Nadu has attracted proposed investments of ₹509.53 crore, with an estimated employment generation of **3,082 jobs**.

Uttar Pradesh

In Uttar Pradesh, proposed investments stand at ₹1,294.18 crore. The park is expected to generate **11,463 jobs**.

Madhya Pradesh

Madhya Pradesh leads with the highest proposed investments of ₹2,374.86 crore and a projected employment figure of **10,011 jobs**.

Cumulative Impact

Across the three parks, the total proposed investment amounts to **₹4,178.67 crore**, with an estimated **24,556 jobs** to be created.

Case Study and Lessons Learned: Andhra Pradesh's AMTZ

Although not funded under the Medical Device Parks Scheme, Andhra Pradesh's AMTZ (Andhra Pradesh MedTech Zone) serves as a successful case study and model for emerging medical parks. AMTZ demonstrated how a focused approach, backed by strong leadership and comprehensive plug-and-play infrastructure, can catalyze MedTech innovation and manufacturing. Key lessons include the importance of equipment leasing models, centralized testing and regulatory facilities, and active startup engagement. AMTZ's integrated ecosystem, PPP model, and efficient governance offer replicable practices that other parks—like those in Tamil Nadu, Uttar Pradesh, and Madhya Pradesh—can adopt to accelerate growth and global competitiveness.

Analysis

The *Scheme for Promotion of Medical Device Parks* was launched with the strategic objective of reducing import dependency, fostering domestic manufacturing, and building world-class infrastructure to support the Indian medical device ecosystem. Currently, three parks—in **Kanchipuram (Tamil Nadu)**, **Greater Noida (Uttar Pradesh)**, and **Ujjain (Madhya Pradesh)**—are

being developed under the scheme. Each park has made measurable progress in terms of infrastructure development, plot allotment, investment attraction, and utilization of central and state funds.

In Tamil Nadu, the park spans 350 acres and is being developed by SIPCOT with a total project cost of ₹212.40 crore. Uttar Pradesh's park, managed by YEIDA, covers 350 acres with a significantly higher project cost of ₹435.94 crore. Madhya Pradesh's park, under MPIDC, is the most efficient in terms of fund utilization and land allotment, covering 360 acres with a cost of ₹222.77 crore.

All three states have awarded the majority of civil tenders for Common Infrastructure Facilities (CIFs), with Madhya Pradesh being the most advanced. Uttar Pradesh and Tamil Nadu still have a few tenders pending, such as for the Gamma Irradiation Centre and ETP facilities. In terms of land allotment and construction commencement, Madhya Pradesh again leads, followed by Uttar Pradesh and Tamil Nadu. A total of 168 units have been allotted across three states, with 24 companies having begun construction.

Financially, ₹180 crore has been released from the central grant, with an overall utilization of ₹112.79 crore. States have released ₹139.5 crore and utilized ₹74.46 crore. Madhya Pradesh leads in fund utilization, reflecting effective project execution.

Observations

1. **CIF Development Progress Varies**: While all parks have initiated civil works, Madhya Pradesh has completed tenders for all nine CIFs, showcasing better coordination and execution. Tamil Nadu and Uttar Pradesh are slightly behind, with a few tenders still in preparation.
2. **Investment and Employment Potential**: The total proposed investment across all three parks stands at ₹4,178.67 crore, with expected employment generation of 24,556 jobs. Uttar Pradesh has shown a strong investor response with 89 allotments and over ₹1,294 crore investment proposals.
3. **Land Utilization Efficiency**: Madhya Pradesh has allotted 78.19% of its reserved land, demonstrating strong demand and administrative efficiency. Tamil Nadu lags, having allotted only 21.11% of its reserved land.
4. **Financial Utilization and Grant Disbursement**: The timely release and utilization of both central and state grants are uneven. Madhya Pradesh has already utilized ₹80.79 crore, while Tamil Nadu and Uttar Pradesh have utilized only ₹50.48 crore and ₹55.98 crore, respectively.
5. **Operational Challenges Identified**:
    - **Infrastructure bottlenecks**: Power supply issues and lack of coordination with utilities have been reported.
    - **Plot size feedback**: Certain high-tech sectors, such as radiology and cancer care, have indicated that smaller plots (1000–2100 sq. ft.) are insufficient.

- **Certification barriers**: Mandatory CE/USFDA compliance has been identified as a deterrent for MSMEs, calling for regulatory handholding.

6. **Benchmarking against AMTZ**: Though AMTZ is not a beneficiary under this scheme, it remains a benchmark for integrated infrastructure, PPP-based equipment leasing, and startup support. Its practices offer vital learnings for replication.

Recommendations

EFFECTIVE UTILISATION OF CIFS

To address the **mutually dependent constraints** hindering the effective utilization of Common Infrastructure Facilities (CIF) in Medical Device Parks—where optimal usage depends on the presence of medical device manufacturers, while manufacturers are hesitant to set up operations until facilities are fully functional—the following recommendations are proposed for the Government.

1. **Adopt a Phased, Demand-Responsive CIF Development Strategy**: Government agencies should initially invest in modular, scalable infrastructure based on preliminary demand assessments with the industry association and inputs from prospective industry investors. This minimizes the risk of underutilization while demonstrating commitment.

2. **Facilitate Industry Anchoring through Incentivized Early Participation**: Introduce incentives such as registration fee waivers, subsidized user charges, or performance-linked grants for anchor tenants willing to commit in early phases. Their presence can help attract other units and validate CIF viability.

3. **Enable Flexibility in Equipment Procurement**: Develop a hybrid model where core common machinery is procured centrally. At the same time, provision is made for co-investment or co-selection of additional equipment based on the needs and specifications of the incoming operator or cluster.

4. **Appoint Interim Operators and Engage Industry Consortia**: Engage interim third-party operators with broad capabilities and flexibility, while simultaneously encouraging the formation of industry consortia to provide collective inputs on machinery selection and facility management.

5. **Streamline Regulatory Reapprovals for Relocating Units**: Coordinate with CDSCO to introduce a fast-track or simplified reapproval mechanism for already licensed Class A and B medical device manufacturers relocating to government-approved medical parks, particularly for MSMEs.

6. **Establish a Sustainable Revenue Model**: Introduce a mixed revenue model combining pay-per-use charges, annual maintenance contributions, and leasing options. Explore viability gap funding and cross-subsidization between high-end users and MSMEs to ensure financial sustainability.

7. **Create a Centralised CIF Management Framework**: Develop standard operating protocols, performance benchmarks, and a digital dashboard to monitor CIF usage, revenue generation, and user satisfaction across all medical device parks for continual policy calibration.

OTHER RECOMMENDATIONS

1. **Expand Scheme to Additional States**: States with strong industrial bases and interested in developing a medical device ecosystem may be considered for further expansion of the scheme. A well-defined selection criterion may be adopted for selection.
2. **Cross-Learning Through Workshops**: Organize regular cross-state workshops, site visits to AMTZ, and knowledge exchanges between state implementing agencies to accelerate learning curves.
3. **Improve Stakeholder Collaboration**: Stronger coordination is needed between state nodal agencies, utility providers (power, water, sewage), and certification authorities. Delays in these aspects are holding back operational readiness.
4. **Scope Enhancement**:
    - Prioritize production of devices from the **Global Tender Enquiry (GTE) Exemption List and** not just critical care. Provide units selected under other schemes of the Department of Pharmaceuticals (DoP) with opportunities to avail facilities for setting up units in the existing Medical Device Parks supported by DoP.
    - Integrate the scheme with **existing central schemes of other departments** (e.g., PLI, MSME CAPEX subsidy).
    - Invest in further strengthening of the medical device ecosystem in the existing parks by providing additional CIF and financial support required by them in activities such as international certification of testing facilities and product certification.
5. **Flexible Governance Models**: Parks should have the autonomy to adopt hybrid PPP, SPV, or Development Authority-led models based on state capacity. Governance flexibility will support diverse ecosystems. Professional management of the parks through qualified professionals may be preferred.
6. **Phased Implementation Strategy**: Adopt a two-phase approach—Phase I for construction and infrastructure development; Phase II for operations, expansion, and global outreach. This allows iterative evaluation and funding control.
7. **Establishing On-Site Certification Bodies:** To enhance regulatory readiness, each Medical Device Park should earmark space for certification bodies and regulatory service providers. These on-site facilitation centers will support QMS audits, product testing, and certification advisory. The Department of Pharmaceuticals (DoP) may also consider strengthening existing parks through additional CIF, including AI labs, advanced testing units, and financial aid for international certifications.

8. **Rapid Prototyping in Medical Device Parks: Enabling Faster Innovation**: Rapid prototyping facilities within Medical Device Parks significantly accelerate innovation by allowing startups and MSMEs to convert ideas into functional models quickly. Using 3D printing, CNC machining, and soft tooling, companies can validate designs, test usability, and meet global standards like ISO 13485 and USFDA early in the development cycle. This reduces design errors, shortens time-to-market, enhances collaboration, and improves clinical readiness—making the parks a vital hub for MedTech innovation and industry preparedness.

9. **Strengthening the R&D Ecosystem in Medical Device Parks**: To transform India into a global MedTech innovation hub, Medical Device Parks must strengthen their R&D ecosystem. Each park should include a dedicated R&D zone with plug-and-play labs, rapid prototyping, and shared high-end equipment. Collaborations with academic institutions, research labs, and medical colleges are vital for joint research and technology transfer. A dedicated R&D fund for startups and SMEs should support product development, trials, and patenting. Regulatory facilitation units must guide innovators through complex certifications. With these enhancements, parks can shift from basic manufacturing to innovation-driven growth, enabling globally competitive healthcare technologies.

10. **Advancing High-End Medical Device Development for Global Competitiveness**: To boost India's global standing in MedTech, medical device parks must evolve beyond low-cost manufacturing and support full-cycle development of complex technologies—like imaging systems, surgical robots, and AI-enabled diagnostics. This requires advanced infrastructure, including cleanrooms, material testing labs, and certification support (ISO 13485, USFDA, CE). Parks should attract global players through export facilitation, policy alignment, and links to international supply chains. Collaboration with global research and standards bodies is essential. By enabling end-to-end innovation—from R&D to export—parks can become world-class hubs for high-end medical device development.

Justification for Continuation of the Scheme

The continuation of the *Scheme for Promotion of Medical Device Parks* is not only desirable but essential for India's journey toward self-reliance in healthcare manufacturing. India still imports over 70–80% of its medical devices, especially in high-end categories like imaging, implants, and diagnostics. This dependency poses a strategic risk, especially in crises such as pandemics.

The current parks, despite being relatively young, have demonstrated significant traction in land allotment, investment mobilization, and employment generation. With ₹4,178 crore worth of investment proposals and nearly 25,000 projected jobs, the economic and social returns on public investment are substantial.

Furthermore, the scheme directly supports the goals of *Make in India*, *Atmanirbhar Bharat*, and *Ayushman Bharat* by enhancing access to affordable, high-quality, domestically produced medical equipment. It aligns with the *National Health Policy 2017*'s emphasis on technology-driven healthcare and capacity building.

In addition, the parks act as enablers for innovation by co-locating R&D labs, prototyping centres, and regulatory support under one roof. This ecosystem approach, when combined with firm policy and financial incentives, has the potential to make India one of the top 5 global MedTech hubs by 2047.

Given the progress so far, the learnings from early implementation, and the transformative potential of the initiative, it is strongly recommended that the scheme be continued, scaled, and refined with the proposed strategies. This will not only strengthen India's healthcare manufacturing base but also position the country as a trusted supplier in the global medical device value chain.

CHAPTER 01: ABOUT THE STUDY

1. Background

The medical device industry is a vital component of the healthcare ecosystem. Recognizing its potential for growth and contribution to public health and economic development, the Government of India introduced the Scheme for Promotion of Medical Device Parks (SPMDP) to reduce manufacturing costs, promote innovation, and enhance domestic production capabilities through Common Infrastructure Facilities (CIFs).

Given the strategic importance of this scheme and its implementation in states like Tamil Nadu, Madhya Pradesh, and Uttar Pradesh, it is imperative to undertake a third-party evaluation to assess the scheme's performance, infrastructure adequacy, implementation challenges, and policy impacts. IIPA has been entrusted with the task of the third-party review of the scheme by the ministry.

2. Objectives of the Evaluation

The evaluation aims to:

1. Evaluate the scheme using the **"Evaluation Template of a Central Sector Scheme"** issued by the Department of Expenditure.
2. Assess the current status of the medical device industry concerning infrastructure availability and associated costs.
3. Examine the adequacy and status of Common Infrastructure Facilities (CIFs).
4. Identify gaps and additional areas requiring government intervention.
5. Review fund utilization, efficiency, and timelines.
6. Identify implementation challenges and propose design or procedural improvements to address them.
7. Recommend strategies to promote these parks globally and attract foreign direct investment (FDI).

3. Scope of the Study

- Evaluation has covered three operational locations under the scheme:
    - **Kanchipuram, Tamil Nadu**

- **Ujjain, Madhya Pradesh**
- **Greater Noida, Uttar Pradesh**

- Stakeholders consulted:
  - State Implementing Agencies (SIAs)
  - Department of Pharmaceuticals
  - Project Management Agency
  - Industrial Units in Medical Device Parks
  - Local Industry Bodies and Associations
  - Potential foreign investors (via desk review or interviews)

Figure 1.1: Stakeholder Consultation Workshop in progress at YEIDA, UP.

4. Evaluation Framework and Methodology

1. EVALUATION FRAMEWORK

The study has used the OECD REEES-IC framework, template given by the Department of Expenditure, GOI:

Criteria	Key Areas
Relevance	Alignment with national manufacturing & health objectives
Effectiveness	Achievement of intended outputs and outcomes
Efficiency	Timeliness and cost-effectiveness of CIF implementation
Equity	Regional balance and support to MSMEs and innovators
Sustainability	Long-term viability and institutional capacity
Impact	Support for medical device manufacturing and cost reduction
Coherence	Aligned with the Make in India, Atmanirbhar Bharat, and National Health Policy

Table 1.1: Evaluation Framework

2. METHODOLOGY

- **Desk Research**: Review of policy documents, DPRs, UC reports, financial statements, and national industry reports.
- **Field Visits**: On-site assessment at the three Medical Device Parks to review CIFs, park infrastructure, and usage.
- **In-depth Interviews**:
    - Government officials (central/state)
    - Park operators and developers
    - Industry stakeholders and cluster associations
    - Investors and unit owners

Figure 1.2: In-depth Interviews with the SIA and Export Promotion Council

Figure 1.3: In-depth Interviews with the Industry, Investors, and Industry Association

5. Sampling and Data Collection

1. SITES COVERED:

- Kanchipuram: State Industry Promotion Corporation of Tamil Nadu (SIPCOT)
- Ujjain: Madhya Pradesh Industrial Development Corporation
- Greater Noida: Yamuna Expressway Industrial Development Authority

2. RESPONDENT CATEGORIES:

- 7–10 stakeholders per site (government, industry, investors)
- Total respondents: 32

6. Research Process

The study used a sequential research process which included review of the secondary data resources, including scheme document, Monthly Progress, and status reports prepared by the PMA, i.e., IFC ltd., DPR of the projects submitted by the SIA, Industry trends, information on the state implementation agencies' websites, etc. The study team carried out an in-depth discussion with key stakeholders, including the Director (Medical Device) and his team in the Department of Pharmaceutical and PMA IFCI Ltd. Team at the national level, to gain a clear understanding of the scheme and key insights into the implementation in different states.

Based on the above discussion and literature review, the study team prepared an in-depth interview guide (See Annexure 1) that was used while interacting with the key stakeholders during a visit to the state. It contains questions related to:

- Background and Motivation to join the park
- Experience within the Park so far
- Needs and Requirements of Common Facilities
- Challenges and Barriers
- Impact and Suggestions for Improvement
- Strategic Vision for the Park
- Expectations from the Government

The validity testing of the interview schedule was done by taking suggestions for improvement from DoP officials and IFCI Ltd. officials The study team first visited Medical Device Park of Greater Noida (Uttar Pradesh) followed by Kanchipuram (Tamil Nadu). The visit to the medical device park includes the following:

1. STAKEHOLDER MEETINGS

The visit began with extensive interactions involving various stakeholders including officials from the SIA like Yamuna Expressway Industrial Development Authority (YEIDA) and State Industries Promotion Corporation of Tamil Nadu (SIPCOT), private investors, company representatives, and relevant government bodies. A focal point of these discussions was the active outreach in critical

sectors such as cancer care, cardiac care etc. Special emphasis was placed on ensuring that stakeholder voices were heard, particularly regarding expectations from the park's infrastructure and support systems. Additionally, Equipment Manufacturing Units (EMUs) expressed their readiness to contribute to the development of a skilled workforce by initiating training programs tailored to the needs of future employees in the park. These conversations set the tone for a collaborative ecosystem aimed at long-term innovation and self-reliance in medical device manufacturing.

2. PRESENTATION BY THE SIA TEAM

The SIA team presented a comprehensive overview of the project's current status and future trajectory. They outlined the progress made on the Common Infrastructure Facilities (CIFs) segments of the Medical Device Park, specifically in terms of construction, tendering, purchasing, installation, and the utilization plan. The presentation also includes the status of the number of land parcel bids received, allotment letters issued, and construction done by the investors who have purchased land. SIA also highlighted the physical and digital infrastructure being developed within and around the park.

3. INTERACTIVE SESSION ON PROGRESS AND CHALLENGES

In a focused interaction with project officials, several operational bottlenecks and solutions were discussed in depth. Discussion issues encompass various land requirements for investors, operational challenges such as power supply and internet connectivity via optical fiber lines, the nature and type of equipment needed in common facilities, licensing issues, and skill gaps.

4. INTERACTION WITH ALLOTTED UNIT OWNERS

During the visit, discussions were held with several entrepreneurs and company owners who have secured plots and begun construction. Discussion topics include motivation to join the park, experience within the park so far, needs and requirements of shared facilities, challenges and barriers, impact and suggestions for improvement, and expectations from the government

5. STRATEGIC DISCUSSION WITH THE LEADERSHIP OF SIA

A detailed discussion was held with Shri Rakesh Kumar Singh, CEO and ACEO of YEIDA. They provided their perspective on their marketing plan and how they are working towards ensuring ease of doing business for the investors investing in the Medical Device Park. They shared their vision and the actions taken, such as affordable land pricing, speeding up CIF completion, logistical connectivity, and proximity to expressways/highways. They also suggested measures to increase the uptake of these parks by the industry.

6. PHYSICAL INFRASTRUCTURE AND SITE VISIT

The final leg of the visit included a thorough physical inspection of the infrastructure. The team visited the main administrative building that houses several critical operational and innovation units, including the incubation centre and the Centre of Excellence. The Central Warehouse and other CIFs were also evaluated on-site. The team also considered construction quality, utility networks, road access, and readiness of investor plots during their assessment.

7. Work Plan and Timeline

Phase	Activities	Timeline
Inception Phase	Planning, literature review, tool design	2 weeks
Field Data Collection	Visits to Kanchipuram, Ujjain, and Greater Noida	2 weeks
Data Compilation & Analysis	Transcription, analysis, benchmarking	2 weeks
Stakeholder Consultation	Sharing key findings & Feedback for the way forward	1 day
Draft Report Preparation	Structure based on DoE evaluation template	1 weeks
Final Report Submission	Revised report with recommendations	1 week
Total Duration		**8 weeks**

Table 1.2: Activity Timeline

Phase	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
Inception Phase								
Field Data Collection								
Data Compilation & Analysis								
Stakeholder Consultation								
Draft Report Preparation								
Final Report Submission								

Table 1.3: Phase Timeline

CHAPTER 02: MEDICAL DEVICE INDUSTRY IN INDIA

Overview of the market size and share of medical devices in India

1. MARKET SIZE AND GROWTH

India's medical device sector is experiencing remarkable momentum. The size of the Indian medical devices market is estimated at US$15.35 billion in 2023 and is expected to grow to US$20.51 billion by 2029 with a CAGR of 5.35%. This robust growth trajectory is driven by factors such as increasing healthcare access, aging populations, and a surge in lifestyle-related diseases. (Source: IBEF, Medical Devices Feb 2025)

Despite the promising figures, **India's global market share** in medical devices remains modest at around **1.5%**, indicating immense room for expansion. A significant constraint to domestic growth has been India's **heavy reliance on imports**, with **70–80% of high-end and critical care equipment** sourced from other countries. This dependence highlights the need for building domestic capabilities and reducing the import burden, particularly through policy support and infrastructure development.

2. MARKET SEGMENTATION

The Indian medical device market is diverse and segmented across several key product categories. The **Diagnostic Imaging** segment leads the pack, accounting for **25%** of the market, and includes products such as X-ray machines, CT scanners, MRI equipment, and ultrasound machines. **Consumables and Disposables**—including syringes, needles, gloves, and IV tubes—make up **20%**, playing a vital role in everyday medical procedures.

Surgical instruments form **15%** of the market and include essential tools like scalpels, scissors, and forceps. The **Orthopedic Devices** segment, also at **15%**, comprises implants, prosthetics, and joint replacement products. **Patient aids**, including hearing aids and pacemakers, contribute **10%**, while **Dental Products** stand at **5%**, covering dental chairs, X-ray systems, and surgical tools. The remaining **10%** is categorized under "Others," which includes wearable health tech, telemedicine-enabled devices, and home-use diagnostic tools—segments that are rapidly growing with the adoption of digital health.

3. KEY DRIVERS OF GROWTH

Several interrelated factors are driving the rapid expansion of India's medical device sector. A major impetus comes from **government initiatives** such as the **Production Linked Incentive (PLI) Scheme for Medical Devices**, with an allocation of **Rs. 3,420 crores**, and the **Medical Device Parks Scheme** aimed at building dedicated clusters with world-class infrastructure. These initiatives are aligned with the broader vision of **'Atmanirbhar Bharat'**, which focuses on achieving self-reliance across key industries.

Additionally, the **expansion of healthcare infrastructure**—including the rise in hospitals, diagnostic laboratories, and health-tech startups—has created substantial demand for medical devices. The **increase in lifestyle-related diseases** like diabetes and cardiovascular ailments is also contributing to the growing need for diagnostics and therapeutic equipment. Further, schemes like **Ayushman Bharat** and the **expansion of health insurance coverage** are increasing access to healthcare services, subsequently boosting demand for equipment. Lastly, the **COVID-19 pandemic** has had a lasting impact by catalyzing local manufacturing and raising public awareness around respiratory health and diagnostics.

4. KEY PLAYERS IN THE INDIAN MEDICAL DEVICE MARKET

The Indian market features a blend of **home-grown innovators** and **multinational giants**. Among Indian companies, **Skanray Technologies**, **Poly Medicure**, **Hindustan Syringes & Medical Devices**, and **Opto Circuits India** are notable for their contribution to both domestic supply and exports. These companies are increasingly focusing on R&D, quality enhancement, and cost-effective innovations.

On the multinational front, leading global players like **GE Healthcare**, **Philips Healthcare**, **Siemens Healthineers**, **Medtronic**, and **Johnson & Johnson** maintain a strong presence in India. Their advanced technologies, large-scale operations, and collaboration with local partners help introduce cutting-edge products into the Indian ecosystem while also contributing to knowledge transfer and capability building.

5. CHALLENGES IN THE MARKET

Despite its promising growth, the Indian medical device industry faces several **critical challenges**. The foremost issue is the country's **dependence on imports**, particularly for high-end and

technologically sophisticated devices. This reliance makes the sector vulnerable to global supply chain disruptions and foreign pricing pressures.

Moreover, the **regulatory landscape**, although evolving, remains **fragmented and inconsistent**. While the **Medical Devices Rules (2017)** marked progress, and a **new Medical Devices Bill** is in the pipeline, clarity and uniformity across states and segments are still needed. Another challenge is the **lack of robust testing and certification infrastructure**, which affects product reliability and export competitiveness. **Domestic R&D investment** remains low, especially among smaller players, and **price caps on critical devices** like stents and implants—though aimed at affordability—can impact the sector's profit margins and innovation drive.

6. OPPORTUNITIES

Despite the hurdles, the Indian medical device sector is brimming with **untapped opportunities**. With exports already crossing **USD 3.5 billion** (2023), primarily to countries like the **US, Germany, China, and Brazil**, India has the potential to become a major global supplier. The expansion of **hospital infrastructure in Tier 2 and Tier 3 cities** presents new markets for manufacturers, while the rise in **wearable and home-use devices**—like glucometers, BP monitors, and fitness trackers—is driving demand from health-conscious consumers.

Additionally, the sector is witnessing increasing integration of **digital health technologies and AI-based diagnostics**, which open up prospects for smart devices and real-time health monitoring. With the **Government of India's ambitious goal** to position the country among the **top five global medical device hubs by 2047**, there is strong policy alignment and industry support to build scale, quality, and innovation capacity over the next two decades.

Emerging Technologies & Innovations in India's Medical Devices Sector

1. ARTIFICIAL INTELLIGENCE (AI) AND MACHINE LEARNING (ML)

Artificial Intelligence and Machine Learning are transforming India's healthcare landscape by enhancing diagnostics and predictive care. AI-powered tools now assist in early and accurate diagnosis of diseases such as tuberculosis, cancer, and diabetic retinopathy using medical imaging. Predictive analytics is being employed in ICUs to monitor patient conditions in real time and forecast deteriorations before they happen, improving response times and patient outcomes. Innovations like AI-based ECG interpretations and radiology reports are streamlining medical workflows. Indian innovators are leading this revolution—Niramai has developed a novel thermal imaging method for breast cancer screening. At the same time, Qure.ai uses AI to interpret X-rays and CT scans, especially for tuberculosis diagnosis in remote areas.

2. INTERNET OF MEDICAL THINGS (IOMT)

The Internet of Medical Things (IoMT) integrates connected medical devices with cloud platforms and analytics to enable remote health monitoring and real-time diagnostics. In India, this technology is being used for managing chronic conditions through wearable devices like glucose monitors, heart rate trackers, and smart inhalers that ensure medication adherence. IoMT allows for the seamless collection of patient data, helping healthcare providers make proactive decisions. Indian startups are pushing boundaries—Dozee has introduced contactless health monitoring using AI and sensors, and Turtle Shell Technologies has developed smart ICU beds that continuously track vital signs and alert medical staff to abnormalities.

3. 3D PRINTING (ADDITIVE MANUFACTURING)

3D printing is bringing personalization to healthcare by enabling the production of patient-specific prosthetics, orthotics, dental implants, and even surgical tools. Surgeons in India are increasingly using 3D-printed anatomical models for pre-surgical planning, enhancing precision and outcomes. In research, the technology is extending into bioprinting for skin and tissue regeneration. Pioneers like Anatomiz3D specialize in medical 3D printing, offering life-like replicas of organs for education and surgery. Intech Additive is another key player, creating metal 3D-printed components for the medical and aerospace sectors, significantly reducing lead time and costs.

4. ROBOTICS AND MINIMALLY INVASIVE SURGERY (MIS)

Robotics has opened new frontiers in minimally invasive surgery in India. Robotic systems now assist in complex procedures across disciplines like orthopedics, gynecology, and urology, offering greater precision and faster recovery times. These technologies are revolutionizing microsurgery and neurosurgery by reducing human error and improving patient safety. Indian company SS Innovations has developed "Mantra Surgical Robot," the country's first indigenous robotic surgery system.

5. TELEMEDICINE AND POINT-OF-CARE (POC) DEVICES

Telemedicine is reshaping rural healthcare delivery by bridging geographic barriers. Portable point-of-care devices now allow patients in remote areas to receive timely diagnostic services and consultations. Tools like portable ECG machines, blood sugar monitors, and hemoglobin meters are linked with cloud-based systems, enabling doctors to interpret results and provide treatment remotely. Forus Health's "3nethra" device brings eye screening to underserved areas, while Achira Labs uses microfluidics for rapid testing of blood and urine samples. These innovations ensure timely intervention and reduce the burden on urban hospitals.

6. WEARABLES AND MOBILE HEALTH (MHEALTH)

Wearables and mobile health applications are becoming a cornerstone of preventive and personalized healthcare in India. Devices such as smartwatches and fitness bands now come equipped with medical-grade sensors to track vital signs like ECG, blood oxygen levels, and blood pressure. Smartphone-based diagnostics further extend healthcare to the user's palm, allowing for self-screening of conditions like urinary infections or vision issues. Indian brands like GOQii offer a blend of wearable tech and wellness coaching. At the same time, Biosense creates affordable diagnostic devices for conditions like anemia, diabetes, and hypertension—making health monitoring more accessible to all.

7. ADVANCED IMAGING AND DIAGNOSTICS

India's diagnostic infrastructure is evolving with advances in imaging technologies. Low-radiation imaging techniques and AI-assisted interpretation tools are improving diagnostic speed and accuracy. Portable ultrasound machines have enabled point-of-care diagnostics, particularly in rural areas where access to imaging is limited. Startups like InstaMD have developed smart diagnostic platforms and stethoscopes tailored for underserved clinics, enabling early detection and timely referrals. These developments are democratizing access to high-quality diagnostics across India's vast population.

8. BLOCKCHAIN IN HEALTHCARE DEVICES

Blockchain technology is gradually entering India's healthcare sector to enhance data security, transparency, and traceability. In medical devices, blockchain can ensure authenticity by recording the usage history of each device, which is critical for quality assurance. It also supports the creation of tamper-proof patient records and aids in cold chain monitoring, especially for temperature-sensitive vaccines and biologics. Pilot projects are underway in India, focusing on tracking vaccination records and ensuring device certification integrity, setting the stage for broader adoption in regulatory compliance and patient safety.

9. NANOTECHNOLOGY AND BIOSENSORS

Nanotechnology is playing an increasingly vital role in diagnostics and disease detection in India. Nanosensors are capable of identifying pathogens or biomarkers at extremely low concentrations, enabling early diagnosis of diseases like cancer and infectious conditions. Lab-on-chip devices are streamlining testing by condensing complex lab functions into a single microchip. Indian institutions such as the IITs and CSIR labs are at the forefront of this research, working on nano-biosensors that promise fast, accurate, and affordable diagnostics that can be deployed even in resource-limited settings.

10. AR/VR AND SIMULATION DEVICES

Augmented and Virtual Reality (AR/VR) technologies are revolutionizing medical education and patient care in India. VR is being widely used for surgical simulation and training, allowing medical professionals to practice complex procedures in a risk-free environment. AR provides real-time, image-guided assistance during surgeries, improving precision. These technologies also aid in patient rehabilitation, such as VR-based physical therapy for stroke patients. Indian med-tech education startups are embracing these tools to modernize anatomy training and enhance procedural learning, ensuring the next generation of doctors is better prepared and more skilled.

Key Enablers for Innovation in India

1. GOVERNMENT PUSH

The Indian government has played a catalytic role in fostering innovation in the medical device sector through a variety of strategic initiatives. The Production-Linked Incentive (PLI) Scheme, with an allocation of ₹3,420 crore, incentivizes high-value manufacturing and encourages startups to localize production of critical devices. Additionally, the Medical Device Parks scheme has created specialized clusters that offer infrastructure, regulatory support, and shared testing facilities. Integration with the National Digital Health Mission (NDHM) aims to create a seamless digital health ecosystem, linking devices with patient records and diagnostics. These policies, aligned with the "Atmanirbhar Bharat" vision, are empowering Indian startups to reduce import dependence and become globally competitive.

2. INCUBATORS & ACCELERATORS

India has established a robust network of incubators and accelerators dedicated to MedTech and healthcare innovation. Institutions like IIT Madras' Healthcare Technology Innovation Centre (HTIC), IIT Delhi's Foundation for Innovation and Technology Transfer (FITT), BIRAC (under DBT), and AIIMS Innovation Centre are at the forefront of nurturing early-stage startups. These incubators offer not just funding but also access to prototyping labs, clinical validation partnerships, mentorship, and regulatory guidance. Their presence has significantly lowered the entry barrier for MedTech entrepreneurs, allowing for the rapid development and testing of market-ready solutions tailored to India's healthcare needs.

3. GROWING STARTUP ECOSYSTEM

India's MedTech startup ecosystem has seen remarkable growth, with over 300 startups innovating across diagnostics, AI-based imaging, wearable technologies, and surgical tools. The sector is driven by young entrepreneurs focused on affordable, scalable solutions that address India's healthcare access challenges, especially in Tier 2/3 cities and rural areas. The ecosystem includes companies building diagnostic imaging tools, portable point-of-care devices, robotic surgical aids, and AI-powered clinical decision systems. The drive to substitute costly imports with locally developed, cost-

effective alternatives is a key motivation for these ventures, aligning innovation with national priorities.

4. INCREASING VC FUNDING & COLLABORATIONS

The MedTech sector in India is seeing rising interest from venture capitalists, angel investors, and corporate accelerators. Funding is flowing into scalable, impact-driven innovations, particularly in diagnostics, AI platforms, and wearable health devices. Organizations like India Health Fund, Axilor Ventures, Unitas Ventures, and Acumen are actively investing in early-stage MedTech startups. Additionally, accelerators like the GE Healthcare India Edison Accelerator are supporting growth-stage companies with mentorship and enterprise integration opportunities. These collaborations help bridge the gap between innovation and market entry, often providing the operational and strategic support needed for expansion.

5. TECHNOLOGY SUMMARY AND INDIAN INNOVATORS

India's health-tech innovation map spans a variety of emerging technologies, each with strong local champions. In AI/ML, companies like Qure.ai and Niramai are enabling early diagnosis and predictive analytics for conditions like TB and breast cancer. The Internet of Medical Things (IoMT) is gaining traction with players like Dozee and Turtle Shell Technologies providing remote monitoring solutions. 3D printing is revolutionizing prosthetics and surgical planning through innovators such as Anatomiz3D and Intech Additive. Robotics, led by SS Innovations, is introducing precision and cost-effective solutions in surgery. Point-of-care diagnostic tools from Forus Health, Achira Labs, and Biosense are making quality diagnostics accessible in underserved regions. Wearables and mHealth platforms like GOQii and HealthifyMe are empowering preventive care. Blockchain, nanotech, and AR/VR are also witnessing active experimentation through pilot programs and academic collaborations.

6. STARTUP ECOSYSTEM OVERVIEW AND FOCUS AREAS

India's MedTech startup ecosystem is diverse and rapidly maturing. These startups are building innovations in diagnostic imaging, surgical tools, remote patient monitoring, and AI-powered diagnostics. For instance, devices like smart stethoscopes, low-cost blood analyzers, and sleep apnea monitors are now commonplace. Startups are also working on affordable robotics, AI-based radiology interpretation, customized implants via 3D printing, and IoMT devices like smart ICU beds. Special focus is also on PoC diagnostics for diseases like malaria, COVID-19, and kidney disorders. With continued innovation and support, this ecosystem holds great promise for addressing India's healthcare delivery gaps.

7. NOTABLE INDIAN MEDTECH STARTUPS

India's MedTech landscape features standout innovators making a global impact. Niramai's AI-based breast cancer screening uses thermal imaging, offering a private and low-cost solution. Qure.ai's deep-learning tools aid in interpreting chest X-rays and CT scans. Forus Health's "3nethra" device provides eye screening in rural areas. Dozee offers contactless patient monitoring used in hospitals across the country. Tricog Health enables real-time ECG analysis even in ambulances. Achira Labs uses microfluidics for PoC diagnostics. Sattva MedTech develops fetal and maternal health monitors. Inali Foundation's low-cost prosthetic hands are changing lives, while SigTuple automates pathology through AI image analysis.

8. GOVERNMENT AND INSTITUTIONAL SUPPORT

Government bodies like BIRAC play a pivotal role in enabling innovation through programs such as BIG, SIIP, and SEED, which offer grants up to ₹50 lakh. The Medical Device Parks under the SPMDP provide infrastructure and shared facilities for rapid scaling. The PLI Scheme incentivizes local manufacturing in critical segments. The Atal Innovation Mission and Startup India provide incubation and mentoring support across regions. Academic institutions, including IIT Madras (HTIC), IIT Delhi (FITT), AIIMS Innovation Centre, and AIC-CCMB, provide critical platforms for idea validation, prototyping, and market readiness.

9. FUNDING AND ACCELERATOR ECOSYSTEM

The availability of early-stage capital has significantly improved in India's MedTech sector. Active venture capital firms, impact investors, and angel networks are investing in scalable, affordable healthcare innovations. Entities like HealthQuad, Omidyar Network, and Ankur Capital are backing startups that align with health equity and digital transformation goals. Corporate accelerators such as GE Healthcare's Edison Accelerator help startups integrate with larger healthcare systems, providing resources for scale and commercialization. These funding channels not only support R&D but also offer much-needed market access and operational scaling opportunities.

10. CHALLENGES FACED BY STARTUPS

Despite the momentum, Indian MedTech startups face several hurdles. Regulatory clarity, though improving, remains a bottleneck, especially in navigating CDSCO approvals. R&D-intensive products have long gestation periods with high costs and uncertain returns. Clinical validation opportunities are scarce, often delaying market entry. Startups also struggle with limited funding beyond the prototype stage. Procurement delays, especially in government hospitals, further inhibit growth. These challenges, unless addressed through policy and ecosystem alignment, can hamper the scale-up of promising innovations.

11. OPPORTUNITIES FOR GROWTH

The outlook for Indian MedTech startups is highly optimistic. Expansion opportunities lie in Tier-2 and Tier-3 cities, where demand for affordable healthcare is rising. India's strong export capabilities offer access to growing markets in Africa, Southeast Asia, and the Middle East. Innovations in AI-based diagnostics, digital health, and wearable tech continue to gain ground. Government programs like ABDM and Ayushman Bharat are creating digital highways and payment infrastructures that startups can plug into. There is also vast potential in elderly care, chronic disease management, and telemedicine-based primary care—making India a potential global hub for MedTech innovation.

CHAPTER 03: SCHEME AND ITS ALIGNMENT WITH NATIONAL GOALS

Background of the Scheme

The Scheme for **"Promotion of Medical Devices Parks**" was approved by the Cabinet on 20.03.2020 and got notified via Gazette notification no. - 31026/08/2020-MD, dated - 21/07/2020 to facilitate the setting up of Four (4) MD Parks in the country.

Objectives:

The **Scheme for Promotion of Medical Device Parks** was approved by the Union Cabinet on **March 20, 2020**, to establish four dedicated medical device parks across India. The core objective of the scheme is to develop **Common Infrastructure Facilities (CIF)** such as testing laboratories, calibration centres, and manufacturing support units to boost the domestic medical device industry. These facilities are intended to lower production costs, enhance quality standards, and support innovation by providing shared resources to manufacturers.

Figure 3.1: Medical Device Park Entry in Tamil Nadu

IMPLEMENTATION MECHANISM:

The scheme is implemented through State Implementing Agencies (SIAs) nominated by respective

State Governments. These SIAs are typically Special Purpose Vehicles (SPVs) or nodal agencies responsible for developing the infrastructure of the medical device parks.

The scheme aims to:

- Strengthen the medical device ecosystem.
- Reduce manufacturing cost and import dependence.
- Promote innovation, R&D and competitiveness.
- Create a self-reliant supply chain for critical health infrastructure.

SCHEME ARCHITECTURE/DESIGN:

Under the scheme, the central government provides financial assistance of up to ₹100 crore per park or 70% of the project cost for the CIF component, whichever is lower. For the Northeastern and hilly states—including Himachal Pradesh, Uttarakhand, Jammu & Kashmir, and Ladakh—the assistance is enhanced to cover up to 90% of the project cost. The total financial outlay for the scheme is ₹400 crore, with ₹100 crore allocated for each of the four parks. The scheme is being implemented over five years, from 2020–21 to 2024–25. It is expected to significantly strengthen India's manufacturing capabilities in the medical device sector, reduce import dependence, and promote self-reliance in healthcare technology.

- The Government of India provides financial assistance to the selected states for establishing Common Infrastructure Facilities (CIFs) like testing labs, R&D centres, skill development units, etc.
- Maximum assistance is capped at ₹100 crore per park or 70% of the project cost, whichever is lower.
- The scheme is time-bound and monitored through project milestones.
- Funding is disbursed in stages, based on achievement of specified milestones.

Figure 3.2: Medical Device Park CIF Building in Tamil Nadu

INVITATION OF APPLICATIONS AND SELECTION

The Department of Pharmaceuticals had received proposals from 16 States: Chhattisgarh, Goa, Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, J&K, Madhya Pradesh, Maharashtra, Punjab, Rajasthan, Tamil Nadu, Telangana, Uttar Pradesh and Uttarakhand under the scheme.

Following the evaluation of proposals submitted by the States, Tamil Nadu, Uttar Pradesh, Madhya Pradesh, and Himachal Pradesh, final approval was conveyed for providing a grant-in-aid to develop Common Infrastructure Facilities (CIF) in the proposed Medical Devices Park.

Components of the Scheme

The scheme consists of the following key components:

- Testing and Calibration Labs (including Electrical Safety, Biocompatibility, etc.)
- Quality Certification Facilities (NABL, ISO)
- Warehousing and Cold Storage
- Tool Rooms and Prototyping Facilities
- Radiation Testing Facilities
- Training and Skill Development Centres

CREATION OF COMMON INFRASTRUCTURE FACILITIES (CIF):

Figure 3.3: EMC Equipment at Medical Device Park CIF Building in Tamil Nadu

The scheme aims to support the creation of Common Infrastructure Facilities (CIFs) that will boost domestic manufacturing and reduce costs in the medical device sector. These facilities include state-of-the-art testing and calibration labs, covering critical parameters such as electrical safety and biocompatibility to ensure compliance with international standards. Quality certification infrastructure, including NABL and ISO facilities, will streamline the regulatory approval process. Additionally, the scheme promotes the establishment of warehousing and cold storage units to ensure safe and efficient supply chain management. Tool rooms and prototyping facilities will provide manufacturing support for design validation and innovation. Radiation testing units will enable manufacturers to assess device safety for radiological exposure. Finally, the creation of training and skill development centres will address the sector's skill gap, enabling workforce readiness and long-term sustainability. These integrated CIFs are critical for building a robust, self-reliant medical device ecosystem in India.

Under the scheme, financial assistance would be provided for the creation of Common Infrastructure Facilities (CIF):

1. Component Testing Centre/ESDM/PCB/Sensor's facility
2. Electromagnetic interference & Electromagnetic Compatibility Centre
3. Biomaterial / Biocompatibility /Accelerated Ageing testing centre
4. Medical grade moulding/milling/injection moulding/machining/tooling centre

5. 3D designing and printing for medical-grade products.
6. Sterilisation/ETO/Gamma Centre
7. Animal Lab and Toxicity testing centre, radiation testing centre, etc.
8. Radiology Tube/Flat Panel Detectors/MRI Magnets/Piezo-electrical crystals/power electronics facility
9. Solid waste management/ETP/STP/Electronic Waste management unit, Common Warehouse & Logistics (Clearing and Forwarding, Insurance, Transportation, Customs, Weigh-bridges, etc.) centre
10. Emergency Response Centre/Safety/Hazardous Operations audit centre, Centre of Excellence/Technology incubator/ ITI/Training Centre.

SUPPORT FOR PLUG-AND-PLAY INFRASTRUCTURE:

To accelerate the growth of startups and MSMEs in the medical device sector, providing plug-and-play infrastructure is essential. These built-up factory spaces allow new entrants to begin operations without the delays and high costs associated with land acquisition, construction, or utility setup. By offering ready-to-use production units within the medical device parks, the government can significantly reduce the time-to-market for innovative products. This also lowers initial capital expenditure, making it easier for smaller players to scale efficiently. Such infrastructure fosters a dynamic, innovation-friendly environment and drives higher occupancy and faster commercialisation within the parks.

CONNECTIVITY AND UTILITIES:

Robust connectivity and reliable utility infrastructure are foundational to the success of medical device parks. Ensuring an uninterrupted power supply, adequate water availability, proper drainage systems, and well-constructed internal roads is critical for efficient industrial operations. Equally important is the development of a strong ICT backbone to support digital operations, automation, and real-time monitoring. These essential services not only facilitate seamless day-to-day functioning for companies but also attract high-quality investments. A well-connected and utility-ready park enhances productivity, reduces operational bottlenecks, and creates a competitive advantage, ultimately helping transform the park into a globally benchmarked manufacturing and innovation hub.

Fund flow mechanism (National and State Contribution)

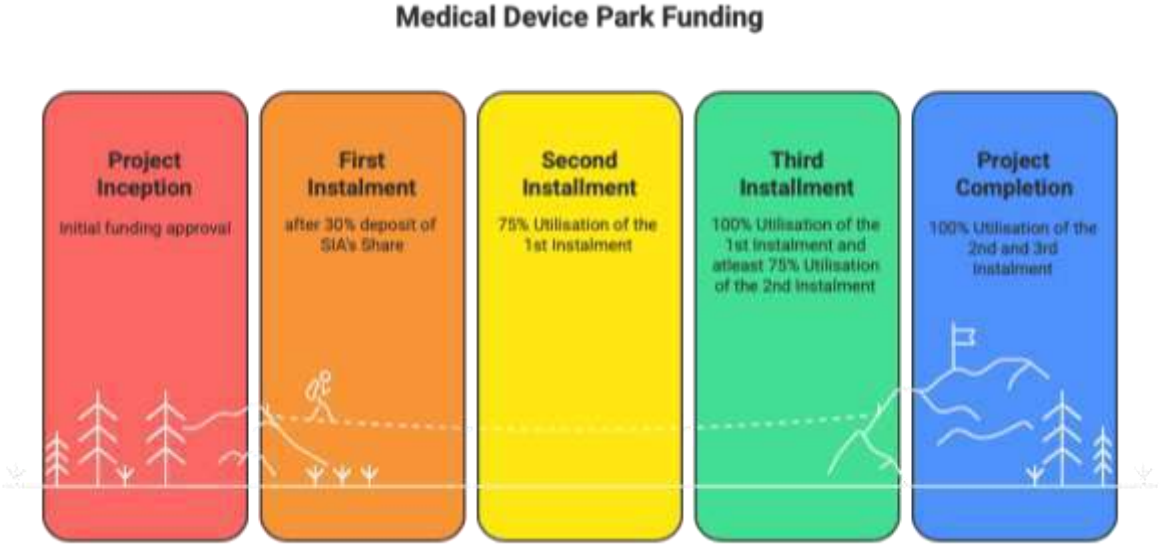

Figure 3.4: Fund flow mechanism of the scheme

1st	30	On final approval of the project by the SSC and after deposit of 30 per cent of SIA's share in the project cost in the Trust and Retention Account (TRA) or Escrow or No Lien Account, as the case may be, subject to the condition that all relevant environment clearances are in place.
2nd	30	75% utilisation of the 1st instalment, and after proportionate expenditure has been incurred by the SIA, with proportionate physical progress of the Medical Device Park as per the DPR. • Against the production of Bills
3rd	30	100% utilisation of the 1st instalment and at least 75% utilisation of the 2nd instalment, and after the proportionate expenditure has been incurred by the SIA with proportionate physical progress of the Medical Device Park as per the DPR
4th	10	100% utilisation of 2nd and 3rd instalments • SIA has mobilised and spent its entire share in proportion to the grant and completed the project in all respects

Table 3.1: Fund Flow Mechanism

The central financial assistance is disbursed in four instalments, linked to specific milestones in project implementation and fund utilisation by the State Implementing Agencies (SIAs).

The first instalment accounts for 30% of the total central grant. It is released after final approval of the project by the Scheme Steering Committee (SSC) and upon the SIA depositing 30% of its share

of the project cost into a designated Trust and Retention Account (TRA), Escrow, or No Lien Account. This release is also contingent upon the completion of all necessary environmental clearances.

The second instalment, also 30%, is released once 75% of the first instalment of both state and central grants has been utilised and proportionate physical and financial progress has been achieved, as per the approved Detailed Project Report (DPR). The release must be supported by verifiable expenditure documentation, such as utilization certificate and bills.

The third instalment, again 30%, is provided after full utilisation of the first instalment and at least 75% utilisation of the proportionate expenditure of the second instalment of the state grant. The SIA must also demonstrate proportional physical progress aligned with the DPR, and the release is made against the production of valid bills.

The final (fourth) instalment, which comprises the remaining 10%, is released upon 100% utilisation of the second and third instalments. Additionally, the SIA must have fully mobilised and spent its share of the funding and completed the project in all respects.

This staged disbursement mechanism ensures accountability, timely implementation, and effective monitoring of financial and physical progress throughout the project lifecycle.

Alignment with the National Goals

1. SUSTAINABLE DEVELOPMENT GOALS (SDG) SERVED

The SPMDP contributes to the following **SDGs**:

SDG	Goal	Scheme Contribution
SDG 3	Good Health and Well-being	By ensuring affordable, high-quality medical devices through local manufacturing.
SDG 8	Decent Work and Economic Growth	Creation of skilled jobs in the MedTech sector.
SDG 9	Industry, Innovation and Infrastructure	Developing industrial infrastructure and fostering innovation in MedTech.
SDG 12	Responsible Consumption and Production	Encouraging sustainable production and reducing environmental impact via modern technologies.

Table 3.2: Scheme Contribution to SDG

SDG 3 – GOOD HEALTH AND WELL-BEING

The SPMDP contributes significantly to the achievement of SDG 3, which focuses on ensuring healthy lives and promoting well-being for all at all ages. One of the critical challenges facing India's healthcare system is the accessibility and affordability of medical devices essential for diagnostics,

monitoring, and treatment. By promoting local manufacturing of medical devices through shared infrastructure, the scheme ensures that high-quality devices can be produced at significantly lower costs. This not only improves the availability of these devices across urban and rural healthcare settings but also reduces reliance on expensive imports, thereby making healthcare interventions more affordable for patients. The availability of a wide range of medical devices—from simple diagnostic kits to complex life-support systems—directly supports better health outcomes. It enables timely interventions, accurate diagnostics, and effective treatment in public health systems. Furthermore, by improving supply chain resilience and ensuring a steady availability of essential health technologies, the scheme helps strengthen the overall healthcare delivery system. This systemic improvement aligns strongly with the broader goals of SDG 3, especially in the context of universal health coverage and resilient health systems.

SDG 8 – DECENT WORK AND ECONOMIC GROWTH

The medical devices sector represents a sunrise industry with vast potential for skilled employment, and the SPMDP directly supports SDG 8, which promotes inclusive and sustainable economic growth, employment, and decent work for all. Each medical device park established under the scheme creates a significant number of direct and indirect job opportunities across various stages of the value chain. These jobs span design and engineering, regulatory affairs, quality control, production, logistics, maintenance, and support services. Additionally, the parks foster an ecosystem for startups and MSMEs, which further stimulates entrepreneurship and local economic development. Training centres and incubation hubs within the parks ensure that workers, especially youth, are equipped with the necessary skills to thrive in the evolving medical technology landscape. The presence of a structured industrial cluster also promotes fair labor practices, better working conditions, and formal employment—all of which are essential components of decent work. Through these interventions, the scheme not only contributes to economic growth but does so in a way that is inclusive, sustainable, and aligned with the aspirations of India's young workforce.

SDG 9 – INDUSTRY, INNOVATION AND INFRASTRUCTURE

SDG 9 emphasises building resilient infrastructure, promoting inclusive and sustainable industrialisation, and fostering innovation. The SPMDP exemplifies this goal by laying the foundation for a modern, innovation-driven medical device industry in India. The scheme facilitates the development of advanced industrial infrastructure, including testing laboratories, calibration facilities, sterilisation units, and plug-and-play manufacturing spaces. This shared infrastructure lowers entry barriers for new players, especially startups and MSMEs, and allows them to focus on innovation and product development without heavy capital investment. Furthermore, the integration of academic institutions, research centres, and regulatory bodies within the ecosystem nurtures a culture of research and technological advancement. The parks are designed to become hubs of innovation where new ideas are translated into scalable and commercially viable medical solutions. This not only strengthens India's capacity to develop indigenous technologies but also enhances the country's global competitiveness in the medical device sector. The industrial and innovation ecosystem created under the scheme aligns directly with the targets of SDG 9, supporting both domestic resilience and international leadership.

SDG 12 – RESPONSIBLE CONSUMPTION AND PRODUCTION

The SPMDP aligns with SDG 12 by encouraging sustainable practices in the production of medical devices and promoting more efficient use of resources. Traditional manufacturing of medical equipment often comes with significant environmental costs due to inefficient energy use, waste generation, and non-compliance with environmental norms. By promoting the development of dedicated medical device parks equipped with state-of-the-art infrastructure, the scheme facilitates the adoption of green manufacturing technologies and compliance with environmental standards. The shared facilities within these parks are designed to optimise the use of energy, water, and raw materials, while centralised waste management systems help reduce the environmental footprint. Moreover, by localising production, the scheme minimises the carbon emissions associated with transportation and long-distance supply chains. Manufacturers within these parks are also encouraged to design products with longer lifespans, higher recyclability, and minimal hazardous material use. Through these actions, the scheme supports responsible production patterns and contributes to a more sustainable and environmentally conscious industrial sector. This directly resonates with the goals of SDG 12, particularly in the context of reducing the ecological impact of industrial activities while meeting growing healthcare demands.

2. ALIGNMENT WITH VIKSIT BHARAT 2047 VISION

- Building Healthcare Self-Reliance: Reducing reliance on imported medical devices, thereby improving national health security.
- Boosting Innovation: Supporting indigenous innovation and R&D in medical technology.
- Creating Employment: Generating skilled employment in sunrise sectors like MedTech
- manufacturing and biomedical engineering.
- Global Competitiveness: Enabling India to become a global hub for medical device exports and manufacturing excellence.
- Strengthening Public Health Infrastructure: Supporting availability of affordable diagnostic and therapeutic equipment.

The SPMDP supports the **Viksit Bharat 2047** goals by:

BUILDING HEALTHCARE SELF-RELIANCE

The Scheme for Promotion of Medical Device Parks plays a critical role in supporting India's transition towards self-reliance in healthcare, a key component of the Viksit Bharat 2047 vision. At present,

India imports a significant portion of its medical devices, particularly in high-value categories such as diagnostic imaging, radiotherapy equipment, and implantable devices. This dependency exposes the country to price volatility, supply chain disruptions, and external market pressures. The scheme aims to address this vulnerability by enabling domestic manufacturing through the creation of common infrastructure facilities such as testing labs, calibration centres, and sterilisation units. These shared resources reduce capital expenditure for manufacturers, encouraging them to set up operations locally. By focusing on self-sufficiency, the scheme enhances national preparedness during health emergencies, reduces foreign exchange outflows, and promotes equitable access to essential medical technologies. This directly supports the Viksit Bharat goal of achieving sovereignty in critical sectors, thereby reinforcing the foundation for a resilient and self-reliant India by 2047.

BOOSTING INNOVATION

Innovation is central to India's growth journey, and the medical devices sector holds immense potential to showcase Indian technological leadership. The scheme boosts indigenous innovation by facilitating access to plug-and-play manufacturing zones, collaborative R&D spaces, and regulatory support services within medical device parks. Startups, research institutions, and MSMEs are encouraged to co-develop new technologies, ranging from wearable diagnostic tools and AI-powered imaging systems to advanced surgical instruments. These innovation clusters foster knowledge exchange and improve the rate of product development cycles. The availability of affordable infrastructure also lowers the entry barrier for early-stage innovators, thus widening the pipeline of market-ready Indian-made devices. The scheme supports convergence between academia, industry, and healthcare institutions, which is crucial for translating research into commercially viable solutions. By creating an environment conducive to continuous technological advancement, the scheme strengthens India's ability to create cutting-edge medical technologies tailored to local and global health needs. This aligns with the Viksit Bharat 2047 objective of making India a global leader in innovation and intellectual property creation.

CREATING EMPLOYMENT

One of the defining pillars of the Viksit Bharat 2047 vision is the generation of sustainable, high-quality employment across emerging sectors. The SPMDP contributes directly to this objective by creating skilled and semi-skilled jobs in the medical technology and allied sectors. Each medical device park has the potential to attract numerous manufacturers and ancillary units, leading to job creation in areas such as design, assembly, testing, quality assurance, logistics, regulatory affairs, and equipment maintenance. These jobs cater to both technical graduates and vocationally trained workers, thus addressing the needs of a diverse workforce. The parks also include provisions for incubation centres and training facilities, which further enhance employability by equipping individuals with sector-specific competencies. As the ecosystem matures, it is expected to support not only direct employment within the parks but also indirect employment in supply chain management, research services, packaging, and transport. In doing so, the scheme supports inclusive growth and regional development, especially in Tier 2 and Tier 3 cities, thus contributing meaningfully to the broader employment goals outlined in the Viksit Bharat roadmap.

GLOBAL COMPETITIVENESS

The ability to compete globally is an essential goal under Viksit Bharat 2047, and the medical device industry has been identified as a strategic sector for India's export growth. The scheme enhances global competitiveness by enabling manufacturers to meet international standards through access to world-class testing, regulatory, and compliance infrastructure within the parks. These facilities are essential for obtaining certifications such as ISO, CE, and US FDA approvals, which are prerequisites for exports to developed markets. The reduction in production costs due to shared infrastructure further improves the cost-efficiency and price competitiveness of Indian products. The clustering approach promoted by the scheme also helps develop specialised supply chains and encourages foreign direct investment into India's MedTech space. As Indian companies gain experience and market visibility, they are better positioned to scale exports to Africa, Southeast Asia, Latin America, and Europe. Over time, this will help India transition from being a predominantly import-dependent country to a major exporter of high-quality, affordable medical devices. The scheme thus reinforces India's aspiration to become a global hub for medical device manufacturing by 2047.

STRENGTHENING PUBLIC HEALTH INFRASTRUCTURE

Public health infrastructure is a cornerstone of national development, and the availability of medical devices is critical to its effectiveness. The SPMDP contributes to strengthening India's health infrastructure by ensuring a reliable, domestic supply of affordable diagnostic and therapeutic equipment. This includes essential devices such as ventilators, infusion pumps, blood pressure monitors, ECG machines, and surgical instruments. By facilitating local production, the scheme reduces supply chain lags and ensures that primary and secondary healthcare centres, especially in rural and remote regions, are equipped with necessary devices. This has a direct impact on improving healthcare delivery outcomes, disease monitoring, early diagnosis, and treatment. Additionally, domestically available equipment can be tailored to suit the specific needs of Indian demographics and climatic conditions, enhancing usability and reliability. Through this approach, the scheme aligns with Viksit Bharat's goal of universal access to quality healthcare. It helps India build a robust, self-sustaining public health system capable of addressing both routine care and emergency medical needs.

3. ALIGNMENT WITH MAKE IN INDIA

The Indian medical device sector has witnessed a transformative shift in recent years, with a growing emphasis on domestic manufacturing and technological self-reliance—closely aligned with the vision of the **Make in India** initiative. This alignment seeks to position India as a global manufacturing hub while reducing dependence on imports, which have traditionally dominated the medical device market.

Under Make in India, the government has created a supportive ecosystem for the sector through policy reforms, financial incentives, and the development of medical device parks. These parks provide state-of-the-art infrastructure, plug-and-play facilities, and common testing and calibration centers to encourage indigenous manufacturing. By easing regulatory norms and offering production-linked incentives (PLI), the initiative is fostering the growth of homegrown companies

capable of producing high-quality, cost-effective devices for both domestic and international markets.

Figure 3.5: One of the operational units at Medical Device Park, Tamil Nadu

Indian startups and SMEs are increasingly entering the space with innovations in AI-based diagnostics, 3D printing, robotics, wearable health monitors, and telemedicine solutions. Many Indian companies exemplify this new wave of local innovators harnessing cutting-edge technologies to address India's unique healthcare challenges. Their success underlines how Make in India not only boosts manufacturing but also nurtures a robust innovation ecosystem.

Moreover, Make in India contributes to greater accessibility and affordability of healthcare, especially in rural and underserved regions. Locally produced devices reduce costs and supply chain delays, ensuring timely availability in critical settings. It also promotes employment, skill development, and capacity building within the country.

Overall, the synergy between the medical device sector and Make in India underscores a strategic move toward self-sufficiency, global competitiveness, and improved healthcare outcomes—paving the way for India to emerge as a leader in med-tech manufacturing and innovation.

4. ALIGNMENT OF MEDICAL DEVICE PARK SCHEME WITH THE NATIONAL HEALTH POLICY

The **Medical Device Park Scheme** is strongly aligned with the objectives of the **National Health Policy (NHP) 2017**, which aims to provide equitable, affordable, and quality healthcare services to all citizens. The NHP emphasizes strengthening healthcare infrastructure, improving access to essential medical technologies, and encouraging innovation in the health sector. The development of medical device parks directly supports these goals by facilitating domestic manufacturing of critical medical equipment and reducing dependency on imports.

One of the core principles of the NHP is **"Make in India for self-reliance"** in health technologies. This topic is covered in detail in the last section. However, Medical Device Parks fulfill this by offering shared infrastructure, regulatory support, and cost-effective facilities to domestic manufacturers, particularly MSMEs and startups. This reduces entry barriers, accelerates product development, and promotes the availability of affordable medical devices across public and private healthcare institutions.

The policy also calls for improving **access to diagnostics and treatment technologies** at all levels of care, especially in underserved regions. By enabling the localized production of diagnostic and therapeutic devices, the park scheme helps reduce costs. It ensures timely supply, aligning with the NHP's vision of universal access to health services.

Further, the NHP focuses on **strengthening health research and innovation**. The Medical Device Park Scheme encourages collaboration with academic and research institutions, promoting indigenous R&D and commercialization of new technologies.

Additionally, the parks contribute to **capacity building and employment generation**, in line with the NHP's emphasis on human resource development. By nurturing a skilled workforce in design, manufacturing, quality assurance, and regulatory affairs, the scheme supports the broader health ecosystem.

In essence, the Medical Device Park Scheme operationalizes several key priorities of the National Health Policy, ensuring that India's healthcare system becomes more self-sufficient, accessible, affordable, and technologically advanced.

5. ALIGNMENT WITH NATIONAL MEDICAL DEVICES POLICY, 2023

The **National Medical Devices Policy, 2023**, notified by the Government of India, lays down a strategic framework to transform India into a global hub for medical device manufacturing, innovation, and exports. It envisions propelling the Indian medical devices sector to reach **USD 50 billion by 2030**, contributing significantly to the country's **Atmanirbhar Bharat (Self-Reliant India)** vision. One of the core pillars of this policy is the **development of world-class Medical Device Parks** that provide state-of-the-art infrastructure, testing and certification facilities, and an ecosystem for R&D-led manufacturing excellence.
The **National Medical Devices Policy, 2023,** and the **Medical Device Park Scheme (2020)** are inherently aligned in vision and implementation. The parks serve as physical enablers of the policy's strategic pillars—**infrastructure readiness, regulatory ease, innovation promotion, skill development, and global competitiveness**. As the policy evolves, Medical Device Parks will act as **centres of excellence and manufacturing clusters**, driving India's emergence as a leading international hub for medical device innovation, production, and exports.

1. Enabling Infrastructure through Medical Device Parks

The Policy emphasizes the need for **dedicated industrial infrastructure** to reduce manufacturing costs and ensure competitiveness. The **Medical Device Parks Scheme (2020)** directly supports this

objective by developing specialized parks with **Common Infrastructure Facilities (CIFs)** such as testing labs, sterilization centers, packaging units, and calibration facilities. These parks are crucial in providing shared resources that lower capital investment requirements, especially for MSMEs and startups.

The Parks in **Kanchipuram (Tamil Nadu), Greater Noida (Uttar Pradesh), and Ujjain (Madhya Pradesh)** align with the policy's focus on **cluster-based development**, ensuring economies of scale, streamlined regulatory processes, and efficient logistics through proximity to national corridors (PM Gati Shakti).

2. Regulatory Streamlining & Single-Window Clearance

One of the key directives of the Policy is the establishment of a **Single Window Clearance System** for medical device approvals, certifications, and compliances. The integration of **on-site certification bodies and regulatory liaison cells within the Medical Device Parks** is a direct translation of this policy, enabling faster and smoother regulatory navigation for park tenants.

Parks are envisioned to house satellite offices of **CDSCO, BIS, AERB, and notified certification agencies (TUV, UL, DNV)** to facilitate product approvals, reducing time-to-market for manufacturers.

3. Promoting R&D, Innovation, and Skill Development

The Policy places strong emphasis on **R&D, innovation, and skill-building**. It encourages the development of **Centers of Excellence (CoE)**, incubation hubs, and collaborative platforms within Medical Device Parks. These will foster partnerships between manufacturers, academic institutions, and research bodies, accelerating product development cycles.

Parks are expected to host **Rapid Prototyping Labs, AI/IoT innovation zones, and Technology Transfer Offices (TTOs)**. Additionally, skill development initiatives in collaboration with **Skill India, NSDC, and local universities** will ensure a steady pipeline of trained workforce tailored for MedTech manufacturing.

4. Reducing Import Dependency & Enhancing Export Competitiveness

India currently imports around 70–80% of its medical devices. The policy's focus on **import substitution through indigenous manufacturing** directly aligns with the Parks' role in enabling domestic production across segments such as diagnostics, implants, surgical tools, and wearable health tech.

By providing **world-class infrastructure, CIFs, and regulatory support**, Medical Device Parks will not only reduce import dependency but also help Indian manufacturers achieve **global certifications (ISO, CE, USFDA)**, positioning India as an export powerhouse for affordable, high-quality medical devices.

5. Investment Promotion & Public-Private Collaboration

The Policy encourages **private sector participation, venture funding, and public-private partnerships (PPPs)** to accelerate infrastructure development. Medical Device Parks are key vehicles for such collaborations, providing plug-and-play manufacturing spaces, vendor development platforms, and shared R&D services to lower entry barriers for MSMEs while attracting large anchor tenants.

Parks will also facilitate access to government incentive schemes like the **Production Linked Incentive (PLI) Scheme for Medical Devices**, ensuring a holistic ecosystem for growth.

6. Monitoring & Governance Alignment

The Policy calls for robust monitoring frameworks to track the progress of infrastructure, regulatory outcomes, and market expansion. Medical Device Parks will act as **lighthouse projects**, with clear Outcome-Result-Milestone (ORM) monitoring for:

- Production output
- Export volumes
- Certification numbers
- Employment generation
- Investment mobilization

State-level Project Management Units (PMUs) and a Central Oversight Committee (proposed under DPIIT or MoHFW) will ensure alignment with policy goals.

CHAPTER 04: CURRENT STATUS OF THE SCHEME AND BEST PRACTICES

Present Status and Site Coverage

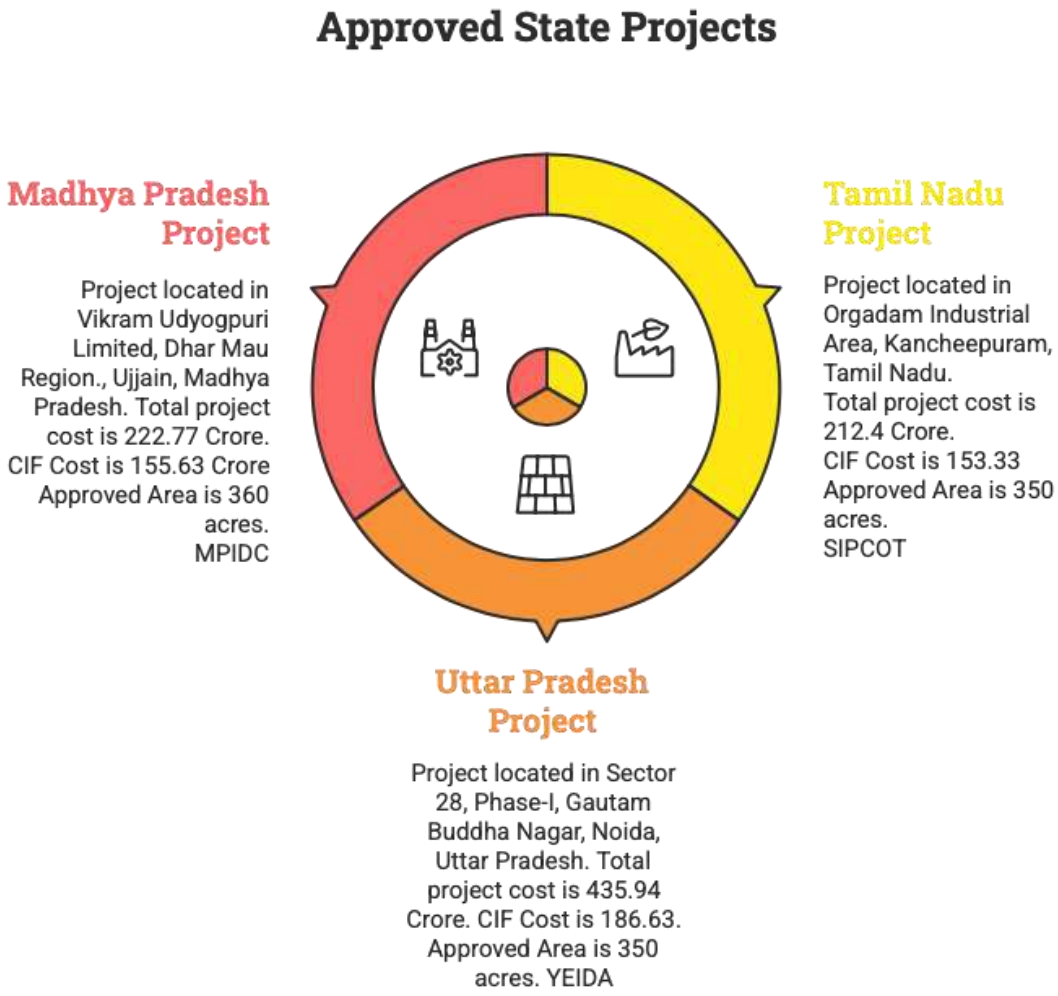

Figure 4.1: Approved State Medical Device Park

1. SUMMARY OF THE APPROVED PARKS:

Approved States	Park Location	Approved Area	State Implementing Agency (SIA)	Total Project Cost (Rs. Crore)	CIF* Cost (Rs. Crore)
Tamil Nadu	Orgadam Industrial Area, Kancheepuram	350	State Industrial Promotion Corporation of Tamil Nadu (SIPCOT)	212.4	153.33
Uttar Pradesh	Sector 28, Phase-I, Gautam Buddha Nagar, Noida	350	Yamuna Expressway Industrial Development Authority (YEIDA)	435.94	186.63
Madhya Pradesh	Vikram Udypogpuri Ltd. (Pithampur-Dhar-Mhow region), Dist. Ujjain	360	Madhya Pradesh Industrial Development Corporation (MPIDC)	222.77	155.63

Table 4.1: Summary of the Approved Parks

*Common Infrastructure Facilities (CIF)

Three medical device parks are currently operating under the scheme in Tamil Nadu, Uttar Pradesh, and Madhya Pradesh. The Tamil Nadu park is located in the Oragadam Industrial Area, Kancheepuram, and is spread across 350 acres. It is being developed by the State Industrial Promotion Corporation of Tamil Nadu (SIPCOT), with a total project cost of ₹212.40 crore, out of which ₹153.33 crore is allocated for Common Infrastructure Facilities (CIF).

Figure 4.2: One of the constructed CIFs in Uttar Pradesh

In Uttar Pradesh, the park is located in Sector 28, Phase I, Gautam Buddha Nagar, Noida, covering 350 acres. The project is being implemented by the Yamuna Expressway Industrial Development Authority (YEIDA), with a total project cost of ₹435.94 crore and a CIF cost of ₹186.63 crore.

The Madhya Pradesh park is situated in Vikram Udyogpuri Ltd., within the Pithampur-Dhar-Mhow region of Ujjain district. It spans 360 acres and is being implemented by the Madhya Pradesh Industrial Development Corporation (MPIDC). The total project cost here is ₹222.77 crore, with ₹155.63 crore dedicated to CIF.

These parks aim to provide shared infrastructure to reduce manufacturing costs and enhance competitiveness in India's medical device sector.

2. APPROVAL AND RELEASE OF GRANT:

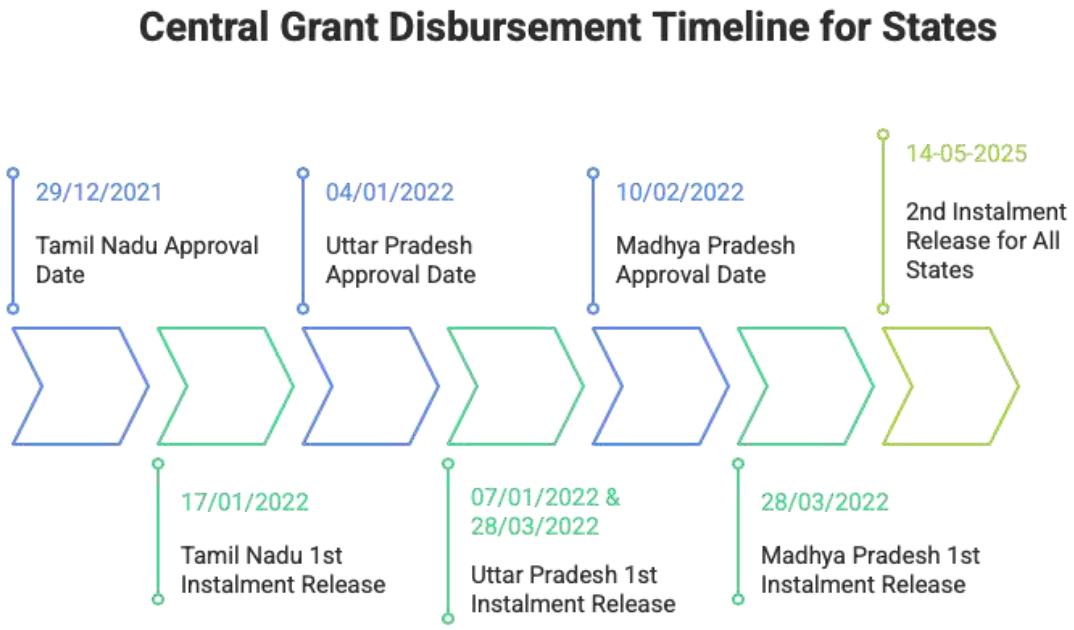

Figure 4.3: Central Grant Disbursement Timeline

Approved States	Approval Date	Release Date of 1st Instalment of Central Grant	Central Grant released as 1st Instalment (Rs. Crore)	Release Date of the 2nd Instalment of the Central Grant	Central Grant released as 2nd Instalment (Rs. Crore)
Tamil Nadu	29/12/2021	17/01/2022	30	14-05-2025	30
Uttar Pradesh	04/01/2022	07/01/2022 & 28/03/2022	30	14-05-2025	30
Madhya Pradesh	10/02/2022	28/03/2022	30	14-05-2025	30

Table 4.2: Grant Distribution Timeline

The park in Tamil Nadu was approved on 29 December 2021. The first instalment of ₹30 crore was released on 17 January 2022, and the second instalment of ₹30 crore was released on 14 May 2025.

Figure 4.4: One of the constructed CIFs in Uttar Pradesh with the road infrastructure

For Uttar Pradesh, approval was granted on 4 January 2022. The first instalment of ₹30 crore was released in two parts on 7 January 2022 and 28 March 2022. The second instalment of ₹30 crore was also released on 14 May 2025.

In Madhya Pradesh, the park received approval on 10 February 2022. The first instalment of ₹30 crore was released on 28 March 2022, and the second instalment of ₹30 crore was released on 14 May 2025.

In all three states, the total central grant released so far amounts to ₹60 crore per park, with both instalments completed as of May 2025.

3. PROGRESS STATUS:

(A) CIF PROGRESS IN MD PARKS:

All the approved States have awarded major tenders for the civil construction of CIF Buildings, and the construction of CIF buildings is underway. The initial slow progress was due to delays in obtaining regulatory approvals. Additionally, for tenders related to equipment for CIF, the medical device sector is highly technology-intensive, and preparing very technical tenders, took time. There is also an issue with getting sufficient responses from bidders for the tenders floated. In some cases, only a single bidder participated in the tenders. Regular reviews are conducted at the level of DoP, and follow-ups by the PMA to expedite progress.

In Tamil Nadu, a total of 12 CIF units have been planned. Civil tenders have been awarded for 11 of them, while one tender is still under preparation. Notably, the Gamma Irradiation Centre is pending, for which a Memorandum of Understanding (MoU) has been signed with the BRIT team on 20 January 2025. A draft tender has been prepared and is currently under technical vetting by BRIT.

State wise tender status

State	CIF Units	Civil Tender Awarded	Civil Tender Released	Civil Tender Under Preparation	Remarks
Tamil Nadu	12	11	0	1	Gamma Irradiation MOU signed
Uttar Pradesh	16*	14	0	2	Gamma Irradiation Centre and Bio Material Testing Lab
Madhya Pradesh	9	9	0	0	-

Table 4.3: State-wise CIF civil tender status

*Out of the Combined CIF unit for STP and ETP, the Civil tender for STP has been awarded, while the tender for ETP is under preparation.

In Uttar Pradesh, 16 CIF units have been planned. Civil tenders have been awarded for 14 of these, while two tenders are under preparation. The pending tenders are for the Gamma Irradiation Centre and the Bio-material Lab. It is also noted that a combined CIF unit for Sewage Treatment Plant (STP) and Effluent Treatment Plant (ETP) is included in the count—while the civil tender for the STP has been awarded, the ETP tender is still in progress.

In Madhya Pradesh, 9 CIF units have been planned, and civil tenders for all nine units have already been awarded. No tenders are pending or under preparation in the state. Overall, civil works are well-progressed in Madhya Pradesh, nearing completion in Tamil Nadu, and advancing steadily in Uttar Pradesh.

Figure 4.5: CIFs at Tamil Nadu, Rapid Proto Typing and CNC Machining Facilities

(B) TENDERS FOR EQUIPMENT TO BE INSTALLED IN CIF BUILDINGS ARE IN DIFFERENT STAGES OF PROCUREMENT.

State wise tender and equipment status

State	CIF Units	Equipment Tender Awarded	Equipment Tender Released	Tender Under Preparation
Tamil Nadu	12	1	0	11
Uttar Pradesh	13*	0*	0	13
Madhya Pradesh	8**	5	0	3

Table 4.4: CIF equipment procurement status

***Out of the approved 16 CIF units, 3 CIF units (STP, Admin Block & Commercial Facility) do not have any equipment requirement. Accordingly, Equipment Tenders for only 13 CIF Units are being considered by SIA.

****Out of the approved 9 CIF units, 1 CIF unit - Central Warehouse does not have any equipment requirement. Accordingly, Equipment Tenders for only 8 CIF Units are being considered by SIA.

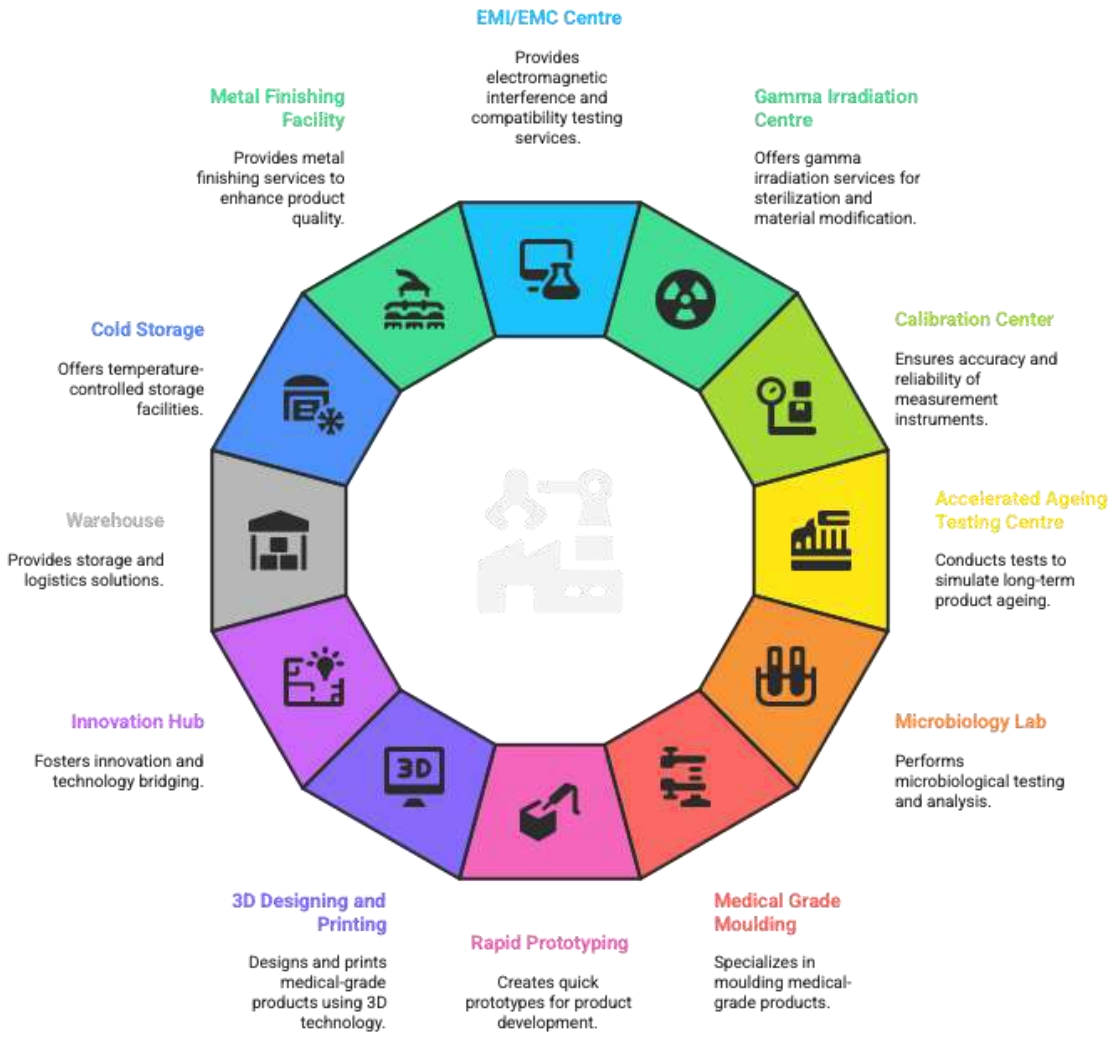

Figure 4.6: CIF units in Tamil Nadu

For the Gamma Irradiation Centre, the SIA has signed an MOU with the BRIT team, and the first draft of the tender document has been shared with the BRIT team for technical vetting. (Tender under Development)

For the remaining 10 CIF Facilities, SIA is in the process of finalising the tender document for the Operation and Maintenance agency. (Tender under Development).

After the finalization of the operation and maintenance agency the technical documents will be prepared.

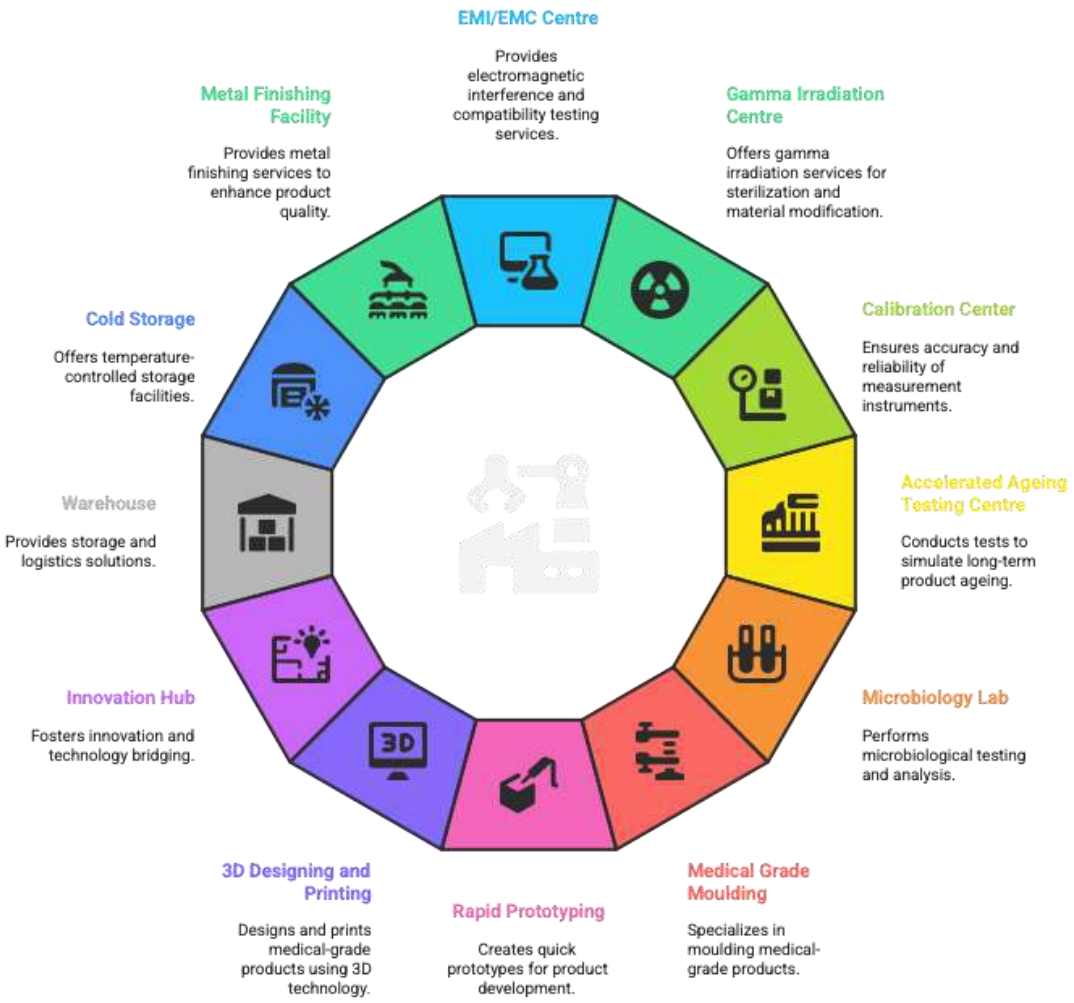

Figure 4.7: CIF units in Uttar Pradesh.

Two tenders for equipment of CIF units, i.e., 3D Design, Rapid Prototyping and Tooling lab and Electronic Assembly Facility, are recalled due to a single bid quotation.

SIA is in the process of finalising a technical consultant for the project. After finalisation of the same, the technical document will be prepared.

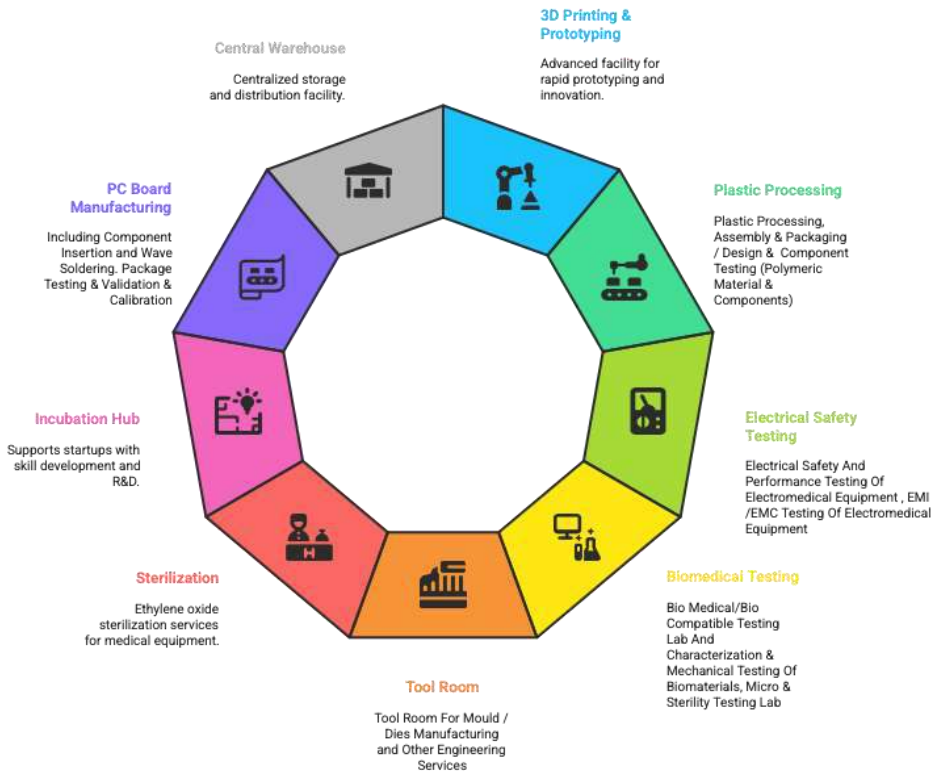

Figure 4.8: CIF units in Madhya Pradesh

SIA has awarded equipment tenders for 05 CIF units. For the remaining 3 CIF units, the SIA is re-evaluating the technical specifications of the tender, as only a single bid was received against the tender that was released twice.

(C) LAND ALLOTMENT:

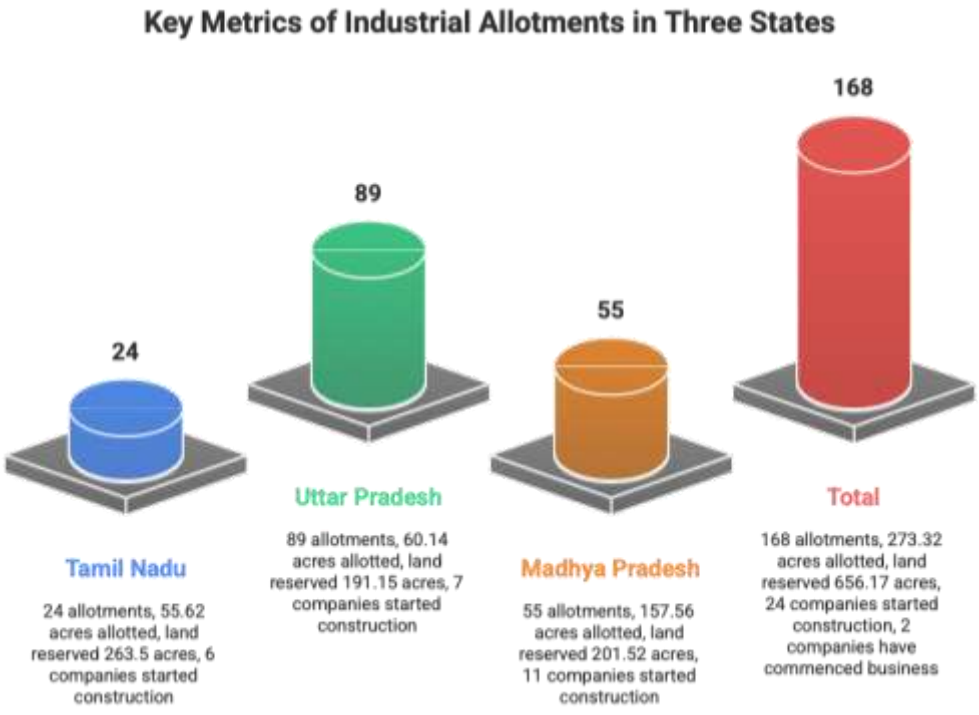

Figure 4.9: Key metrics of Industrial Allotments in three states

In Tamil Nadu, out of 263.5 acres reserved for allotment, 55.62 acres have been allotted, which accounts for 21.11% of the reserved area. A total of 24 allotments have been made, with six companies already commencing construction activities and two others starting operations.

In Uttar Pradesh, 89 allotments have been made, covering 60.14 acres out of 191.15 acres reserved, achieving 31.46% of the total area. So far, seven companies have begun construction.

In Madhya Pradesh, the highest area allotment has taken place, with 157.56 acres allotted out of 201.52 acres reserved—representing 78.19% of the reserved land. The state has made 55 allotments, and 11 companies have started construction.

Across all three states, a total of 168 allotments have been made over 273.32 acres of land, against a total reserved area of 656.17 acres. A total of 24 companies have started construction across the parks, and 2 have commenced business. Madhya Pradesh leads in land utilisation, followed by Uttar Pradesh and Tamil Nadu.

Land Allotment and Category Expansion at Uttar Pradesh Medical Device Park

The Uttar Pradesh Medical Device Park (UP MDP), situated in Sector 28, Greater Noida, has adopted a category-based land allotment strategy aligned with the park's Detailed Project Report (DPR). As per the current policy, land allotments are being guided by a product segmentation framework approved by the State Industrial Authority (SIA), with 89 allotments completed so far. These segments prioritise high-impact healthcare areas such as:

1. **Cancer Care and Radiotherapy Equipment**
2. **Radiology and Imaging Devices** – including ionizing, non-ionizing, and nuclear imaging equipment
3. **All Types of Implants** – including bioimplants and electronic implants
4. **Anaesthetic and Cardio-Respiratory Devices** – including catheters and renal care devices
5. **In Vitro Diagnostic (IVD) Devices**

This structured approach ensures that critical segments of the medical device industry receive focused infrastructure support, fostering the development of products crucial to the healthcare ecosystem. However, while this segmentation provides clarity and prioritization, it may inadvertently limit the spectrum of potential manufacturing activity in the park, especially from emerging domains.

Need for Expansion of Categories and Manufacturing Scope

Despite 89 allotments, significant portions of land in the park remain unallotted. A reassessment of the DPR's selection criteria reveals the opportunity to broaden the scope of permissible manufacturing categories. This is particularly relevant in light of evolving global healthcare trends, the rapid rise of health-tech startups, and India's push toward digital health, AI, and wearable diagnostics.

Key recommended expansions include:

- **Wearable and IoT-Integrated Medical Devices:** Including smart diagnostic patches, health monitors, and connected rehabilitation tools

- **AI-Driven Diagnostic Platforms** and software-as-medical-device solutions
- **Home-Based and Remote Care Devices:** Oxygen concentrators, portable dialysis, and self-monitoring kits
- **Surgical Robotics and Advanced Prosthetics**
- **Medical Device Packaging, Sterilization, and Ancillary Supplies**

Widening the manufacturing categories will also attract more startups, MSMEs, and multinational enterprises with diverse portfolios—ensuring a more vibrant and scalable industrial ecosystem.

Land Parcel Sizes and Industry Readiness

The park offers land parcels of varying sizes; however, the current sizes may not always suit large-scale or specialized manufacturers who require integrated campuses, cleanroom facilities, or warehousing support. A strategic review of unallotted parcels and reclassification based on potential usage—such as high-precision manufacturing, diagnostic reagents, packaging, or logistics—will make the park more inclusive and adaptable.

Recommendations include:

- **Repackaging of Larger Parcels:** To accommodate anchor units that bring in large-scale employment and investment
- **Micro Parcels for Startups:** Smaller, plug-and-play land or built-up units to enable startups to begin operations with minimal capex
- **Special Zoning for High-End R&D or Testing Units:** Allocated areas with flexible leasing, near CIF facilities or proposed AI/testing labs

Industry Engagement and Land Allotment Drive

To ensure optimal utilization of the park, a targeted **industry engagement campaign** should be launched to invite companies not only from traditional device categories but also from adjacent sectors like bioinformatics, medical logistics, sterilization services, and device software validation. Engagement with international chambers, export promotion councils, and global MedTech forums could bring in FDI and global manufacturing partners looking to expand in India.

The government may also explore **fast-track allotment windows** for companies that offer:

- A minimum capex commitment
- Employment targets
- Transfer of technology (ToT) or IP development in India

Land Allotment and Strategic Scope at Tamil Nadu Medical Device Park

The Tamil Nadu Medical Device Park (TN MDP), developed by SIPCOT at Oragadam in Kancheepuram, is guided by a well-defined categorization strategy for plot allocation, as provided by the State Industrial Authority (SIA) to the Project Management Agency (PMA). The allotment strategy aligns with national objectives and follows the **GTE list**, ensuring structured development across critical segments of the MedTech value chain.

Target Segments for Land Allotment

According to the SIA, plot allocation is currently focused on the following priority product categories:

1. **Medical Equipment:** Devices used for preventive, diagnostic, therapeutic and monitoring procedures (e.g., ventilators, ECG, dialysis machines).
2. **Medical Devices:** Includes stents, orthopedic implants, pacemakers, and other artificial bio-devices.
3. **Diagnostics:** Encompasses in-vitro diagnostic (IVD) equipment, reagents, and diagnostic support systems.
4. **Medical Software:** Both technical and application software including imaging analytics, telemedicine platforms, and AI-powered diagnostic support tools.
5. **Consumables:** Medical disposables, syringes, catheters, surgical gloves, and infection-control products.

This categorization offers a comprehensive coverage of the medical device ecosystem, from high-end capital equipment to consumables and software-based healthcare solutions.

Opportunities for Category Expansion

While Tamil Nadu's approach is inclusive and forward-looking, especially in recognizing **medical software** and **diagnostics** as standalone segments, further expansion of categories could increase industrial diversity and align with emerging trends. Notable potential additions include:

- **Wearable and IoMT Devices:** Including smart sensors, remote patient monitoring systems, and AI-integrated biosensors.
- **Assistive Health Technologies:** Devices catering to differently-abled individuals, rehabilitation equipment, and mobility aids.
- **Advanced Therapeutic Devices:** Including robotic surgery tools, implantable drug delivery systems, and biocompatible materials.
- **Sterilization, Packaging & Logistics:** Units specializing in compliant packaging for export, sterilization solutions, and cold chain systems.

These additions would not only expand the park's offerings but also align with Tamil Nadu's strong innovation ecosystem supported by **IIT Madras, NCAHT**, and nearby medical institutions.

Land Parcel Structuring and Industrial Fit

Based on 20 known land allotments, the park's plots vary in size to accommodate a mix of MSMEs and mid-sized manufacturers. However, there is scope for **reclassification and repackaging** of unallotted land to support:

- **Large anchor tenants** needing integrated cleanrooms, logistics zones, and testing facilities.
- **Small and startup units** with plug-and-play facilities or shared prototyping labs.
- **Academia–Industry collaboration zones** for clinical validation, regulatory advisory, and testing support.

Creating flexible parceling based on end-use (e.g., assembly units vs high-end design labs) will significantly enhance the park's appeal to a diverse investor base.

Recommendation: Strategic Attractiveness and Outreach

Given Tamil Nadu's advantage in infrastructure, port access, and institutional collaborations, the park is well-positioned to become a **global manufacturing and R&D hub**. However, to unlock full potential:

- **Focused promotion of vacant parcels** at international MedTech forums and exhibitions should be prioritized.
- **Incentive-linked allotments** may be offered to companies bringing in novel technologies, IP, or exports.
- **Expanded inclusion of health-tech service providers**, such as software companies and packaging specialists, could enhance the ecosystem.

Land Allotment and Strategic Scope at Madhya Pradesh Medical Device Park

The **Madhya Pradesh Medical Device Park (Ujjain)**, developed under the state's proactive industrial development policies, has adopted a forward-thinking approach to plot allotment. As per discussions with the **State Industrial Authority (SIA)**, the allotment strategy is rooted in a categorization of medical device types while also keeping future flexibility through consideration of the **General Technical Equipment (GTE) list of 354 products**. This dual-track strategy is aimed at establishing Ujjain as a multi-specialty manufacturing hub within the national MedTech framework.

Target Segments for Land Allotment

The SIA has delineated six broad product categories to guide current and near-future allotment of land parcels:

1. **Mid-size Medical Devices:** Including cardiac care products like stents and drug-eluting stents, crucial for chronic disease management.
2. **Micro-sized and Home-based Medical Devices:** Such as glucometers, thermometers, oximeters, and blood pressure monitors—essential for decentralized and at-home diagnostics.
3. **Embedded Medical Software:** Mobile-based health apps and embedded software for smart diagnostic or therapeutic devices.
4. **Medical Equipment:** Larger diagnostic and monitoring devices such as ECG machines, pulse oximeters, ultrasound units, CT, MRI, and UV/IR-based imaging tools.
5. **Implants:** Including intrauterine devices (IUDs), orthopedic implants, and bone-related support products like bone cement.
6. **Medical Instruments:** High-end diagnostic and surgical tools, such as X-ray machines, dental imaging devices, gamma ray apparatus, and X-ray tubes.

This classification reflects the park's ambition to serve both traditional manufacturing and emerging digital health domains.

Opportunities for Expansion and Diversification

While the current categories are comprehensive, the inclusion of **GTE products** in future allotments opens doors to strategically diversifying the manufacturing base. Additional segments could include:

- **AI-integrated Devices & Wearables:** Smart monitoring systems for hospitals and chronic care.

- **Rehabilitation and Assistive Devices:** Products aimed at differently-abled and aging populations.
- **Consumables & Packaging Units:** Which are critical to enable a full-stack medical device ecosystem.
- **Sterilization and Supply Chain Equipment:** That ensures post-manufacture quality assurance and safe distribution.
- **Cleanroom Material Manufacturers:** To support in-park sterile manufacturing environments.

This would help balance the park's portfolio between capital equipment, software, and consumables.

Land Parcel Strategy and Infrastructure Fit

According to available data, 55 land allotments have already been made in the park. The layout includes **flexible parcel sizes** aimed at accommodating:

- **MSMEs and start-ups** in home-based or digital devices.
- **Mid-tier manufacturers** in diagnostics and imaging equipment.
- **Anchor units** that require high-grade cleanroom facilities or integrated testing zones.

The park's location within the **Vikram Udyogpuri smart industrial zone**, along with ready access to **ICMR labs, AIIMS Bhopal, and NIPER Ahmedabad**, enhances its positioning as an ideal location for cross-disciplinary collaboration and clinical validation.

Recommendations for Enhancing Land Allotment Efficiency

To make optimal use of remaining land parcels and attract high-value investors, the following strategic measures are suggested:

- **Market-linked selection criteria:** Allot land to units producing globally in-demand technologies such as point-of-care diagnostics, minimally invasive surgical tools, and robotic-assisted devices.
- **Technology-weighted incentives:** Give preference to companies offering advanced tech, patented IP, or clinical trial-backed innovations.
- **Incorporate space for shared infrastructure:** Rapid prototyping labs, sterilization units, and certification support agencies should be spatially integrated.
- **Anchor tenancy strategy:** Offer larger land parcels with upfront fiscal incentives for large Indian or global MedTech players to serve as flagship tenants.

(D) INSTALMENT RELEASE AND FUND UTILISATION:

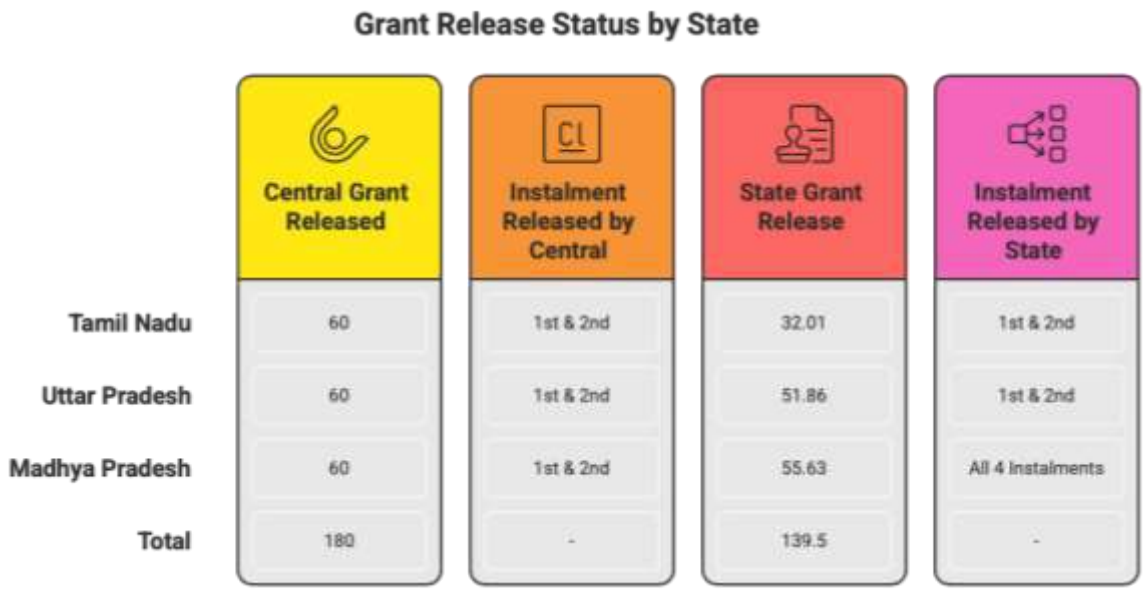

Figure 4.10: Grant released status in three states

Total Fund Utilized till May 2025 - Rs. 186.75 crores. The breakup of the same is as follows:

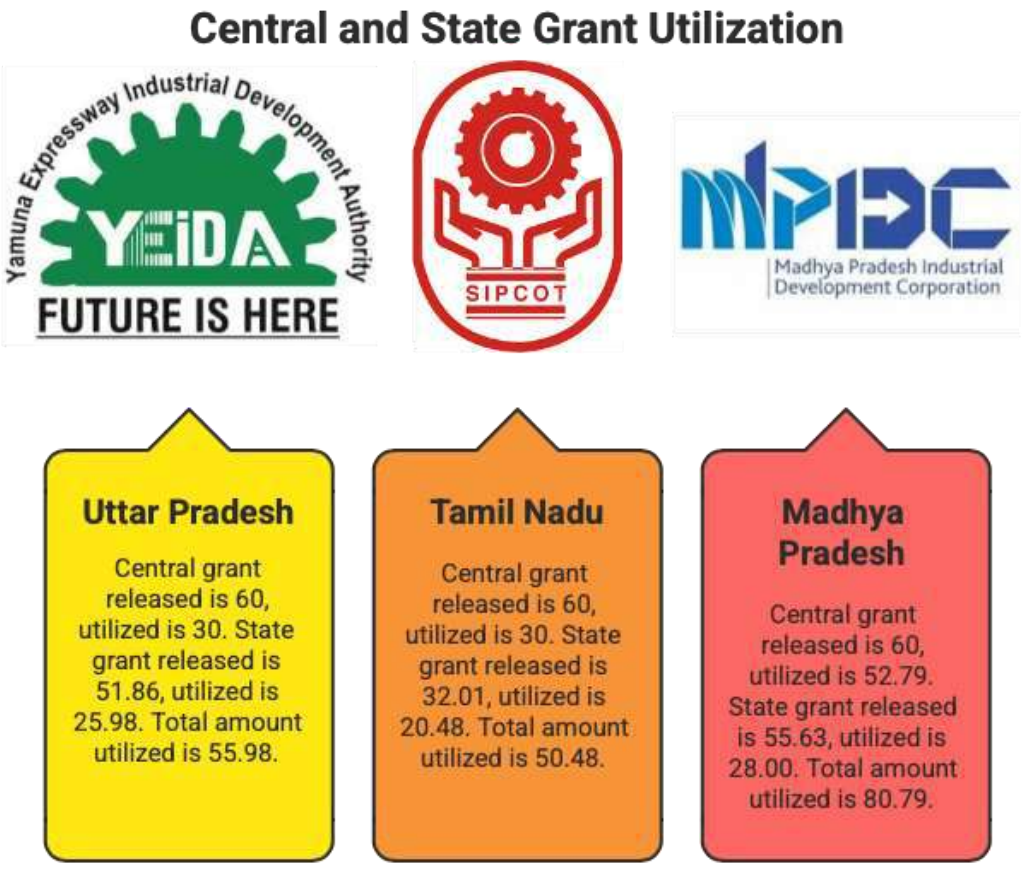

Figure 4.11: Central and State grant utilisation

Grant and instalment release by the Centre and the State

Approved States	Central Grant Released	Central Grant Utilized	State Grant Release	State Grant Utilized	Total Amount Utilized
Tamil Nadu	60	30	32.01	20.48	50.48
Uttar Pradesh	60	30	51.86	25.98	55.98
Madhya Pradesh	60	52.79	55.63*	28.00	80.79
Total	**180**		**139.5**		**Total**

***The states have released all four instalments of the state grant

Table 4.5: Grant and instalment release status

In Tamil Nadu, ₹60 crore of central grant has been released, of which ₹30 crore has been utilised. The state government has released ₹32.01 crore and utilised ₹20.48 crore. The total amount utilised so far in the state stands at ₹50.48 crore.

In Uttar Pradesh, ₹60 crore has been released from the central grant, and ₹30 crore has been utilised. The state has released ₹51.86 crore and utilised ₹25.98 crore. The total amount utilised in the state is ₹55.98 crore.

In Madhya Pradesh, ₹60 crore has been released as a central grant, and ₹52.79 crore has already been utilised, indicating significant progress. The state has released the full ₹55.63 crore across four instalments and utilised ₹28 crore. The total amount utilised in Madhya Pradesh is ₹80.79 crore, the highest among all three states.

Cumulatively, ₹180 crore has been released by the Centre, with ₹112.79 crore utilised. The states have released ₹139.5 crore and utilised ₹74.46 crore. The overall total expenditure under the scheme so far amounts to ₹187.25 crore. Madhya Pradesh leads in terms of fund utilisation, followed by Uttar Pradesh and Tamil Nadu.

(E) MEDICAL DEVICE PARK I PLUG AND PLAY INFRASTRUCTURE

Plug-and-play facilities are pre-built industrial spaces designed to allow businesses to commence operations immediately upon entry, eliminating the need for extensive construction and setup. These facilities offer ready-to-use infrastructure like power, water, and internet access, enabling companies to focus on their core operations without delays. Currently, the status of these facilities in the parks:

Park	Facility name	Area Designated	Status	Expected commencement
MP	Medical Device Park, Plug and Play units	3X(20mX50m)	Under Construction	31-Aug 2025
TN	Development of plug and play facilities under PPP mode on DBFOT basis with a concession period of 45 years at SIPCOT Oragadam Medical Devices Park	17.99 acres	RFP is under preparation for the selection of a concessionaire	Construction of the facility will commence by the end of August 2025
UP	Plug and Play facility / Flatted factory	29.5 acres	Under Construction	31-Dec 2025

(E) PROJECTED INVESTMENT AND EMPLOYMENT

Approved States	Investment Proposed in Rs. crore	Projected Employment
Tamil Nadu	509.53	3082
Uttar Pradesh	1294.18	11463
Madhya Pradesh	2374.86	10011
Total	4178.67	24556

Table 4.6: Projected investment and employment

In Tamil Nadu, the medical park proposed investments of ₹509.53 crore. The projected employment from these investments is 3,082 jobs.

In Uttar Pradesh, the proposed investments in the park amount to ₹1,294.18 crore, with an employment projection of 11,463 jobs.

The Medical Device Park in Madhya Pradesh has attracted the most significant proposed investment of ₹2,374.86 crore. The projected employment is 10,011.

The cumulative proposed investment amounts to ₹4,178.67 crore, with total projected employment reaching 24,556 jobs.

(F) REGULATORY APPROVAL:

All approved states have obtained Environmental Clearance for the approved area of the Medical Devices Park.

Approved States	Environment Clearance	Validity
Tamil Nadu	Available	April 2026
Uttar Pradesh	Available	October 2029
Madhya Pradesh	Available	March 2026

Table 4.7: Status of regulatory approval

The State of Himachal Pradesh submitted a withdrawal letter Dev. F(16) MDP/2024/Vol-V10130 dated 07th September 2024.

(G) BUDGETARY ALLOCATION AND EXPENDITURE PATTERN OF THE SCHEME

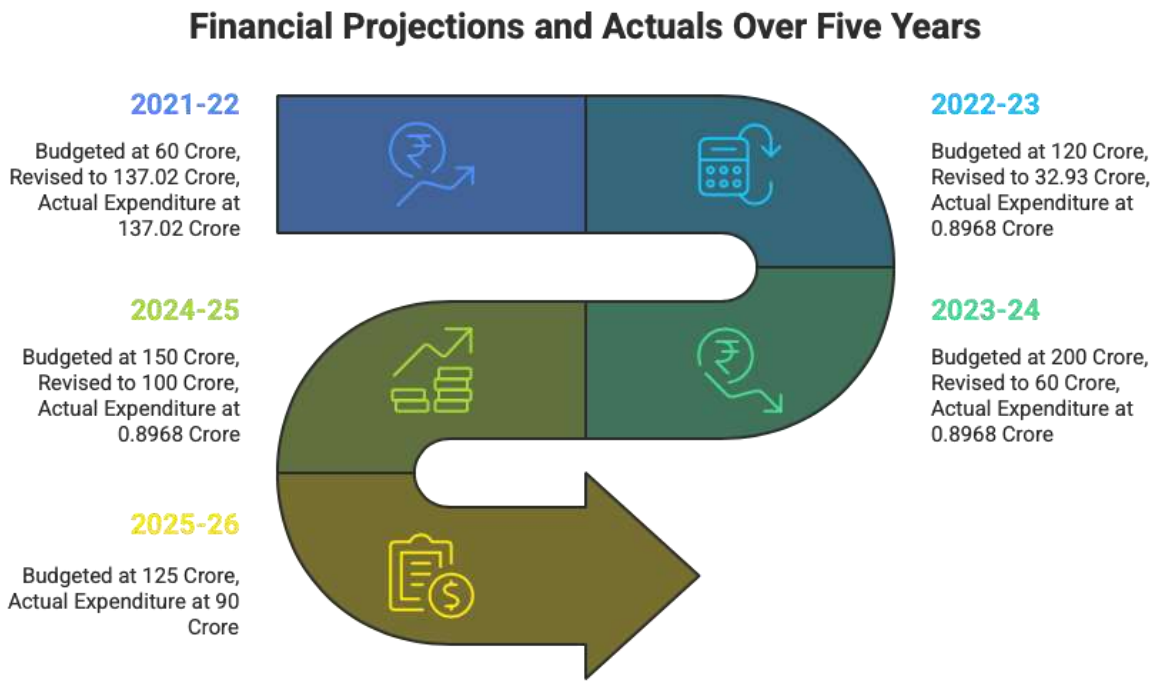

Figure 4.12: Budgetary, Revised Estimates and Actual Expenditure

In 2021–22, the scheme had a Budget Estimate (BE) of ₹60 crore, which was later revised (RE) to ₹137.02 crore. The actual expenditure matched the revised estimate, with a full utilisation of ₹137.02 crore.

In 2022–23, the BE increased to ₹120 crore, but the RE was significantly reduced to ₹32.93 crore. The actual expenditure during the year was only ₹0.8968 crore.

In 2023–24, the BE rose to ₹200 crore, and the RE was ₹60 crore.

In 2024–25, the BE was ₹150 crore, and the RE was revised to ₹100 crore.

For 2025–26, the BE is ₹125 crore (with no RE specified yet), and the actual expenditure recorded so far is ₹90 crore,

(H) REVIEW MEETINGS AND OVERSIGHT

Regular review meetings have been conducted to monitor the progress and address implementation challenges of the Medical Device Parks Scheme. A review meeting was held under the chairmanship of the Joint Secretary, Department of Pharmaceuticals, on **29th February 2024**, focusing on infrastructure development status and fund utilization across the parks. Subsequently, another review meeting chaired by the Joint Secretary took place on **13th September 2024**, where discussions revolved around the pace of CIF construction, pending equipment tenders, and land allotment progress. A high-level **Steering Committee (SSC) Meeting** was convened under the chairmanship of the Secretary, Department of Pharmaceuticals, on **18th December 2024**, which deliberated on critical policy interventions, scheme extension considerations, and strategic alignment with the National Medical Devices Policy, 2023. The most recent review meeting was held on **27th May 2025**, chaired again by the Joint Secretary, to assess the operational readiness of common facilities, challenges faced by allotted units, and to streamline regulatory coordination mechanisms within the parks. These periodic meetings have been pivotal in ensuring that the parks' development remains aligned with national objectives and timelines. Visits have also been made by officials to the MD Parks.

(I) SITE VISITS BY LEADERSHIP TEAM

A series of high-level official visits was conducted across the Medical Device Parks to monitor progress and strengthen inter-agency coordination. On **30th August 2024**, **Mr. Hitendra Sahu (Director)**, accompanied by Mr. Amir Khan, visited the **Tamil Nadu Medical Device Park** to assess the ongoing infrastructure development and CIF readiness.
Subsequently, on **9th October 2024**, **Mr. R. P. Singh (Joint Secretary, Department of Pharmaceuticals)** undertook a review visit to the **Uttar Pradesh Medical Device Park**, also accompanied by Mr. Amir Khan, to evaluate land allotment progress and unit establishment timelines.
Continuing this momentum, **Mr. Hitendra Sahu (Director)** revisited the **Uttar Pradesh Park** on **10th January 2025**, with Mr. Amir Khan, focusing on implementation status and stakeholder engagement.
On **16th January 2025**, **Mr. R. P. Singh (JS)** conducted another field inspection at the **Tamil Nadu Park**, joined by **Mr. Varun Mahajan**, to follow up on CIF installations and skill development initiatives.
Most recently, on **21st January 2025**, **Mr. Amit Aggarwal (Secretary, Department of Pharmaceuticals)** led a strategic visit to the **Madhya Pradesh Medical Device Park**, accompanied by **Mr. Varun Mahajan**, underscoring the importance of high-end manufacturing readiness and institutional partnerships.
These visits reflect the central government's commitment to closely monitoring and facilitating the timely execution of the Medical Device Parks scheme across key states.

(J) SITE VISITS BY PMA TEAM

The Project Management Agency (PMA) has conducted comprehensive site visits to all four approved Medical Device Parks, including those in Kanchipuram (Tamil Nadu), Greater Noida (Uttar Pradesh), Ujjain (Madhya Pradesh), and the now-cancelled site in Himachal Pradesh. These visits aimed to assess the progress of physical infrastructure, land readiness, and the status of Common Infrastructure Facilities (CIFs). In Tamil Nadu, Uttar Pradesh, and Madhya Pradesh, the PMA evaluated the construction of CIF buildings, the availability of utilities such as power and water, and preparedness for equipment installation. The PMA also interacted with implementing agencies—SIPCOT, YEIDA, and MPIDC—and engaged with unit owners to understand operational challenges, especially those related to land allotment, regulatory clearances, and equipment procurement. In Himachal Pradesh, the PMA reviewed the preliminary planning and land-related issues before the project was eventually cancelled due to unsatisfactory progress and administrative constraints. Insights from these visits have informed key recommendations to the central government, enabling timely corrective actions and providing critical support to ensure alignment with the scheme's objectives, including infrastructure readiness, investor facilitation, and scheme continuity planning.

Reasons for Delays

Land Acquisition Delays

While land acquisition has been formally completed in all three parks, the initial phases of implementation witnessed considerable delays, particularly in **Tamil Nadu and Uttar Pradesh**. Challenges arose due to pending land-use conversions, prolonged title verification processes, and clearances from multiple administrative bodies. In Tamil Nadu's Kanchipuram park, delays were attributed to the time-consuming Change of Land Use (CLU) approvals, given the industrial area's partial overlap with agricultural zones. Uttar Pradesh faced hurdles in synchronizing land acquisition processes with master plan zoning and environmental clearances, slowing the handover of fully demarcated and encumbrance-free plots to investors. Madhya Pradesh, in contrast, managed to expedite its land acquisition process more efficiently due to proactive state-level facilitation but still experienced minor lags during internal plot readiness for allotments.

Delays Due to the Nature of Work

The nature of work involved in setting up a medical device ecosystem—unlike general industrial parks—is inherently layered, causing sequential delays in execution across all three parks. The CIF infrastructure involves not just building warehouses or factory shells but also the creation of **cleanrooms, precision labs, calibration zones, sterilization units, and regulatory-compliant manufacturing areas**. These are highly specialized constructions that demand phased execution with frequent inspections, slowing overall progress. Moreover, in parks like Uttar Pradesh, the scale of infrastructure (e.g., larger STP/ETP capacities) and demand for flexible modular layouts based on investor feedback led to several revisions in scope. In Tamil Nadu, park development had to be balanced with regional ecosystem alignments (such as EMS clusters), which introduced additional

design and coordination complexities. These intricacies have inherently extended the infrastructure completion timelines.

Technical Delays due to the Specialized Nature of Work

The construction of highly specialized Common Infrastructure Facilities (CIFs) has been a complex undertaking in all three parks, leading to unavoidable technical delays. **Tamil Nadu's Gamma Irradiation Centre** and **Uttar Pradesh's Bio-material Lab and ETP facility** are still pending due to the intricate nature of equipment procurement, vetting of technical designs, and dependency on foreign Original Equipment Manufacturers (OEMs) for specific systems. These facilities require precision installation, calibration, and compliance with stringent global standards (ISO 13485, CE, AERB guidelines), which have extended timelines. Additionally, Madhya Pradesh, despite being ahead in tender finalizations, faced delays in technical commissioning due to integration complexities of utility systems—such as high-capacity HVAC systems essential for cleanrooms and testing labs.

Legibility and Regulatory Approval Delays

One of the critical bottlenecks across all three parks has been delays in obtaining necessary regulatory and legibility approvals. **Tamil Nadu and Uttar Pradesh** particularly faced delays due to the absence of a centralized, park-level single-window clearance mechanism. Processes such as factory licensing, CDSCO registrations, environmental NOCs, and fire safety approvals require interaction with multiple agencies, leading to procedural lag. Documentation gaps, particularly for MSME units unfamiliar with complex compliance pathways, led to repetitive review cycles and extended approval times. Additionally, due to the evolving nature of medical device regulations in India and the high dependency on third-party certifications, delays in coordination with BIS, AERB, and NABL-accredited bodies were common. In Madhya Pradesh, despite quicker administrative facilitation, the legibility approval cycle slowed down due to national-level backlog in processing specialized certifications (e.g., CE and USFDA-aligned documentation).

Skill Development Ecosystem

1. SKILL DEVELOPMENT ECOSYSTEM AT UTTAR PRADESH MEDICAL DEVICE PARK

Academic–Industry Collaboration:

IIT Kanpur, IIT Delhi & Medical Device Innovation Hubs

The park has formalized engagement with **IIT Kanpur's Foundation for Innovation and Research in Science and Technology (FIRST)** and **IIT Delhi's Foundation for Innovation and Technology Transfer (FITT)**. These partnerships are designed to:

- Conduct joint **design-to-prototype workshops** for device manufacturers.
- Facilitate **clinical validation and field-testing labs** within the park premises.
- Develop **student-industry internships** linked to manufacturing and R&D units. Through these linkages, early-stage innovators, startups, and tenant companies within the park will have access to IIT-led design mentorship, rapid prototyping support, and **regulatory documentation readiness frameworks**—ensuring they are market- and compliance-ready.

State Skill Partnerships: UPSDM, NSDC, DGT (Skill India)

Uttar Pradesh's Skill Development Mission (UPSDM) has aligned with YEIDA to create **specialized training modules in device assembly, cleanroom protocols, quality management systems (QMS), and IoMT device integration**. These programs, developed in collaboration with **NSDC and the Directorate General of Training (DGT)**, are structured under **Skill India's modular certification framework**, making them nationally recognized and industry-relevant.

In addition, plans are underway to establish an on-site **Centre of Excellence (CoE) for MedTech Skill Development**, which will function as a training hub for park-based companies. This CoE will offer practical training in sterilization processes (ETO/Gamma), precision calibration, and device testing procedures, addressing the sector's acute need for hands-on skilled technicians.

Academic Linkages: AKTU, Galgotias University & Local Polytechnics

Regional academic institutions such as **Dr. A.P.J. Abdul Kalam Technical University (AKTU)**, **Galgotias University**, and **Greater Noida's network of polytechnics** are being integrated into the skill development pipeline. Through collaborations with the park, these institutions will offer **domain-specific electives, internships, and certification programs** in areas like medical device quality control, biomaterial research, and manufacturing engineering. These linkages are aimed at fostering a steady flow of job-ready graduates who can be absorbed directly into park-based industries.

Emerging Partnerships with NIPER & Advanced Compliance Training

The park is also exploring partnerships with **NIPER-Raebareli's Centre for Medical Devices**, which is expected to play a critical role in **capacity building for testing, clinical trials, and compliance documentation**. This collaboration will focus on upskilling personnel in high-end testing labs and quality assurance facilities, ensuring that park units have access to a certified talent pool for **ISO 13485, CE, and USFDA compliance processes**.

Continuous Innovation and Upskilling Initiatives

Beyond technical skilling, broader programs under **Skill India, SANKALP, and Pradhan Mantri Kaushal Vikas Yojana (PMKVY)** are being tapped to roll out **continuous upskilling initiatives**. Modular programs covering emerging technologies like **AI/ML in diagnostics, IoMT integration, smart packaging solutions, and regulatory pathways training** are being designed with support from both IITs and industry associations. These initiatives will ensure that the workforce remains agile, innovation-focused, and aligned with global MedTech standards and documentation.

2. SKILL DEVELOPMENT ECOSYSTEM AT TAMIL NADU MEDICAL DEVICE PARK

Academic–Industry Collaboration: IIT Madras, NCAHT & HTIC

The Tamil Nadu Medical Device Park at Oragadam Phase-II, developed by SIPCOT, is emerging as a robust innovation and training ecosystem. A strategic collaboration with **IIT Madras**, particularly through its **National Centre for Assistive Health Technologies (NCAHT-IITM)**, launched in June 2023 under **ICMR**, has positioned the park as a hub for rehabilitation technologies and biomedical innovation. Startups and manufacturers benefit from access to clinical validation support, design mentorship, and advanced prototyping pipelines through **NCAHT** and the **Healthcare Technology Innovation Centre (HTIC)** located at the **IIT Madras Research Park**.

Institutional Partnership with Anna University

Further strengthening academic-industry linkages, SIPCOT signed a Memorandum of Understanding (MoU) with **Anna University** on 10.10.2022, following approval by the SIPCOT Board on 09.06.2022. The MoU facilitates the establishment of Common Infrastructure Facilities (CIFs) and supports industry-aligned curriculum, internships, and research at the park, ensuring alignment with evolving MedTech manufacturing needs.

Strategic Engagement with NIPER for Advanced Testing Facilities

During a high-level meeting on 03.03.2025 with the **Secretary, Department of Pharmaceuticals**, and the **Tamil Nadu Industries Secretary**, the need for advanced CIFs beyond basic facilities was emphasized. Facilities like **Calibration Centres, Accelerated Aging Labs, Microbiology Labs, Medical-Grade Moulding, and Metal Finishing Centres** were recommended for reassessment. Subsequently, a meeting with the **Director of NIPER** on 04.04.2025 led to the proposal of a high-end, one-stop medical device testing facility within the park—fully certified for CDSCO compliance. This facility will significantly reduce time-to-market, lower testing costs, and anchor the park as a regulatory hub, encouraging broader industry participation.

State Skill Partnerships: TNSDC, Guidance Tamil Nadu, ICT Academy

Tamil Nadu's State Skill Development Corporation (TNSDC), along with Guidance Tamil Nadu and the **SANKALP program**, is actively designing vocational programs tailored for the park. These include training in **biomedical engineering, quality control, regulatory affairs, and lab operations**. The **ICT Academy**, a PPP-supported institution, complements this with modules in digital health, IoT integration, and MedTech software.

Advanced Infrastructure Support: Gamma Irradiation Centre with BRIT

SIPCOT has also initiated collaboration with the **Board of Radiation & Isotope Technology (BRIT)**, under the **Department of Atomic Energy**, to establish a Gamma Irradiation Centre within the park. After a series of meetings beginning on 09.05.2024, followed by a site visit from BRIT on 27.05.2024, a draft MoU was prepared and approved by the SIPCOT Board on 04.12.2025. The final MoU—signed on 21.01.2025—includes additional technical features and seeks BRIT's expertise in operationalizing

the irradiation facility. This unit will serve as a key CIF component, offering critical services for product sterilization and compliance.

Academic Linkages: Anna University, Polytechnics, and Future Collaborations

Beyond formal MoUs, Tamil Nadu is aligning its technical colleges—including **Anna University** and local polytechnics—with park needs through internship programs, industry-led workshops, and lab setups. These collaborations ensure a consistent pipeline of engineers and technicians ready to support the MedTech manufacturing ecosystem.

Innovation-Driven Training Programs
Ongoing initiatives under broader programs like **TANSKILL** and **SANKALP** emphasize modular training in device prototyping, clinical testing, sterilization, and regulatory filing—conducted in association with IIT Madras and local institutions. These efforts ensure continuous upskilling and create a vibrant R&D-ready workforce.

3. SKILL INITIATIVES AND INSTITUTIONAL PARTNERSHIPS IN UJJAIN MEDICAL DEVICE PARK

Academic–Industry Collaboration:
While explicit partnerships with IITs are currently not publicly documented for Ujjain, the Madhya Pradesh administration is actively integrating **industry-oriented skill and training programs** aligned with the Medical Device Park's developmental objectives. A significant milestone in this endeavor is the Memorandum of Understanding (MoU) signed with **NIPER Ahmedabad** (Centre for Medical Devices). This collaboration aims to bridge the skill gap in **medical device testing, validation, and regulatory compliance by offering specialized training modules, workshops, and industry certification programs tailored to the park's operational needs**. NIPER-trained professionals will be instrumental in supporting quality control labs, certification processes, and clinical validation units within the park.

State Skill Development & Industrial Promotion Framework

Under the **Madhya Pradesh Industrial Promotion Policy 2025**, the Medical Devices Park is categorized as a **focus sector**, and the policy provides targeted incentives for **R&D, plug-and-play facilities, and capacity building.** The policy also explicitly supports **sector-specific skill enhancement programs**, linking park activities with state-run technical education infrastructure .

In particular, MP's skill-development mission (e.g. **Mukhya Mantri Yuva Swarozgar Yojana** and **MP Skills Development Project**) is oriented toward youth and disadvantaged groups, intending to align training content with rising industry needs, including medical technology, lab testing, and quality control roles.

Leveraging Employment-Oriented Conclaves and Infrastructure

During regional industry events such as the **RISE Conclave** in Ratlam and the Global Investors Summit, the state highlighted its intent to build **industry-aligned skill clusters** alongside physical infrastructure projects. The state issued publications like *"ITI & Industry Connect"* and *"Youth Sangam"*,

reflecting a deliberate push toward workforce development in emerging sectors, including medical devices.

Moreover, a new program for constructing **working-women hostels in Vikram Udyogpuri** is underway, aimed at facilitating greater participation of women in industrial employment—improving inclusivity in MedTech manufacturing.

Academic Linkages and Technical Institutions

Ujjain lies within the **Vikram Udyog Nagari** smart industrial zone, envisioned with integrated **ITIs, engineering colleges, and medical colleges**, forming the basis for future workforce pipelines in biomedical technology and medical device manufacturing roles.

Local institutions such as the **Mahakal Institute of Technology (Ujjain)** offer engineering programs in electronics, mechanical, and computer engineering—fields relevant to the device manufacturing ecosystem. These institutes are natural partners for tailored internships, certificate courses, and applied training tied to the park.

Adopted Training Models and Progressive Labs

The park's proximity to research hubs and central universities enables the introduction of advanced skill modules—such as **regulatory compliance, device testing protocols, and quality assurance curricula.**

Performance of the scheme based on the Process/Output/Outcome indicators

MEDICAL DEVICE PARK SCHEME: INDICATORS FRAMEWORK

1. Process Indicators

Medical Device Park Scheme Indicators

	MP	UP	TN
DPRs Prepared & Approved	1	1	1
Timely Financial Assistance	60%	60%	60%
MoUs/Partnerships Signed	6	4	2
Environmental Clearances Obtained	Yes	Yes	Yes
Land Acquisition Time	As per the clause 10.4 of the scheme guideline the proposer shall have to be in full possession of the land free of all encumbrances proposed for establishing the Medical Device Park.	As per the clause 10.4 of the scheme guideline the proposer shall have to be in full possession of the land free of all encumbrances proposed for establishing the Medical Device Park.	As per the clause 10.4 of the scheme guideline the proposer shall have to be in full possession of the land free of all encumbrances proposed for establishing the Medical Device Park.
Common Facilities Planned	9	16	12
Capacity-Building Workshops	-	-	-

Table 4.8: Process indicators

* Capacity workshops were not held since the project is at the construction phase.

Each state has prepared and received approval for one Detailed Project Report (DPR). The central financial assistance has been released promptly for all three states, with 60% of the sanctioned amount disbursed as per schedule.

In terms of partnerships, Madhya Pradesh leads with 6 MoUs signed with state-level stakeholders, followed by Uttar Pradesh with 4, and Tamil Nadu with 2. All three states have obtained necessary environmental and statutory clearances, meeting one of the critical preconditions for project execution.

Regarding land acquisition and development, the parks were in full possession of encumbrance-free land as per Clause 10.4 of the scheme guidelines at the time of proposal submission, which was a prerequisite for scheme approval.

In the planning of common infrastructure facilities, Uttar Pradesh has proposed 16 units, Tamil Nadu 12, and Madhya Pradesh 9, which include testing labs, warehousing, calibration centres, and other support systems.

No capacity-building workshops for stakeholders have been reported in any of the three states as of now, indicating a potential area for further development in stakeholder engagement and training.

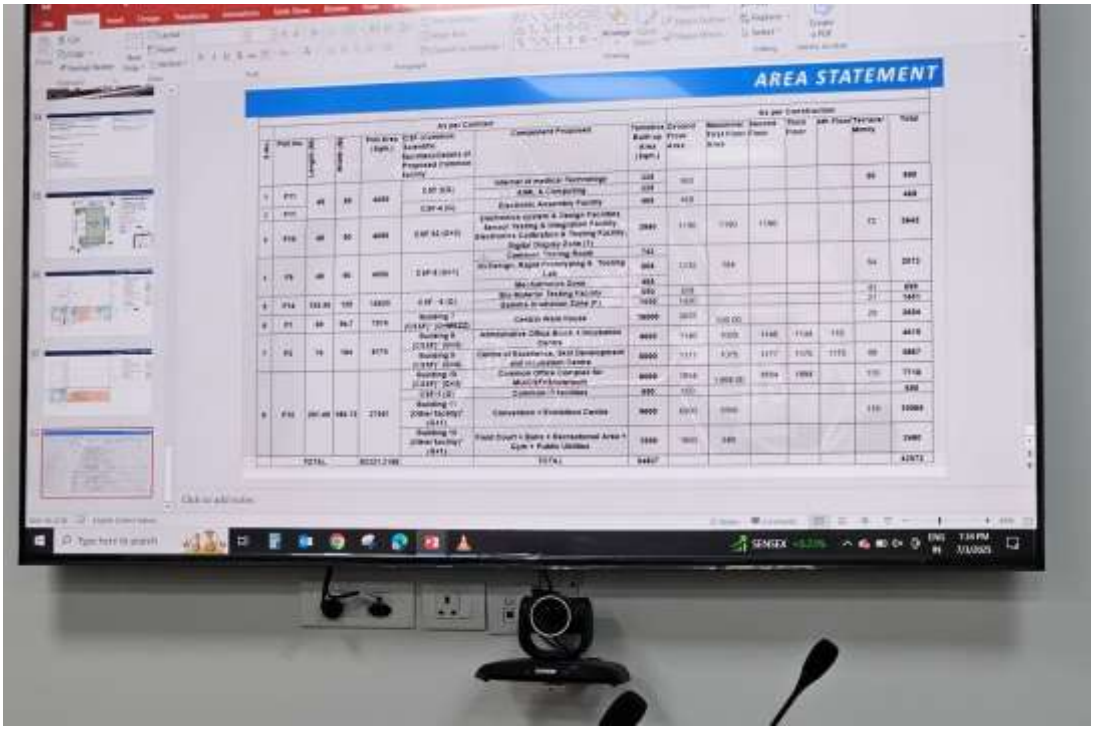

Figure 4.13: Area statement presentation made by YEIDA Officials

2. Output Indicators

Medical Device Park Metrics

	MP	UP	TN
Land Developed (Acres)	360	350	350
Common Infrastructure Facilities	-	-	-
Manufacturing Units Established	0	0	2
Testing & Calibration Facilities	-	-	-
Land Allotment (%)	78.19%	31.46%	21.11%
Construction Jobs Created	105	635	3082
Start-ups/SMEs Incubated	0	0	0

Table 4.9: Output indicators

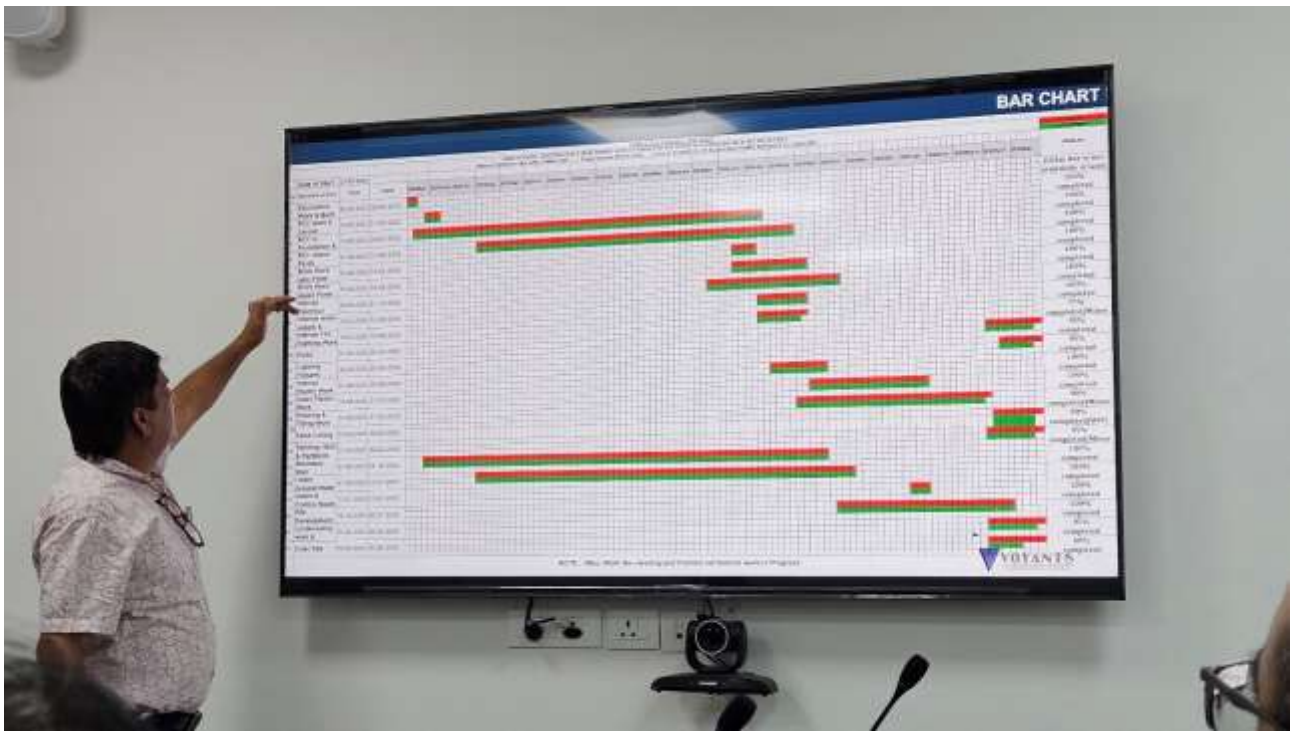

Figure 4.14: YEIDA officer explaining the progress in Medical Device Park

All three states—Madhya Pradesh, Uttar Pradesh, and Tamil Nadu—have developed substantial land areas for their parks, with Madhya Pradesh developing 360 acres, and both Uttar Pradesh and Tamil Nadu developing 350 acres each.

As of now, none of the common infrastructure facilities or testing and calibration facilities have been reported as established or operational in any of the three parks.

In terms of manufacturing activity, Tamil Nadu is ahead, having two medical device manufacturing units established, while Uttar Pradesh and Madhya Pradesh have not yet reported any.

Land allotment to industries is highest in Madhya Pradesh, with 78.19% of the available land allotted. Uttar Pradesh follows with 31.46%, and Tamil Nadu has allotted 21.11% of its developed land.

During the construction phase, Tamil Nadu has created the highest number of jobs at 3,082, followed by Uttar Pradesh with 635, and Madhya Pradesh with 105.

No start-ups or SMEs have been incubated in any of the parks so far, indicating an area for potential focus as the parks become more operational.

3. Outcome Indicators

The present state of the scheme does not allow for measuring the outcome and the impact indicators. However, once the scheme is fully operational, it should be assessed on the following outcome parameters:

Indicator	Unit of Measurement
Increase in domestic medical device production value	₹ Crores / % growth
Reduction in medical device import dependency	% decrease
Long-term direct & indirect employment generated	Number
Reduction in the cost of diagnostic/therapeutic devices	% decrease
Revenue generated from park operations	₹ Crores
Number of certifications/quality standards achieved by park units	Count
Collaborations with R&D institutions and academia	Count

Table 4.10: Outcome indicators

Increase in Domestic Medical Device Production Value

One of the key intended outcomes of the scheme is a substantial increase in the domestic production value of medical devices. Currently, India is a significant importer of advanced medical equipment, which impacts cost and availability across the healthcare system. By creating dedicated infrastructure, the scheme facilitates the growth of manufacturing units across various segments—diagnostic equipment, surgical instruments, implants, and wearable devices. This is expected to lead to a consistent increase in domestic output over the years.

The success of the scheme can be measured through annual tracking of total production volumes and values in rupees, as well as the percentage growth year-on-year. The parks enable economies of scale and attract both MSMEs and large manufacturers to set up facilities, further expanding the production base. Over time, India's share in the global medical device manufacturing landscape is expected to rise, bolstering both domestic supply and exports.

Reduction in Medical Device Import Dependency

India currently imports around 70–80% of its medical devices, particularly high-end equipment such as MRI machines, CT scanners, and implants. The scheme aims to bridge this gap by fostering indigenous production capabilities through common infrastructure and ease of doing business. As more units become operational within these parks, the country's reliance on imports is expected to decline.

This reduction can be quantitatively monitored by tracking the percentage decrease in medical device imports annually. The drop in import dependency will not only reduce the burden on foreign exchange but also make critical healthcare technologies more accessible across the country. In the long run, India could evolve from being a net importer to a major exporter of affordable and quality-assured medical devices.

Long-Term Direct and Indirect Employment Generated

Employment generation is a key developmental goal of the scheme. With each park supporting a wide array of manufacturers, suppliers, logistics providers, and service units, both direct and indirect jobs are created across the value chain. Direct employment includes roles in manufacturing, assembly, quality control, testing, and administration. Indirect employment includes jobs in transportation, maintenance, supply chain management, and construction.

Over the years, these parks are expected to become hubs of skilled employment in the MedTech sector. Monitoring the number of jobs generated helps assess the scheme's impact on local economies, skill development, and youth employment. This indicator also aligns with national goals such as "Make in India" and "Skill India," fostering inclusive growth and regional development.

Reduction in Cost of Diagnostic/Therapeutic Devices

One of the challenges in India's healthcare ecosystem is the high cost of diagnostic and therapeutic equipment, which contributes to overall treatment expenses. By encouraging domestic manufacturing and reducing import dependency, the scheme is expected to drive down costs through competitive pricing, reduced logistics expenses, and tax advantages for Indian-made products.

The outcome will be tracked by measuring the percentage decrease in prices of key medical devices over time. Affordable devices will increase access to essential diagnostics and treatments, especially in rural and underserved areas. Cost reduction will also benefit public healthcare programs by enabling larger-scale procurement and distribution of essential devices.

Revenue Generated from Park Operations

The financial sustainability of the medical device parks is another crucial indicator of the scheme's success. As industrial units become operational, revenue is expected to be generated from land lease, utility services, testing and calibration facility usage, and park maintenance fees. This revenue supports the long-term operational viability of the parks without ongoing government subsidies.

The total revenue generated annually, measured in rupees, will reflect the level of commercial activity and utilisation of shared facilities. A positive revenue trend will also attract further investment and indicate that the park has become self-sustaining, fulfilling its role as a growth engine for the MedTech industry.

Number of Certifications/Quality Standards Achieved by Park Units

Medical devices require strict adherence to national and international quality standards to ensure patient safety and enable global market access. The scheme supports units in achieving certifications such as ISO 13485, CE marking, and US FDA approvals by providing infrastructure like compliant manufacturing zones and testing labs.

Tracking the number of certifications obtained by units within each park helps measure the quality and competitiveness of the products manufactured. This, in turn, enhances trust among domestic buyers and opens up export opportunities. A higher number of certified units also reflects the park's effectiveness in supporting regulatory preparedness and global integration.

Collaborations with R&D Institutions and Academia

Fostering innovation is a long-term objective of the medical device parks. Collaborations with research institutions, universities, and medical colleges are essential to drive product development, clinical validation, and technology transfer. These partnerships can also support student training, skill development, and incubation of start-ups.

The number of such collaborations serves as an indicator of the ecosystem's vibrancy and knowledge intensity. It reflects the park's ability to go beyond manufacturing and become a centre for research-led growth in the MedTech sector. Strong academic-industry ties will ensure a steady pipeline of innovations, keeping the Indian medical device industry globally competitive and technologically advanced.

ATMZ VISHAKHPATNAM: A CASE STUDY

OVERVIEW & GENESIS

The Andhra Pradesh MedTech Zone (AMTZ) was conceptualised between 2016 and 2018 as India's first fully integrated medical technology park. Spread over 270 acres in Visakhapatnam, AMTZ was developed in two phases, with Phase I having an investment of ₹450 crore and Phase II ₹110 crore.

The park was envisioned as a one-stop ecosystem to promote self-reliance in medical device manufacturing by offering shared scientific and industrial infrastructure. AMTZ's vision was to reduce India's dependency on medical imports and to establish a globally competitive MedTech manufacturing base. It houses prominent anchor institutions such as the Kalam Institute of Health Technology (KIHT), MediValley and BioValley incubators, and has been designated a WHO Collaborating Centre, underlining its international relevance.

ROBUST INFRASTRUCTURE & FACILITIES

AMTZ distinguishes itself through a wide array of Common Scientific Facilities (CSFs) and Common Manufacturing Facilities (CMFs). The park is equipped with advanced infrastructure, including Electromagnetic Compatibility (EMC)/Electromagnetic Interference (EMI) testing labs, biomaterial testing labs, MRI coil production units, gamma irradiation units, and industrial-scale 3D printing facilities. Notably, it also includes a 3D bioprinting lab for artificial organ fabrication, developed in collaboration with the University of Wollongong. Through a partnership with TUV Rheinland, AMTZ has established dedicated EMI/EMC and safety testing hubs with a PPP investment of around ₹85 crore, helping manufacturers obtain global certifications.

RAPID COVID-19 RESPONSE

AMTZ proved its strategic importance during the COVID-19 pandemic by responding with unmatched speed and efficiency. Leveraging its facilities and ecosystem, AMTZ ramped up production to deliver over 60,000 ventilators, 15 million RT-PCR kits, and 100 million N95 masks. This achievement highlighted its capability to support high-complexity and high-volume manufacturing in emergency conditions, establishing it as a model of national resilience in health infrastructure.

INTEGRATED INNOVATION & STARTUP ECOSYSTEM

To nurture early-stage innovation, AMTZ has developed a thriving ecosystem for startups. The Forge Accelerator and Academy, launched in April 2025, offers prototyping labs, training programs, and seed funding. Additionally, incubators like BioValley and MediValley offer tailored support for product development, regulatory guidance, and market entry. These institutions create a structured

support network for startups to progress from ideation to commercialisation, fostering indigenous innovation and entrepreneurship in the MedTech space.

INTERNATIONAL COLLABORATIONS & EXPORT FOCUS

AMTZ has forged several international collaborations, including with the University of Wollongong for 3D bioprinting research and with FORGE Innovation for scaling up MedTech startups. The establishment of the Puma World Trade Center within the zone further facilitates global trade and market access. AMTZ-based companies now export to over 80 countries, reflecting the zone's growing role in the global MedTech supply chain.

INSTITUTIONAL & FINANCIAL LEVERS

A unique feature of AMTZ is the presence of KIHT, which serves as the central hub for R&D, intellectual property support, regulatory facilitation, and trade intelligence. Through this and other mechanisms, AMTZ has created financial pathways for startups by securing access to blended finance, venture capital, and public-private partnerships. This financial ecosystem ensures that early-stage MedTech ventures are not only technically supported but also economically viable and bankable.

INNOVATION CLUSTERING & LOCAL ECOSYSTEM

AMTZ anchors the broader Vizag Science and Technology Cluster, which was recognised as one of India's eight national innovation hubs in 2024–25. It supports a broad spectrum of innovation, ranging from pacemaker component design to circular economy initiatives like 'e-yantram 'for e-waste recycling. This clustering approach helps foster interdisciplinary collaboration and leverages local capabilities to generate holistic growth and sustainability in the region.

KEY LESSONS & BEST PRACTICES

Several replicable best practices drive AMTZ's success. First, its single-window governance, backed by visionary leadership (notably Dr. Jitendra Sharma), ensures operational agility and coordination. Second, the shared infrastructure model—offering everything from sterilisation to testing within a single zone—significantly lowers entry barriers for new players. Third, the emergency production model during COVID-19 illustrates its resilience and manufacturing readiness. Fourth, its robust startup support framework, including accelerators and incubators, enables continuous innovation. Fifth, the park's strong global orientation through standards alignment and trade facilitation has opened up international markets. Finally, the integration of R&D via KIHT ensures that the zone contributes not just to manufacturing but to technology development and policy shaping.

CONCLUSION & REPLICABILITY

The Medical Device Parks in Greater Noida (Uttar Pradesh), Ujjain (Madhya Pradesh), and Kanchipuram (Tamil Nadu) have already drawn valuable lessons from the success of AMTZ (Andhra Pradesh MedTech Zone) and have begun implementing several of its proven strategies.
These parks must continue to evolve by learning from successful models like AMTZ, adopting global best practices, and tailoring them to their unique regional contexts. This ongoing alignment will ensure that India builds a network of world-class MedTech manufacturing ecosystems, positioning the nation as a global leader in affordable, high-quality medical devices.

LESSONS TO BE LEARNED FROM THE CASE STUDY

1. INTEGRATED INFRASTRUCTURE MODEL

Feature	AMTZ Approach	Implementation Guide
Land Use Planning	270-acre fully integrated park with zoning for R&D, manufacturing, incubation, and admin	Minimum 100 acres with dedicated zones for CIFs, R&D, warehousing, training, and startups
Common Facilities	EMC/EMI labs, MRI coil manufacturing, 3D printing, sterilization, modular clean rooms	Allocate 20–30% of total capex to shared scientific infrastructure through PPP or Viability Gap Funding.
Plug-and-Play Units	Ready-to-use modules for quick onboarding of SMEs and startups	Standardize at least 20 plug-and-play units (1000–3000 sq ft) with utilities pre-installed
Utilities	On-site power backup, water treatment, and biomedical waste management	Ensure centralized utilities through a single operating SPV

Table 4.11 Integrated infrastructure model approach and lessons

2. ADVANCED TESTING & REGULATORY ECOSYSTEM

Feature	AMTZ Strength	Implementation Guide
Testing Labs	TUV Rheinland partnership for EMC, electrical safety, biocompatibility, and CE testing	Establish BIS/ISO-compliant labs in Phase 1; onboard NABL-accredited testing partners early.
Sterilization Facility	Gamma irradiation and ETO sterilization in-house	Collaborate with BARC or private radiation tech firms; ensure DGCA, AERB compliance.
Regulatory Assistance	On-site CDSCO guidance, legal & IP services	Co-locate regulatory desks with the park admin office

Table 4.12: Advanced testing and regulatory ecosystem approach and lessons

3. STARTUP AND INNOVATION ENABLEMENT

Feature	AMTZ Strength	Recommendation for Other Parks
Incubators	MediValley, BioValley (mentoring, funding, access to prototyping)	Partner with incubators like BIRAC, SIDBI, or state startup missions
Accelerators	FORGE MedTech Accelerator for scale-ups and pilots	Invite domain accelerators (e.g., IKP, NASSCOM CoE) to set up verticals

Prototyping Labs	3D Bioprinting lab (UoW), mechanical, electronic & mechatronics prototyping	Set up modular design labs with FDM/SLA printers, CNC tools, PCB printers, and validation rigs
IP & Tech Transfer	Kalam Institute of Health Tech (KIHT) facilitates IP, licensing & tech transfer	Build a patent cell with DRDO, DST, CSIR support

Table 4.13: Startup and innovation enablement approach and lessons

4. GLOBAL ORIENTATION & EXPORT READINESS

Feature	AMTZ Implementation	Replication Plan
Global Market Linkages	Puma World Trade Centre at AMTZ; export to 80+ countries	Facilitate market access programs through Pharmexcil, EPCMD, EEPC, MoCI, and WHO PQ support
Certifications Support	Assistance with CE, ISO 13485, FDA filings	Co-locate CE/FDA pre-audit advisory desks within the park
Trade Events	AMTZ hosts MedTech summits, buyer-seller meets	Schedule 1–2 national/internatio nal expos annually in park premises

Table 4.14: Global orientation & export readiness approach and lessons

5. SKILL DEVELOPMENT & ACADEMIA CONNECT

Feature	AMTZ Strength	Toolkit
Training Academy	In-house biomedical tech skilling academy with IITs and DRDO	Set up partnerships with AIIMS/IITs/NITs for tech-based fellowships
Curriculum	MedTech-focused modules in design, QA, regulation, and bioengineering	Offer AICTE-certified MedTech diplomas/ certificates on site
Workforce	Over 3,500 trained professionals deployed across AMTZ tenants	Target training 5,000 technicians/operators per park via NSDC or Skill India

Table 4.15: Skill development & academia connect approach and lessons

6. GOVERNANCE, SPEED & FUNDING

Feature	AMTZ Strength	Actionable Steps
SPV Structure	Special Purpose Vehicle (SPV) with state and industry leadership	Establish independent park-level SPV chaired by industry reps and state officials
Approvals	Single-window clearance with digitized process	Provide online investor dashboard with APIs linked to state clearance portals
Financing	PPP model, direct state subsidy + infrastructure funding (~₹450 cr)	Blend central grants (₹100 cr cap) with NABARD, SIDBI, or DFI-based term loans

Table 4.16: Governance, speed & funding approach and lessons

CHAPTER 05: ANALYSIS, OBSERVATIONS, AND RECOMMENDATIONS

Assessment of the Greater Noida Medical Device Park Based on Stakeholder Interview Framework

SECTION A: BACKGROUND AND MOTIVATION

The stakeholders interviewed at the Greater Noida Medical Device Park represent a mix of scale-up companies and established domestic manufacturers keen to access advanced R&D facilities. Their primary motivation for entering the park stems from the opportunity to reduce both capital and operational costs, thanks to the backing of central and state governments. The strategic location within the National Capital Region (NCR)—close to Delhi, AIIMS, upcoming Noida International Airport, major logistics hubs, and a dense healthcare ecosystem—further enhances the park's appeal. Key attractive features include shared Common Infrastructure Facilities (CIFs) for testing and sterilisation, long-term (99-year) land leases at competitive rates, and simplified regulatory processes. Additionally, several incentives under the UP Medical Devices Policy, such as electricity duty waivers and capital subsidies, further incentives participation.

SECTION B: EXPERIENCE WITHIN THE PARK

Though most units are still under construction, companies have expressed satisfaction with the quality and planning of CIFs. There have been some delays reported in plot demarcation and the development of basic infrastructure, including internal roads and the commissioning of power substations. Nevertheless, companies anticipate high utility from the planned CIFs—particularly for ETO and Gamma sterilisation, clean rooms, biocompatibility testing, and product design labs. Stakeholders expect CIFs to reduce production and testing costs by 25–40%, which is particularly beneficial for MSMEs and startups. The park's location offers a significant logistical advantage, with proximity to IGI Airport, and the upcoming Noida International Airport in close vicinity, leading

hospitals, and raw material suppliers in Bawana and Manesar, making it highly conducive for just-in-time manufacturing and distribution.

SECTION C: NEEDS AND REQUIREMENTS

Stakeholders identified several immediate and long-term infrastructural needs. Essential utilities like stable electricity, water supply, waste treatment, and broadband connectivity remain inconsistent, which could affect early-stage operations. A major gap flagged by small manufacturers is the lack of ready-to-use plug-and-play facilities and the absence of on-site regulatory handholding. There is a strong demand for support in skill development, particularly in areas such as biomedical engineering, cleanroom operations, and quality compliance. Companies also suggested that co-located services—such as a design and prototyping centre, medical device-specific incubation spaces, and a CDSCO advisory cell—would make the park more self-sufficient. Several respondents referenced AMTZ's KIHT model as a benchmark for regulatory and R&D support.

SECTION D: CHALLENGES AND BARRIERS

Despite the positive outlook, stakeholders have faced challenges, particularly in the application and allotment phases in the initial stages. Plot sizes and zoning adjustments created some confusion, leading to delays in handover. The synchronization of infrastructure delivery—especially for internal roads, sewage treatment plants (STPs), and power—remains incomplete in certain areas. On the regulatory front, the absence of a single-window clearance system and the lack of a local facilitation centre for approvals such as environmental and fire NOCs have caused procedural delays. Talent shortage is another bottleneck, with companies struggling to hire biomedical engineers and technicians for cleanroom and testing operations. Stakeholders recommended collaboration with Skill India, NSDC, and local polytechnics to set up dedicated training centres within the park.

The development of Common Infrastructure Facilities (CIF) in Medical Device Parks is locked in a circular dependency, stalling progress. On the one hand, state implementing agencies hesitate to invest heavily in specialized machinery without assured demand from industry. On the other hand, medical device manufacturers are reluctant to set up units in parks lacking ready-to-use, high-end testing and prototyping facilities. Similarly, hiring a qualified operator before the machinery is in place poses a challenge, as operators often bring their technical preferences and specifications—yet procuring equipment without operator input risks underutilization or misalignment with industry needs. This conundrum raises critical questions about the sequencing of infrastructure development. Further complicating matters is the absence of a sustainable revenue model: should the park operate on a pay-per-use basis, fixed lease rentals, or public-private partnerships? Resolving these interdependencies requires a phased, demand-linked approach backed by flexible procurement strategies, early industry engagement, and revenue models tailored to attract anchor tenants while ensuring long-term financial viability.

The eligibility criteria of the MD Park restrict applicants to specified segments of Medical Devices, providing an indicative list that aligns with the PLI scheme of the DoP for Medical Devices. Further,

the applicant needs prior experience in the target segment. While we have a sizeable vacant space in the Park, there are entry barriers for manufacturers intending to set up units in the Medical Device parks. Startups or interested players with potential to set up medical device units are prevented from availing the benefits of the facilities in the MD park. There is a need to revisit the criteria and expand the scope for medical device manufacturers intending to set up viable units that target deepening the value chain in medical devices, as well as reducing import dependence on medical devices in the GTE list.

SECTION E: IMPACT AND SUGGESTIONS FOR IMPROVEMENT

Stakeholders had several suggestions to improve execution and long-term effectiveness. First and foremost, they urged acceleration in the completion of utility infrastructure and more straightforward guidelines for accessing CIFs. There is also strong demand for a centralised digital portal to manage land records, construction timelines, vendor networks, and CIF booking. Startups, in particular, expressed the need for small (1000–3000 sq. ft) pre-built modules to enable faster occupancy. Additionally, respondents advocated for digital tools such as a project status dashboard, regulatory update alerts, and a directory of approved service providers to enhance transparency and operational efficiency.

SECTION F: STRATEGIC VISION

Looking ahead, companies see the park as playing a pivotal role in India's self-reliance in the production of low- and mid-end medical devices like syringes, diagnostics, and monitors. While most participants would recommend the park to domestic companies, they felt it may not yet be ready to host foreign MNCs due to the lack of globally certified testing and regulatory support. The five-year vision includes moving toward vertical integration, export readiness, and establishing in-house R&D capabilities. Many stakeholders are targeting certifications such as ISO 13485, CE, and USFDA to boost exports. There is a clear aspiration for Greater Noida to emulate AMTZ's infrastructure-sharing model and build global linkages similar to innovation hubs like Suzhou, China.

OVERALL SATISFACTION

In conclusion, stakeholders are optimistic about the long-term benefits of the park—especially the cost-saving potential of CIFs and the location advantages of being in NCR. However, short-term concerns persist around infrastructure delays and the absence of park-level training and regulatory facilitation services. The prevailing expectation is for the park authorities to take a more proactive stance in resolving these issues, enhancing plug-and-play infrastructure, and supporting startup-scale operations with faster approvals and digital solutions.

Theme	Observation

CIF Infrastructure	Constructed and appreciated, but booking & commissioning guidelines unclear
Land Allotment	Completed, but construction support and utilities were delayed.
Regulatory Support	Lacking—need for a park-level helpdesk and policy clarity.
Talent & Skills	Skilled labor deficit; high demand for park-based skilling
Operational Readiness	6–12 months needed for the park to be fully operational
Strategic Edge	High export, logistics, and innovation potential

Table 5.1: Observations of Greater Noida MDP

Assessment of the Kanchipuram Medical Device Park Based on Stakeholder Interviews

SECTION A: BACKGROUND AND MOTIVATION

Stakeholders at the Kanchipuram Medical Device Park include a diverse mix of mid-sized domestic manufacturers, global component suppliers, and emerging startups in fields such as diagnostics, surgical implants, and electronic medical devices. Their decision to set up operations in the park was primarily motivated by its proximity to Chennai's thriving MedTech and electronics manufacturing ecosystem, including Special Economic Zones (SEZs), premier research institutions, and a robust supply chain network. Tamil Nadu's progressive Medical Devices Policy also played a significant role, offering capital subsidies, land cost reductions, tax waivers, and additional infrastructure support. The park's strategic location near the Chennai Port and EMS (Electronic Manufacturing Services) clusters, along with the promise of fully equipped Common Infrastructure Facilities (CIFs) and fast-track regulatory clearances, stood out as major pull factors. Financial incentives such as certification reimbursements (for ISO, CE, USFDA), a 30% capital subsidy, interest support, and subsidised land leasing added to the park's appeal.

SECTION B: EXPERIENCE WITHIN THE PARK

Companies reported generally positive experiences with Tamil Nadu's implementing agency—SIPCOT—particularly about coordination, land allotment, and infrastructure rollout. Most land transfers and utilities, such as power and water, were completed promptly. While the CIFs are not yet fully operational, companies are hopeful about accessing facilities such as ETO sterilisation, cleanrooms, calibration labs, and material testing units soon. These CIFs are expected to significantly reduce R&D, validation, and regulatory compliance costs by 30–40%, mainly benefiting startups and export-oriented units. The park's location near Chennai provides substantial advantages in terms of

access to international ports, hospitals, suppliers, and talent. Compared to inland parks, Kanchipuram offers superior logistics, stronger vendor support, and quicker access to both domestic and global supply chains.

SECTION C: NEEDS AND REQUIREMENTS

Despite the early success, stakeholders identified several operational requirements and existing gaps. There is a need for specialised infrastructure, including cold storage for temperature-sensitive products, an effluent treatment plant (ETP), and reliable high-speed broadband. Warehousing capacity—particularly for export and import logistics—is inadequate. Even with the presence of academic institutions, companies expressed concerns about a shortage of skilled biomedical engineers and technicians. Stakeholders emphasised the need for on-site skill development centres tailored to MedTech manufacturing and regulatory roles. In addition, they expressed a strong interest in co-located renters such as embedded design labs, accelerators, and R&D hubs modelled on AMTZ's KIHT. Partnerships with IIT Madras and Anna University were specifically recommended to drive innovation, technology transfer, and prototype testing.

SECTION D: CHALLENGES AND BARRIERS

The application and onboarding processes, largely digitised by SIPCOT, were generally smooth. However, some companies faced confusion regarding CIF access fees and clarity on incentive structures. There were minor delays in CIF equipment commissioning and incomplete internal roadwork and signage in some regions of the park. Regulatory procedures remain a challenge; companies strongly urged the establishment of a functioning single-window system for licensing and environmental compliance. On the labor side, while Tamil Nadu has a strong academic base, there is a skills gap when it comes to operating cleanrooms and biomedical equipment. To address this, stakeholders recommended MedTech-aligned training programs through the Tamil Nadu Skill Development Corporation (TNSDC).

Stakeholders at the SIPCOT Medical Device Park in Oragadam reported a significant regulatory hurdle impacting licensed manufacturers of Class A and B medical devices. Upon shifting their units to the park, these manufacturers are required to shut down existing operations and obtain fresh approvals and licenses from the Central Drugs Standard Control Organization (CDSCO). This reapproval process typically takes 8 to 9 months, resulting in prolonged disruptions to production, substantial business losses, and cash flow challenges—especially for MSMEs operating on tight margins. Stakeholders emphasized that such procedural delays undermine the very objective of the park, which is to accelerate the growth of the domestic medical device sector. They have strongly requested regulatory authorities to streamline and fast-track the reapproval process for units relocating within designated medical device parks, particularly for MSMEs, through mechanisms such as provisional continuity of operations, parallel processing, and fastening the application approval process, or a simplified revalidation route.

SECTION E: IMPACT AND SUGGESTIONS FOR IMPROVEMENT

To maximise the park's impact, stakeholders recommended making CIFs accessible on an hourly or subscription basis, especially for early-stage ventures. There is also a strong demand for a digital dashboard that can provide real-time updates on construction, CIF bookings, and approval status. The need for pre-built plug-and-play units was highlighted, particularly for startups interested in light assembly, prototyping, or lab operations. Additional infrastructure enhancements, such as cold-chain logistics, bonded warehousing, and in-park compliance services, would significantly improve the park's export readiness. A dedicated investor portal for tracking documents, accessing regulatory updates, and booking CIFs was suggested as a critical digital tool for operational ease.

SECTION F: STRATEGIC VISION

Stakeholders strongly believe the Kanchipuram park can play a pivotal role in advancing India's self-reliance in key MedTech categories such as diagnostics, surgical disposables, and implants. The scheme was widely recommended for Tamil Nadu-based SMEs and component manufacturers, especially those looking to expand into export-grade production. In their five-year vision, companies aim to achieve global certifications such as ISO 13485, CE, and USFDA with the support of CIFs and state-led facilitation. Many expressed interest in engaging in clinical trials, building in-house R&D capabilities, and forging public-private research collaborations. Benchmarks suggested for the park's evolution include AMTZ's centralised regulatory ecosystem and Penang's integrated design-to-manufacturing model. Strategic partnership with IIT Madras and Anna University was highlighted as essential for nurturing IP, commercialising technologies, and accessing doctoral talent.

OVERALL SATISFACTION

Overall, the Kanchipuram Medical Device Park enjoys strong support from industry players. Stakeholders praised its strategic location, supportive policy framework, and proactive state agencies. The region's strong industrial base and proximity to academic institutions present a unique opportunity to create a world-class MedTech manufacturing ecosystem. However, concerns remain regarding the slow commissioning of CIFs, skill development gaps, and limited startup incubation infrastructure. The need for regulatory support and faster roll-out of services was emphasized. Stakeholders also expect more targeted initiatives such as skill centres, certification assistance, early-stage funding pools, and patent support units for startups.

Theme	Observation
Infrastructure	CIFs in progress; roads and services partially complete
Land Allotment	Completed with active investor participation
Operational Readiness	6–12 months to full-scale activity

Regulatory Support	Required: Request for CDSCO and Pollution Clearance Cell.
Skilled Workforce	Strong academic base, but industry-ready talent lacking
Strategic Advantage	Excellent logistics, EMS cluster access, and IIT ecosystem
Ecosystem Needs	Accelerators, certification labs, IP support, design labs

Table 5.2: Observations of Kanchipuram MDP

Assessment of the Ujjain Medical Device Park Based on Stakeholder Interviews

SECTION A: BACKGROUND AND MOTIVATION

The Ujjain Medical Device Park has primarily attracted MSMEs and mid-scale domestic manufacturers. Compared to other parks, there are relatively fewer startups, indicating that the park currently appeals more to established entities seeking to expand manufacturing closer to the central Indian market. Companies cited the affordability of operations and proximity to underserved regions of Western, Northern, and Central India as key reasons for joining. The state's industrial policy—featuring land subsidies and capital incentives—was noted as a strong motivating factor. However, stakeholders felt that more awareness was needed to capitalize on these incentives fully. The low cost of land entry and central geographic advantage made Ujjain a preferred destination for manufacturers aiming for cost-efficient production. The government's promise of single-window clearance was positively acknowledged, though its implementation was still in early stages.

SECTION B: EXPERIENCE WITHIN THE PARK

Most companies are still in the preparatory or construction phase, and hence have had limited operational experience within the park. Nonetheless, stakeholders expressed cautious optimism. The Common Infrastructure Facilities (CIFs), although still under construction, were anticipated to be useful for services like sterilization, packaging, and low-volume testing. These facilities are expected to reduce initial capital investments by 30–35%, mainly benefiting smaller manufacturers and those transitioning from Tier II cities. Many companies plan to eventually shift their operations entirely to Ujjain to take advantage of the lower costs. The location is viewed as logistically promising due to its proximity to Indore and future integration with the Delhi-Mumbai Industrial Corridor (DMIC). However, current logistics remain a hurdle, with stakeholders pointing out a lack of cargo handling, customs, and cold-chain support in the immediate vicinity.

SECTION C: NEEDS AND REQUIREMENTS

Stakeholders highlighted several infrastructure and operational gaps. Internal roads, electricity infrastructure, and water pipelines were reported as incomplete, delaying site mobilisation. Basic on-site amenities such as canteens and accommodation for early workers were also absent. A major concern was the lack of a central contact point or park office for resolving operational queries and tracking progress. Investors requested more proactive communication from the implementing agency, including milestone updates and site readiness reports. There was a strong need for skill development programs focused on device assembly, clean room usage, and testing calibration. Additionally, companies recommended subsidies for certification costs and testing equipment. Stakeholders expressed keen interest in having design labs, CDSCO liaison cells, and regulatory support centers within the park to improve ease of doing business and speed up certification processes.

SECTION D: CHALLENGES AND BARRIERS

Administrative and regulatory hurdles remain significant. Early applicants experienced delays due to confusion around land allotment criteria and changing communication protocols. Infrastructure handover issues were also common, with companies unsure of when CIFs would be ready or when electricity connections would become operational. There was a lack of a transparent system for tracking utilities and construction status. Regulatory support was absent on the ground; stakeholders reported no help available for obtaining environmental clearances or factory licenses. The park also lacked a digital interface or dashboard where companies could track compliance status. Labor availability emerged as another key barrier. Ujjain has a limited talent pool skilled in biomedical device production. Stakeholders recommended partnerships with nearby institutions like ITI Indore, the National Skill Development Corporation (NSDC), and Skill India to build a steady workforce for the park.

SECTION E: IMPACT AND SUGGESTIONS FOR IMPROVEMENT

To improve the park's functioning and attractiveness, stakeholders emphasised the need for better coordination between the Madhya Pradesh Industrial Development Corporation (MPIDC) and the park's operational team. A simplified and transparent CIF access policy—including clear fee structures, booking methods, and usage guidelines—was strongly recommended. There was also a demand for plug-and-play units in the range of 5,000–10,000 sq ft, particularly for early-stage firms and pilot manufacturing. A leasing model with an option to purchase land later was suggested to reduce the upfront financial burden. In terms of digital infrastructure, companies requested a comprehensive investor portal for land status tracking, construction approvals, CIF scheduling, and grievance redressal. The addition of an interactive GIS-based map was proposed to improve clarity on plot boundaries, utility locations, and facility development timelines.

SECTION F: STRATEGIC VISION

Most stakeholders believe that the Ujjain Medical Device Park has the potential to significantly boost India's self-reliance in Tier 2 and Tier 3 medical devices such as IV sets, PPE kits, diagnostic strips, and tubing. However, advanced medical technologies requiring R&D ecosystems—such as imaging equipment—were viewed as out of scope unless additional research infrastructure is developed. Stakeholders strongly support the continuation of the scheme, particularly for cost-sensitive MSMEs. While export potential remains limited in the short term, several companies intend to target emerging markets in Africa and Southeast Asia once CIFs and regulatory supports become operational. The five-year vision includes vertical integration within the park—combining assembly, packaging, and quality control under one roof. Parks like AMTZ and Penang Science Park were cited as benchmarks, particularly for their incubator ecosystems, shared facilities, and streamlined regulatory frameworks.

OVERALL SATISFACTION

Overall, stakeholders view the Ujjain Medical Device Park positively in terms of cost efficiency and geographic location. However, significant concerns remain around the pace of infrastructure development, the shortage of skilled labor, and the lack of regulatory facilitation. Stakeholders are hopeful that with greater government engagement, improved communication, and faster CIF deployment, the park can become a hub for cost-effective medical device manufacturing. There is a strong expectation for startup support, regular investor updates, and a visible governance mechanism to oversee the park's development and ease its transition into an operational manufacturing cluster.

Theme	Observation
Infrastructure	CIFs under construction; internal infra behind schedule
Land Allotment	Completed, but utilities (electricity/water) are delayed.
Operational Readiness	12–18 months to full setup
Regulatory Support	Absent, companies need clear licensing and certification help.
Skilled Workforce	Limited local talent; needs investment in skilling pipeline
Strategic Advantage	Central India location; attractive for Tier 2–3 device firms
Ecosystem Needs	R&D labs, design accelerators, and certification units needed

Table 5.3: Observation table of Ujjain MDP

The SPMDP has infrastructure potential, but the implementation needs to be expedited. There is a need for leveraging ecosystems being developed through the proactive role of SIAs in promoting and managing the Parks. Eligibility criteria for setting up units in the Parks need to be flexible to attract potential players, and processes need to be time-bound and transparent.

Strategies to Promote Medical Device Parks Globally and Attract Foreign Direct Investment (FDI)

To attract global interest and foreign direct investment (FDI) in India's Medical Device Parks, the first and foremost strategy should focus on strong international branding and positioning. The parks need to be promoted as globally competitive zones offering world-class infrastructure, skilled workforce, regulatory facilitation, and cost advantages. India should create a dedicated branding campaign, similar to "Incredible India" or "Digital India," to position these parks as ideal investment destinations for global medical device manufacturers and innovators. Participating in international expos, conferences, and roadshows under a unified India MedTech Park branding can help create visibility and credibility among potential investors.

Figure 5.1: SIPCOT participated in the MED TECH Conference in August 2023

Second, bilateral and multilateral trade and investment agreements should be leveraged to attract FDI. Government agencies, such as Invest India and Indian embassies abroad, can play a critical role in targeting countries with strong medical device sectors like the USA, Germany, Japan, and South Korea. Strategic outreach to global OEMs (Original Equipment Manufacturers), component suppliers, and medtech startups can be done through structured investment summits. Joint ventures and technology-transfer agreements can be promoted through diplomatic channels, offering foreign players a local partner and smoother market entry.

Figure 5.2: SIPCOT participated in the Swiss Biotech Event in April 2023

Third, India should offer tailored fiscal and non-fiscal incentives to foreign investors setting up units in these parks. These may include tax holidays, customs duty exemptions, R&D grants, single-window clearances, and faster patent protection. The parks should be included in special economic zones (SEZs) or given similar status to allow 100% FDI under automatic routes, along with repatriation benefits. A dedicated "FDI Facilitation Cell" for each park can help investors with legal, regulatory, and operational support.

Fourth, India should build and showcase success stories and case studies of global firms operating successfully in Indian medical device parks. Highlighting collaborations, innovations, and exports from existing parks like AMTZ can build investor confidence. Digital and physical infrastructure, including plug-and-play facilities, testing labs, skill centers, and regulatory support systems, should be demonstrated through immersive promotional content, virtual tours, and live webinars with current tenants and park authorities.

Lastly, promoting synergistic value chains and ecosystem partnerships will be critical. Global investors look for not just factories, but thriving ecosystems of suppliers, researchers, designers, and logistics. Establishing linkages with universities, hospitals, R&D labs, and global medtech clusters can create a collaborative environment attractive to multinational firms. Promoting India as an innovation-led, cost-efficient, and scalable destination for medtech manufacturing will position the parks as vital links in the global healthcare value chain.

Recommendations

EFFECTIVE UTILISATION OF CIFS

For the effective utilization of Common Infrastructure Facilities (CIF) in Medical Device Parks, the following recommendations are proposed for the Government:

1. **Adopt a Phased, Demand-Responsive CIF Development Strategy:** Government agencies take the risk and initially invest in modular, scalable infrastructure based on preliminary demand assessments with the industry association and inputs from prospective industry investors. This minimizes the risk of underutilization while demonstrating commitment. The Tamil Nadu model of onboarding a professional company as an operator appears to be a solution to selecting the industry-required equipment to be purchased and installed.

2. **Facilitate Industry Anchoring through Incentivized Early Participation**: Introduce incentives such as registration fee waivers, subsidized user charges, or performance-linked grants for anchor users willing to commit in early phases. Their presence can help attract other units and validate CIF viability—revisit eligibility conditions for allotment of land in the Parks to attract potential players. Allotment procedures need to be made more transparent and time-bound.

3. **Enable Flexibility in Equipment Procurement**: Develop a hybrid model where core common machinery is procured centrally. At the same time, provision is made for co-investment or co-selection of additional equipment based on the needs and specifications of the incoming operator or cluster.

4. **Appoint Interim Operators and Engage Industry Consortia**: Engage interim third-party operators with broad capabilities and flexibility, while simultaneously encouraging the formation of industry consortia to provide collective inputs on machinery selection and facility management.

5. **Streamline Regulatory Reapprovals for Relocating Units**: Coordinate with CDSCO to introduce a fast-track or simplified reapproval mechanism for already licensed Class A and B medical device manufacturers relocating to government-approved medical parks, particularly for MSMEs.

6. **Establish a Sustainable Revenue Model**: Introduce a mixed revenue model combining pay-per-use charges, annual maintenance contributions, and leasing options. Explore viability gap funding and cross-subsidization between high-end users and MSMEs to ensure financial sustainability.

7. **Create a Centralised CIF Management Framework**: Develop standard operating protocols, performance benchmarks, and a digital dashboard to monitor CIF usage, revenue generation, and user satisfaction across all medical device parks for continual policy calibration.

   By implementing these measures, the government can break the cycle of hesitation between infrastructure creation and industrial occupancy, thereby enhancing the viability, utilization, and impact of medical device parks across India.

GOVERNANCE MODEL FOR MDPS

For effective governance of Medical Device Parks during the initial stages, it is recommended that a Special Purpose Vehicle (SPV) in PPP mode should be established, modeled on the successful governance structure of the Smart Cities Mission. This SPV should have a top-heavy composition, including a dedicated CEO, preferably a Technocrat with good experience in the medical device

sector, senior bureaucrats, and domain experts in biomedical engineering, regulatory affairs, procurement, and industrial infrastructure. Such a structure will provide the necessary leadership, technical oversight, and institutional credibility to make strategic decisions regarding vendor selection, appropriate and future-ready machinery procurement, and streamlined coordination with regulatory bodies like CDSCO, state pollution control boards, and customs authorities.
Moreover, the SPV should function as a single-window facilitation mechanism to ensure faster approvals, ease of doing business, and effective grievance redressal for incoming manufacturers. It should also include advisory representation from industry associations and key anchor investors to align infrastructure with real-world manufacturing needs. This empowered governance structure will enable the Medical Device Parks to overcome early-stage implementation bottlenecks, foster investor confidence, and ensure that the Common Infrastructure Facilities (CIF) are optimally designed, utilized, and maintained.

ESTABLISHING ON-SITE CERTIFICATION BODIES WITHIN MEDICAL DEVICE PARKS

A critical enabler for the success of Medical Device Parks is the **integration of on-site certification bodies** that facilitate seamless regulatory compliance for manufacturers. Certification is a vital and often complex component of the medical device production cycle, requiring adherence to national and international standards such as **ISO 13485, CE Marking, USFDA approvals, BIS certifications**, and other safety and quality protocols. However, the absence of proximate certification agencies often leads to **delays, increased costs, and logistical challenges** for manufacturers, especially for MSMEs and startups.
To address this, it is recommended that a **dedicated space within every Medical Device Park be earmarked for certification bodies and regulatory service providers**. These facilities will act as **on-site regulatory facilitation centers**, offering end-to-end support for documentation, quality management system (QMS) audits, product testing, and certification advisory services.
DoP may consider further strengthening the medical device ecosystem in existing parks by providing additional CIF for future needs, such as AI labs, testing facilities, and financial support for international certification of testing facilities and product certification by manufacturers based in MDPs.

Purpose and Importance

- **Accelerating Time-to-Market:** Having certification bodies within the park will drastically reduce the time required to obtain necessary regulatory clearances, enabling faster commercialization.
- **Reducing Compliance Costs:** By offering subsidized and shared services for documentation, audits, and inspections, especially for small manufacturers.
- **Enhancing Export Readiness:** On-site agencies can assist manufacturers in preparing for **global market certifications** (USFDA, CE MDR, WHO prequalification), which is crucial for India's export ambitions.

Building Trust and Quality Culture: Immediate access to auditors and compliance experts ensures higher quality standards and reduces risks of rejections or recalls.

UTILISATION OF RAPID PROTOTYPING IN MEDICAL DEVICE PARKS: ACCELERATING INNOVATION AND INDUSTRY READINESS

Integrating **Rapid Prototyping Facilities** within Medical Device Parks is a transformative enabler for **fostering innovation, reducing time-to-market, and ensuring product designs meet global industry standards**. Medical device development, traditionally a time-consuming and resource-intensive process, can benefit immensely from in-park rapid prototyping centers, where ideas can be translated into functional prototypes within days instead of months.

Purpose and Strategic Importance

Rapid prototyping enables medical device manufacturers—especially startups and MSMEs—to quickly iterate their designs, test functionalities, and address clinical feedback before scaling up to production. These facilities enable companies to create precise physical models of implants, surgical instruments, diagnostic devices, wearable tech, and IoMT components using advanced techniques such as **3D printing (plastic, metal, biocompatible materials), CNC machining, and soft tooling**. By facilitating early validation, rapid prototyping:

- Reduces design flaws and costly rework during mass manufacturing.
- Enhances collaboration between designers, engineers, and clinicians.
- Accelerates **regulatory documentation and usability testing**, making it easier to align with ISO 13485, CE, and USFDA requirements.
- Supports the **clinical simulation of devices**, improving patient safety and device efficacy from the conceptual stage.

STRENGTHENING THE R&D ECOSYSTEM WITHIN MEDICAL DEVICE PARKS

To position India as a global hub for medical technology, medical device parks must foster a robust research and development (R&D) environment tailored for innovation-driven companies. Currently, while the parks offer common infrastructure facilities for manufacturing and testing, the ecosystem remains underdeveloped in terms of dedicated R&D infrastructure, innovation grants, and collaborative platforms. It is recommended that each park establish a dedicated R&D zone with plug-and-play labs, rapid prototyping centers, and shared high-end equipment for design, simulation, and testing of novel devices. Additionally, formal collaboration frameworks should be created with academic institutions, national research labs, and medical colleges to enable joint research, clinical validation, and technology transfer. A dedicated fund for R&D-focused companies, especially start-ups, and SMEs, should be launched to subsidize product development, patenting, and trials. Regulatory support units within the parks should also assist innovators in navigating complex certification pathways for new technologies. By nurturing a vibrant R&D environment, medical device parks can go beyond contract manufacturing and become engines of innovation, capable of producing globally competitive, high-impact healthcare solutions.

C-CAMP COLLABORATION IN MEDICAL DEVICE PARKS

The Centre for Cellular and Molecular Platforms (C-CAMP), an initiative supported by the Department of Biotechnology (DBT), Government of India, plays a pivotal role in promoting innovation and research in the life sciences and biotechnology sectors. Its intervention in **Medical Device Parks** across India is envisioned as a transformative step to bridge the gap between ideation and commercialization, especially in the high-impact domain of **MedTech research, development, and translation**.

C-CAMP can facilitate the **setting up of dedicated R&D cells or co-incubation centers** within these parks to help early-stage startups and MSMEs working on innovative diagnostic, therapeutic, or assistive technologies. These centers could offer access to **state-of-the-art labs, mentorship programs, clinical collaborations, IP management services**, and assistance in product validation and certification (CE, USFDA, ISO 13485).

Furthermore, C-CAMP can act as a **national-level partner** to manage innovation calls, scout promising technologies, and connect medical device park units with its **pan-India network of scientists, clinicians, investors, and regulatory experts**. Through its existing programs, such as the **BIG (Biotechnology Ignition Grant), MedTech Rapid Prototyping support, and global fellowships**, it can create pathways for innovation-driven enterprises to scale quickly from proof-of-concept to market-ready devices.

ENABLING HIGH-END MEDICAL DEVICE DEVELOPMENT AND A GLOBALLY COMPETITIVE ECOSYSTEM

To truly elevate India's position in the global medical devices industry, the focus of medical device parks must shift beyond low-cost manufacturing and assembly toward supporting high-end, full-cycle development and production of complex medical technologies. This includes advanced imaging systems, robotic surgical tools, implantable devices, molecular diagnostics, and AI-integrated platforms. The parks must be equipped with cleanrooms, precision engineering facilities, advanced material testing labs, and regulatory compliance centres tailored to support such high-value innovations. Additionally, global quality benchmarking—such as ISO 13485, USFDA, and CE certifications—must be embedded into the park's compliance infrastructure. It is critical to attract anchor tenants, including multinational corporations and large Indian MedTech players, by offering them a globally aligned policy environment, export facilitation support, and integration with international supply chains. Establishing direct channels with international standards bodies, global research institutions, and export promotion agencies will help create a seamless bridge from India's MedTech innovation to global markets. Building a complete ecosystem that supports ideation to global deployment—through R&D, prototyping, clinical trials, certifications, manufacturing, and export—will be key to transforming medical device parks into hubs of high-end technological excellence and global competitiveness.

PROMOTING INTER-STATE LEARNING AND EXCHANGE WITH AMTZ

The Andhra Pradesh MedTech Zone (AMTZ) has proven to be a highly successful medical device manufacturing cluster, and its success should be replicated nationwide. Its integrated infrastructure, policy support, startup ecosystem, and public-private collaboration provide a ready-made template

for other parks. A blueprint based on AMTZ's design—modular layouts, CIF units, prototyping labs, and in-house certification centres—can streamline new park development. By learning from AMTZ's challenges and achievements, future parks can avoid pitfalls and accelerate time-to-market. Encouraging similar clusters across India based on AMTZ's model can foster national innovation and manufacturing capacity in the medical device sector.

Inter-state collaboration is vital for shared growth. The scheme should institutionalise learning exchanges through structured workshops, site visits, and knowledge sessions with successful clusters like AMTZ. Officials from participating states can benefit from AMTZ's operational insights—land development, regulatory coordination, and startup nurturing strategies. Peer learning creates a culture of cooperation and accelerates capability-building in lagging states. These exchanges will also encourage innovation, sharing, problem-solving, and adoption of best practices. When states learn from each other, it raises the national baseline for implementation, fosters competition, and ensures that the medical device manufacturing ecosystem matures uniformly across regions.

STRENGTHENING COLLABORATION WITH ALL RELEVANT STAKEHOLDERS

Effective implementation requires better collaboration between state and central departments, utility providers, certifying agencies, and private stakeholders. An integrated platform must be established to facilitate communication, decision-making, and troubleshooting. Early-stage engagement with electricity boards, pollution control boards, and certification bodies will reduce approval delays. Bringing stakeholders into the planning and execution phases ensures alignment and faster turnaround. Joint working groups and coordination cells can streamline policy execution, resolve inter-departmental issues, and monitor project KPIs. Improved collaboration also creates ownership among stakeholders, fosters a shared vision, and enhances the overall efficiency and transparency of park operations.

FACILITATING LICENSING AND COMPLIANCE FOR FASTER ONBOARDING

Medical device parks should include dedicated facilitation centres that assist companies with licensing and compliance requirements. Navigating regulations from CDSCO, ISO, CE, and USFDA can be complex and time-consuming, especially for startups and MSMEs. By offering in-house support for documentation, certification, and application processing, parks can significantly shorten the go-to-market timeline for new products. These centres should also provide training and updates on evolving regulatory norms. Simplifying the regulatory journey boosts participation from innovators and startups, leading to faster product development cycles and higher occupancy rates within the parks.

As per current regulatory procedures, any change in premises necessitates the surrender of the existing license and submission of a fresh application. However, this requirement was not in effect when the land was purchased at SIPCOT. The now-enforced process poses significant operational, compliance, and financial risks, especially for Micro and Small Industries. Class C & D devices face no such challenge as this is supported at the state level.

SETUP OF ASCA TEST LABS

The establishment of **ASCA (Accreditation Scheme for Conformity Assessment) Test Labs** within Medical Device Parks is a critical enabler for India's ambition to become a global hub for high-quality medical device manufacturing. ASCA, an initiative by international regulatory bodies like the USFDA, facilitates faster and internationally accepted testing and validation of medical devices. By aligning with ASCA principles, Indian medical device parks can offer globally accredited, reliable, and standardized testing facilities within their infrastructure, drastically reducing time-to-market and improving export readiness.

Importance of ASCA Test Labs in the Park Ecosystem

Medical device manufacturers face long certification cycles due to the need for product testing against stringent regulatory benchmarks (ISO 13485, USFDA, CE MDR). Having **ASCA-accredited labs within the parks** allows manufacturers—especially MSMEs and startups—to conduct device testing, calibration, validation, and performance assessments locally, with results recognized by global regulators. This reduces dependency on overseas labs, cuts validation timelines by 30–40%, and lowers associated costs. Moreover, ASCA labs enhance the credibility and global acceptance of Indian-manufactured medical devices, enabling smoother export pathways.

Key Functions of ASCA Test Labs

- Biocompatibility and material testing for implants and disposables.
- Sterilization validation (ETO, Gamma, Steam sterilization) as per ISO 11135/11137.
- Electrical and mechanical safety testing (IEC 60601 standards).
- Electromagnetic Compatibility (EMC) testing.
- Clinical simulation labs for usability testing.
- Calibration and performance testing of diagnostic devices (imaging, wearables, monitors).

AI LABS SETUP IN MEDICAL DEVICE PARKS

The establishment of **AI Labs within Medical Device Parks** is a critical component for transforming India into a high-tech hub for medical innovation and future-ready healthcare solutions. These labs are envisioned as **dedicated centers for applied research, data analytics, algorithm development, and clinical validation** for AI-powered medical technologies. AI Labs can serve as **core enablers of innovation** in areas such as diagnostics, imaging, predictive analytics, remote monitoring, and robotic surgeries. For example, AI-powered tools can assist in interpreting medical imaging (X-rays, MRIs, CT scans), predicting ICU patient deterioration, automating ECG/radiology reports, and supporting real-time decision-making in critical care. Such applications have the potential to improve **clinical outcomes, reduce diagnostic errors, and lower healthcare costs**.

Core Objectives and Functions

AI Labs are not merely digital workspaces but innovation ecosystems that support:

- **Development and validation of AI/ML algorithms** in diagnostics, medical imaging, biosignal analysis (ECG, EEG), and remote monitoring.
- **Clinical data curation and annotation** in partnership with hospitals and diagnostic labs, ensuring that algorithms are trained on diverse, high-quality datasets.
- **Regulatory sandboxing** for new AI-based devices to allow real-world performance testing in compliance with CDSCO, US FDA, or EU MDR frameworks.
- **Interoperability and data standards research**, especially for integrating AI into IoMT (Internet of Medical Things) systems.

LEVERAGING SUPPORT FROM EXISTING STATE AND CENTRAL SCHEMES

The medical device parks can benefit immensely from aligning with existing state and central government schemes that offer subsidies, incentives, and skill development programs, etc. Schemes like the Modified Electronics Manufacturing Clusters (EMC 2.0), Skill India, and Startup India can be integrated into the park's operational strategy. The approved applicants under other complementary schemes of DoP, such as the Scheme for Strengthening Medical Device Industry, may also be considered for setting up units/facilities in the MDPs. States should be encouraged to provide capital subsidies, subsidised land, and concessional utilities for units within the park. Tapping into these complementary initiatives will amplify impact, reduce financial burden on new entrants, and encourage faster ecosystem growth. Seamless convergence of policies ensures holistic support and efficient fund utilisation.

ENABLING POLICY ENHANCEMENTS FOR SCHEME EFFECTIVENESS

The scheme should incorporate policy enhancements to align with global market dynamics and domestic needs. For instance, including list of medical devices under the Global Tender Enquiry (GTE) exemption may be considered under list of eligible devices for setting up units in MDPs. Many of these equipment types are essential for diagnostics, surgical prep, and monitoring in both public and private healthcare. By incorporating GTE into the scope, parks can support a more diverse range of manufacturers. It also reduces the imports and costs of essential health technologies, making the parks more attractive to a larger group of entrepreneurs. This broadens the application of the scheme and encourages greater industry participation.

Additionally, aligning policy with export strategies, patent support, and tax benefits will boost competitiveness. The policy framework should also account for AI, robotics, and digital diagnostics to reflect MedTech's evolving landscape. Enhancements must be data-driven, responsive to industry feedback, and regularly reviewed. A future-ready policy design can attract investments and accelerate India's rise as a MedTech manufacturing leader.

PHASED IMPLEMENTATION: FROM CONSTRUCTION TO OPERATIONAL GROWTH

A phased implementation strategy—starting with construction, followed by establishment, and then long-term operations and growth—is essential for sustained impact. The initial phase should focus on civil works, utility connections, and setting up common infrastructure. The establishment phase must ensure the onboarding of anchor investors, certification labs, and administrative facilities. Finally, the operations phase must focus on tenant capacity-building, market access, R&D support, and exports. Phased planning allows for resource optimisation, risk mitigation, and agile response to on-ground challenges. A clear transition framework across phases ensures the parks evolve into vibrant, self-sustaining MedTech ecosystems.

STRENGTHENING THE MEDICAL DEVICE PARK SCHEME: INCLUSION OF EMERGING PARKS IN HYDERABAD AND JODHPUR FOR CIF SUPPORT

The Medical Device Park Scheme (2020) has been a catalytic initiative aimed at developing specialized infrastructure to strengthen India's medical device manufacturing capabilities. While the current scheme supports three officially approved parks–in Tamil Nadu (Kanchipuram), Uttar Pradesh (Greater Noida), and Madhya Pradesh (Ujjain)–the changing needs of the sector and the emergence of new clusters call for expanding the scheme's scope. Initiatives are being undertaken in other states, such as Hyderabad Medical Device Park (Telangana) and the Jodhpur Medical Device Park (Rajasthan). The scheme may consider supporting CIF in such parks that are being implemented elsewhere.

States with strong industrial bases and an interest in developing a medical device ecosystem may be considered for further expansion of the scheme. A well-defined selection criterion may be adopted for selection.

3. Scheme Expansion and Flexibility

Given the strong demand and emerging hubs across India, the scheme must be expanded beyond the initial four parks. A revised proposal under the next Union Budget should aim to:

- Expand CIF support to **3-5 medical device parks**, including high-performing parks like Hyderabad and new clusters like Jodhpur.
- A well-defined selection criterion may be adopted for selection for more 2-3 states on a similar pattern, as the existing three Parks for development of MDPs.
- Introduce a **performance-linked grant structure**, where fund release is tied to milestone achievements in infrastructure readiness, investment attraction, and CIF operationalization.
- Enable **shared access to specialized facilities** across parks (e.g., sterilization, testing labs) through inter-park service agreements.
- Allow parks with **PPP-driven development models** or partial state funding to qualify for central assistance, ensuring inclusivity.

4. Targeted Subsidies and Support Mechanisms

Both Hyderabad and Jodhpur medical device parks, along with similar emerging clusters, should be eligible for:

- **Capital subsidies** for Common Infrastructure Facilities (CIFs) and specialized labs.

- **Viability gap funding or interest subvention schemes** for anchor manufacturers setting up within the parks.
- Access to **national R&D funds**, product innovation incentives, and alignment with PLI (Production Linked Incentive) schemes.

Inclusion in central programs like **Startup India, Digital India, and Skill India** to ensure operational scalability and workforce readiness.

Why The Scheme Should Be Continued

The **Scheme for Promotion of Medical Device Parks in India** holds strategic importance in building a self-reliant, globally competitive, and innovation-driven medical device industry. Although still in its early stages, there are compelling arguments for its continued support and expansion, based on its current and potential contributions.

REDUCES IMPORT DEPENDENCY

India currently depends on imports for 70–80% of its medical device needs, particularly for high-end equipment like MRI machines, CT scanners, and cardiac stents. This heavy reliance poses risks to national healthcare security and results in high costs for both institutions and patients. By providing common infrastructure facilities (CIFs), the scheme enables cost-effective domestic production, which can significantly reduce this dependency. Local manufacturing of such critical equipment ensures timely availability, promotes self-sufficiency, and makes India more resilient in addressing public health emergencies.

LOWERS COST OF PRODUCTION

Medical device manufacturing requires substantial capital investment due to the need for advanced testing laboratories, prototyping centres, and certification facilities. These are cost-prohibitive, especially for startups and MSMEs. By setting up shared infrastructure within the parks, the scheme substantially lowers the entry barrier for these smaller players. This shared approach leads to cost savings of approximately 25–30% on capital equipment and regulatory compliance, making it easier and more feasible for new and small manufacturers to operate in the sector.

BOOSTS MAKE IN INDIA AND ATMANIRBHAR BHARAT

The scheme aligns with India's broader national vision of Atmanirbhar Bharat (self-reliant India) and reinforces the 'Make in India 'initiative. By fostering local manufacturing, especially of high-value and complex medical technologies, it complements the Production-Linked Incentive (PLI) Scheme for Medical Devices. Together, these initiatives are laying the foundation for a robust domestic manufacturing ecosystem that reduces external dependence and builds capabilities for global competitiveness.

ENCOURAGES INNOVATION AND STARTUPS

One of the most impactful contributions of the scheme is its potential to foster innovation. By locating manufacturing parks near R&D laboratories, offering access to prototyping tools, and providing regulatory assistance, the scheme creates an enabling ecosystem for the growth of MedTech startups. This environment encourages the development of next-generation solutions, including AI-powered diagnostics, 3D-printed implants, wearable health monitoring devices, and other disruptive technologies. Over time, these clusters can evolve into hubs of innovation, attracting talent and investment.

DRIVES EMPLOYMENT GENERATION

The medical devices sector is inherently employment-intensive, offering jobs across a variety of functions such as design, manufacturing, quality control, marketing, and technical support. A single operational park has the potential to generate between 5,000 and 10,000 direct and indirect jobs. These include high-skill roles for biomedical engineers, technicians, and quality assurance professionals. In addition to creating employment, the scheme also promotes skill development and helps bridge the talent gap in this high-potential sector.

ENABLES EXPORT COMPETITIVENESS

India's medical device exports have been growing steadily, reaching approximately USD 3.8 billion in FY24. However, the sector still lacks the scale and regulatory rigor required to compete with global leaders like the US, Germany, and China. By facilitating access to certified testing laboratories and regulatory infrastructure (such as ISO, CE, and USFDA standards), the scheme enhances the credibility and quality of Indian-made devices. This, in turn, improves their acceptance in international markets, helping Indian companies tap into global supply chains.

BRIDGES INFRASTRUCTURE GAPS

There is a significant deficit in India's infrastructure for medical device testing and sterilisation, both of which are essential to ensure product safety and efficacy. The parks established under this scheme help bridge this gap by providing centralised facilities such as biocompatibility testing labs, calibration services, ETO sterilisation units, electromagnetic compatibility (EMC) labs, and packaging centers. These services, which were previously either unavailable or unaffordable to many manufacturers, are now accessible within the parks, enhancing product quality and regulatory compliance.

SUPPORTS STATE-LEVEL INDUSTRIAL GROWTH

The scheme is designed to decentralise healthcare manufacturing and promote industrial growth at the state level. States like Tamil Nadu, Uttar Pradesh, and Madhya Pradesh have already taken the lead in developing specialised medical device industrial zones. This decentralisation helps balance regional development, generates local employment, and fosters the emergence of new industrial corridors focused on medical technology and healthcare innovation.

IMPROVES HEALTHCARE ACCESS

A key indirect benefit of the scheme is improved access to healthcare, particularly in rural and underserved areas. By enabling domestic production of affordable diagnostic and therapeutic devices, the scheme makes it possible for smaller hospitals, primary health centres (PHCs), and clinics to acquire modern medical equipment at reduced costs. This contributes to the larger goal of universal health coverage and supports India's commitment to the Sustainable Development Goals (SDGs), particularly those related to health and well-being.

LONG-TERM SECTORAL TRANSFORMATION

The long-term strategic vision of the scheme is to transform India into one of the top five global hubs for medical device manufacturing by 2047, in alignment with the Viksit Bharat roadmap. The success of similar state-supported manufacturing clusters in countries like China and South Korea

demonstrates the potential of such initiatives. With sustained investment and expansion, this scheme can play a transformative role in elevating India's MedTech industry to global prominence.

What Happens If the Scheme Is Discontinued?

- Continued import dependency and trade deficit in medical devices.
- Missed opportunity to become a global MedTech hub.
- MedTech startups may fail to scale due to a lack of shared infrastructure.
- Reduced investment confidence and under-utilised potential in medical innovation.

Annexure I – Pictorial View of Progress of Medical Device Parks

Tamil Nadu Medical Device Park Pictures

Uttar Pradesh Medical Device Park Pictures

Madhya Pradesh Medical Device Park Pictures

Annexure II – Medical Device Park Brochures

Medical Device Park, Greater Noida Brochure

Yogi Adityanath
Chief Minister
U.P.

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Great Investment
Great Opportunity

Nand Gopal Gupta "Nandi"
Minister of Industrial
Development, U.P.

YEIDA

Invites applicationfor the allotment of plots in

SECTOR 28

SCHEME CODE: YEA/IND-MDP (2023)-03

MEDICAL DEVICES PARK

S.N.	Size of Plot (in sq. mtrs)	No of Plots	Registration Amount (Rs.) (Rs./Sqcm.)	Rate of allotment
1	1000	20	701000	7010
2	2100	23	1472100	7010
3	10,000	04	6204000	6204
4	11,200	01	6811202	6081.43
5	12,000	01	7216008	6013.34

Note: Number of plots may increase/decrease as indicated in the above respective categories.

Exclusive Banking Partner ICICI Bank

SCHEME OPENS: 12.06.2023

SCHEME CLOSES: 03.07.2023

DATE OF DRAW 19.07.2023

Metro Connectivity to Noida International Airport, Jewar (Proposed) | Close to Noida International Airport, Jewar | Near International Film City | Pod Taxi Service | Dedicated MSME, Apparel, Handicraft & Toy Park | Adjacent to Yamuna Expressway | Electronic Manufacturing Cluster (EMC)

The application shall be submitted online through Single Window Portal Nivesh Mitra at: **www.niveshmitra.up.nic.in**

YAMUNA EXPRESSWAY INDUSTRIAL DEVELOPMENT AUTHORITY

1st Floor, Commercial Complex, Block-P-02, Sector-Omega-1, Greater Noida 201308, Distt. Gautam Budh Nagar, U.P.,
Toll Free No.: 18001808296, E-mail: info.yeidamedicaldevicepark@gmail.com

Annexure III – Land Allotment

Land Allotment in UP Medical Device Park

Sr. No	Name of Allotee	Plot Size (Sqm)	Medical Device to be Manufactured	Target Segment (1/2/3/4/5)	Status of Land (Construction Started)
1	HOSPI LINE EQUIPMENT PVT LTD	1000	ANAESTHESIA KIT AND DIALYSIS KIT	CATEGORY 3	NOT STARTED
2	HOSPITAL DEVICES	1000	ANAESTHIA MACHINE ANAESTHESIA WORKSTATION ANAESTHESIA VAPORIZER	CATEGORY 3	STARTED
3	LIFE PLUS HEALTHCARE PRIVATE LIMITED	1000	OXYGEN CONCENTRATOR	CATEGORY 3	NOT STARTED
4	SHRI KRISHNA ENTERPRISES	1000	ORTHOPEDIC IMPLANTS, SPINE SYSTEM	CATEGORY 4	NOT STARTED
5	SUPER SURGICAL DEVICES PVT LTD	1000	HEART LUNGSBYPASS UNIT TUBE, BLOOD CARDIOPLEGIA DELIVERY SYSTEM	CATEGORY 3	NOT STARTED
6	BASIC HEALTHCARE PRODUCTS PVT LTD	1000	ORTHOPEDIC IMPLANTS	CATEGORY 4	NOT STARTED
7	KOSDRUG PRIVATE LIMITED	1000	CARDIAC CATHETER	CATEGORY 3	NOT STARTED
8	GENERAL MEDICAL EQUIPMENT	1000	X-RAY MACHINE	CATEGORY 2	NOT STARTED
9	PAUL BREATHING EQUIPMENT COMPANY PRIVATE LIMITED	1000	ANAESTHISIA WORKSTATION	CATEGORY 3	NOT STARTED
10	GEL CRAFT HEALTHCARE	1000	MEDICAL OXYGEN	CATEGORY 3	NOT STARTED
11	DIVINE MEDITECH PRIVATE LIMITED	1000	CANCER CARE EQUIPMENT	CATEGORY 1	NOT STARTED
12	SPM MEDICARE PVT LTD	2100	ANAESTHETIC KIT	CATEGORY 3	NOT STARTED
13	INNOVATION MEDITECH PRIVATE LIMITED	2100	X-RAY MACHINE	CATEGORY 2	NOT STARTED
14	S M HEALTHCARE PRODUCTS PVT LTD	2100	ANAESTHESIA AND HEMODIALYSIS KIT	CATEGORY 3	NOT STARTED
15	AMRAD MEDICAL EQUIPMENT	2100	X-RAY MACHINE	CATEGORY 2	NOT STARTED

Sr. No	Name of Allotee	Plot Size (Sqm)	Medical Device to be Manufactured	Target Segment (1/2/3/4/5)	Status of Land (Construction Started)
16	S S TECHNOMED PRIVATE LIMITED	2100	ICU VENTILATOR, OXYGEN CONCENTRATOR, AND AIR COMPRESSOR	CATEGORY 3	NOT STARTED
17	BIORAD MEDISYS PRIVATE LIMITED	2100	ORTHOPEDIC IMPLANTS	CATEGORY 4	NOT STARTED
18	MEDION HEALTHCARE PVT LTD	2100	MANUFACTURE OF ANAESTHESIA WORKSTATION	CATEGORY 3	NOT STARTED
19	MEDORAH MEDITEK PRIVATE LIMITED	2100	ENDOSCOPIC, GASTROENTEROLOGY, AND CARDIOLOGY MEDICAL DEVICES	CATEGORY 4	NOT STARTED
20	AGVA HEALTHCARE	2100	ICU VENTILATOR	CATEGORY 3	NOT STARTED
21	GAZTRON ENGINEERING PVT.LTD	2100	OXYGEN CONCENTRATOR	CATEGORY 3	STARTED
22	MDD ENGINEERING PVT LTD	2100	ANAESTHESIA GAS SCAVENGING SYSTEM	CATEGORY 3	NOT STARTED
23	SUNFOX TECHNOLOGIES PRIVATE LIMITED	2100	ECG MACHINE	CATEGORY 3	NOT STARTED
24	JMV LPS LTD	2100	OXYGEN CONCENTRATOR	CATEGORY 3	NOT STARTED
25	NAREENA LIFESCIENCES PVT LTD	2100	MANUFACTURING OF OXYGEN CONCENTRATOR	CATEGORY 3	NOT STARTED
26	EURO MEDI TOOLS PVT LTD	2100	SPINAL, NEOROSURGERY, AND TRAUMA MANAGEMENT IMPLANTS	CATEGORY 4	NOT STARTED
27	MDD MEDICAL SYSTEMS INDIA PVT LTD	2100	ANAESTHESIA GAS SCAVENGING SYSTEM	CATEGORY 3	NOT STARTED
28	NEWTECH MEDICAL DEVICES	2100	PTCA STENTS AND CORONARY STENTS	CATEGORY 4	NOT STARTED
29	ALLIED MEDICAL LIMITED	2100	MANUFACTURE OF ANAESTHESIA WORKSTATION	CATEGORY 3	NOT STARTED
30	EPSILON HEALTHCARE SOLUTIONS PRIVATE LIMITED	2100	X-RAY MACHINE	CATEGORY 2	NOT STARTED
31	SCEPTRE MEDICAL DEVICES PRIVATE LIMITED	2100	HAEMODIALYSIS KIT, CVC KIT, AVF NEEDLE	CATEGORY 3	NOT STARTED
32	GENUINE MEDICA PVT LTD	4000	MANUFACTURE OF ANAESTHESIA WORKSTATION	CATEGORY 3	NOT STARTED

Sr. No	Name of Allotee	Plot Size (Sqm)	Medical Device to be Manufactured	Target Segment (1/2/3/4/5)	Status of Land (Construction Started)
33	AUXEIN MEDICAL PRIVATE LIMITED	4000	ORTHOPEDIC IMPLANTS	CATEGORY 4	NOT STARTED
34	HEIDELCO MEDICORE PRIVATE LIMITED	4000	AUTOMATED EXTERNAL DEFIBRILLATOR, OXYGEN CONCENTRATOR	CATEGORY 3	NOT STARTED
35	ROMSONS GROUP PRIVATE LIMITED	4000	ANAESTHESIA KIT	CATEGORY 3	NOT STARTED
36	TRANS GLOBAL SURGICALS LLP	1000	ORTHOPEDIC IMPLANTS	CATEGORY 4	NOT STARTED
37	RAASI STEELS	1000	MEDICAL ORTHOPEDIC IMPLANTS & HIP REPLACEMENT SYSTEM MANUFACTURING	CATEGORY 4	NOT STARTED
38	SHAGUN CARES INC	1000	ORTHOPEDIC IMPLANTS	CATEGORY 4	NOT STARTED
39	BETAMED EXIM PVT LTD	1000	ORTHOPEDIC IMPLANTS	CATEGORY 4	NOT STARTED
40	AAR KAY ENTERPRISES	1000	CENTRIFUGE MACHINE	CATEGORY 5	NOT STARTED
41	CAREWELL BIOTECH PRIVATE LIMITED	1000	ELECTROLYTE ANALYSER	CATEGORY 5	NOT STARTED
42	KRISH BIOMEDICALS INDUSTRY PRIVATE LIMITED	1000	BIO SAFETY CABINET AND REFRIGERATED CENTRFUDGE	CATEGORY 5	STARTED
43	VANGUARD DIAGNOSTICS PRIVATE LIMITED	1000	HEMATOLOGY ANALYZER, CLINICAL CHEMISTRY, IMMUNOLOGY	CATEGORY 5	NOT STARTED
44	GENENEST BIOTECH PRIVATE LIMITED	1000	HEMATOLOGY ANALYZER	CATEGORY 5	NOT STARTED
45	NULIFECARE	1000	IN VITRO DIAGNOSTIC KIT(RAPID TEST COVID-19, ANTIBODY KITS, ETC)	CATEGORY 5	NOT STARTED
46	EDUSOFT HEALTHCARE PVT LTD	2100	RADIOLOGY & IMAGING MEDICAL DEVICES AND NUCLEAR IMAGING DEVICES (X-RAY EQUIPMENT)	CATEGORY 2	NOT STARTED
47	MEDILUX SYSTEMS	2100	MEDICAL X-RAY MACHINE	CATEGORY 2	NOT STARTED
48	AMAZON CONSULTANT ENGINEERS	2100	MEDICAL X-RAY MACHINE	CATEGORY 2	NOT STARTED

Sr. No	Name of Allotee	Plot Size (Sqm)	Medical Device to be Manufactured	Target Segment (1/2/3/4/5)	Status of Land (Construction Started)
49	AMX MEDICAL SYSTEMS	2100	X-RAY MACHINE MANUFACTURING	CATEGORY 2	NOT STARTED
50	HINDLAND EQUIPMENT	2100	X-RAY MACHINE MANUFACTURING	CATEGORY 2	NOT STARTED
51	ENDOLINE PROSCOPE SYSTEMS	2100	ENDOSCOPES AND METALLIC STENTS	CATEGORY 4	NOT STARTED
52	NARANG MEDICAL LIMITED	2100	ORTHOPEDIC IMPLANTS, INSTRUMENTS, AND SURGICALS	CATEGORY 4	NOT STARTED
53	ENDO MED TGECHNOLOGIES PVTLTD	2100	CORONARY STENTS AND STENTS FOR GASTROINTESTINAL AND RESPIRATORY	CATEGORY 4	NOT STARTED
54	ACCUSTER TECHNOLOGIES PVT LTD	2100	PORTABLE MOBILE LABS	CATEGORY 5	NOT STARTED
55	AVIENCE BIOMEDICALS PVT LTD	2100	BIOCHEMISTRY ANALYZER	CATEGORY 5	STARTED
56	BIOGENIX INC PVT LTD	2100	BIOCHEMISTRY, IMMUNOLOGY (RAPID CARDS AND ELISA) SEROLOGY KITS, INSTRUMENTS	CATEGORY 5	NOT STARTED
57	Genes2me Private Limited	1000	IVD DNA/RNA EXTRACTION SYSTEM, AUTOMATED PCR, AND POINT OF CARE EQUIPMENT	CATEGORY 5	NOT STARTED
58	Aurus Medtech Pvt. Ltd.	2100	SURGICAL MESH, HEART PTCA BALLON, HEART PTCA STENTS, AND ACCESSORIES	CATEGORY 4	NOT STARTED
59	Imperial Life Sciences Private Limited	2100	IVD INSTRUMENTS, REAL-TIME PCR SYSTEM, AND RNA EXTRACTION SYSTEM	CATEGORY 5	NOT STARTED
60	MEDITRIX	1000	X-RAY MACHINE MANUFACTURING	CATEGORY 2	NOT STARTED
61	WELDON BIOTECH INDIA PRIVATE LIMITED	2100	IVD DIAGNOSTICS	CATEGORY 5	NOT STARTED
62	SUNMAX ELECTRONICS	2100	X-RAY MACHINE MANUFACTURING	CATEGORY 2	NOT STARTED
63	GR BIOURE SURGICAL SYSTEM PVT LTD	2100	NEURO AND ORTHOPEDIC IMPLANTS	CATEGORY 4	NOT STARTED
64	PARAMOUNT SURGIMED LIMITED	2100	RENAL BIOPSY KIT	CATEGORY 3	NOT STARTED

Sr. No	Name of Allotee	Plot Size (Sqm)	Medical Device to be Manufactured	Target Segment (1/2/3/4/5)	Status of Land (Construction Started)
65	YASHKA INFOTRONICS PVT LTD	2100	ICU VENTILATORS	CATEGORY 3	NOT STARTED
66	Accure Medical Pvt. Ltd.	2100	BLOOD GAS ANALYZER, HEMATOLOGY ANALYSER, BIOCHEMISTRY & ELECTROLYTE ANALYSER	CATEGORY 5	NOT STARTED
67	Diasys Diagnostics India Private Limited	2100	HEMATOLOGY ANALYSER, BIOCHEMISTRY & URINE ANALYSER	CATEGORY 5	NOT STARTED
68	WELLMED INTERNATIONAL INDUSTRIES PVT. LTD.	10000	ANAESTHESIA KIT	CATEGORY 3	NOT STARTED
69	M/S ALLENGERS MEDICAL SYSTEMS PVT. LTD.	10000	CT SCAN AND X-RAY MACHINE MANUFACTURING	CATEGORY 2	NOT STARTED
70	M/S DELUXE SCIENTIFIC SURGICO PVT. LTD.	12000	SPINE AND ORTHOPEDIC IMPLANTS	CATEGORY 4	NOT STARTED
71	SYON MED PVT LTD	10000	INTRAOCULAR LENS AND OPTHALMIC MEDICAL DEVICE	CATEGORY 4	NOT STARTED
72	Q LINE BIOTECH PRIVATE LIMITED	10000	BIOCHEMISTRY ANALYSER, HEMATOLOGY ANALYSER, AND ELECTROLYTE ANALYSER	CATEGORY 5	NOT STARTED
73	TI Medical Private Ltd.	44800	MFG. OF DIALYZER, DIALYSIS MACHINE & ANESTHESIA KIT	CATEGORY 3	NOT STARTED
74	BURETTE HEALTH PVT LTD	1000	BUREFIT ENTERAL FEEDING SET	CATEGORY 5	NOT STARTED
75	MEDTECH DEVICES	1000	RENAL CARE MEDICAL DEVICES	CATEGORY 3	NOT STARTED
76	SIGNOR MEDICAL DEVICES PVT LTD	1000	MANUFACTURE OF MEDICAL DEVICES, SPINAL IMPLANTS, AND ACCESSORIES	CATEGORY 4	NOT STARTED
77	JITM C GENES PRIVATE LIMITED	1000	BIOCHEMISTRY AND HAEMATOLOGY REAGENTS	CATEGORY 5	NOT STARTED
78	OCEAN HEALTHCARE INDUSTRIES	1000	ECG, ANAESTHESIA WORK STATION, ANAESTHESIA GAS MONITOR, AED, FOETAL DOPPLER, MULTIPA	CATEGORY 3	NOT STARTED
79	ALPHA INC	1000	ALPHA INC	CATEGORY 5	NOT STARTED

Sr. No	Name of Allotee	Plot Size (Sqm)	Medical Device to be Manufactured	Target Segment (1/2/3/4/5)	Status of Land (Construction Started)
80	MEHROTRA BIOTECH PRIVATE LIMITED	1000	BIO SAFETY CABINET LAMINAR AIRFLOW CABINET PCR WORK STATION	CATEGORY 5	NOT STARTED
81	BETA MEDIKIT PVT LTD	1000	BIOCHEMISTRY ANALYZER	CATEGORY 5	NOT STARTED
82	WELCO LIFECARE PRIVATE LIMITED	1000	HEART VALVES, STENTS, AND OTHER PRODUCTS	CATEGORY 4	NOT STARTED
83	MS BONE LIFE SURGICALS	2100	MANUFACTURE OF MEDICAL DEVICES, SPINAL IMPLANTS, AND ACCESSORIES	CATEGORY 4	NOT STARTED
84	MADHU INSTRUMENTS PVT LTD	2100	MANUFACTURE OF MEDICAL DEVICES (IMPLANTS)	CATEGORY 4	NOT STARTED
85	ILIFE MEDICAL DEVICES PVT LTD	2100	ANESTHESIA KIT	CATEGORY 3	NOT STARTED
86	AVANA LIFESCIENCE PRIVATE LIMITED	2100	MANUFACTURE OF A FULLY AUTOMATIC BIOCHEMISTRY ANALYZER THROUGHPUT IN THE RANGE OF	CATEGORY 5	NOT STARTED
87	GRAD MEDICAL EQUIPMENTS PVT LTD	2100	X-RAY MACHINE	CATEGORY 2	NOT STARTED
88	DISPOSAFE HEALTH AND LIFE CARE LTD	2600	SPINAL NEEDLE, ENDOTRACHEAL TUBE, SUCTION CATHETERS, BLOOD LINE, AV FISTULA	CATEGORY 3	NOT STARTED
89	ORTHOCURE HEALTHCARE PRIVATE LIMITED	2600	HIP IMPLANTS, KNEE IMPLANTS, SPINAL IMPLANTS, ORTHOPAEDICS IMPLANTS, MEDX (USA)	CATEGORY 4	NOT STARTED

Land Allotment in UP Medical Device Park

S. No.	Allotee Name	Date of Allotment	Plot Size (Area in Acre)	Medical Segment
1	M/s. Genuine Biosystem Pvt. Ltd	05.07.2022 / 08.08.2022	2.4	Manufacturing of In Vitro Diagnostic Kits and Equipment.
2	M/S. Global Ophthalmic Pvt. Ltd	25.08.2022	1.35	Manufacturing of Intraocular Lens and related Surgical Blades.
3	M/S. Axon Technologies	25.08.2022	0.82	Manufacturing of Ventilators, Parts, and Beds
4	M/s.Morrisons Life Care Pvt. Ltd	25.08.2022	1.25	Manufacturing of 3-way Stopcock, Face Masks, Airways, catheter cap, Cover, etc

S. No.	Allotee Name	Date of Allotment	Plot Size (Area in Acre)	Medical Segment
5	M/s.Avanttec Laboratories Pvt. Ltd	10.10.2022	2.51	Manufacturing of Electronic Dosimeter and TLD Dosimeter,
6	M/s.Suntech Devices	14.11.2022	0.5	Manufacturing of Dialysis kits, Surgical Drapes, and Transducer Protector
7	M/S. Trustin Analytical Solutions Pvt. Ltd	14.11.2022	1	Manufacturing of Surgical items, Blood Bags, etc.
8	M/S. PZ Medical India Pvt. Ltd	24.12.2022	2.2	Manufacturing of X-ray Machines, Panel Detectors, etc.
9	M/S. Malles Automated and Robotic System Pvt. Limited	30.12.2022	2	Manufacturing of Blood Glucose Monitors, Conveyor Systems, Medicine Vial Packing Machines, etc.
10	M/S. Gesco Healthcare Pvt. Ltd *	30.12.2022 / 13.09.2023	6.42	Manufacturing of Spine Implants, Neuro Implants, Orthopedic Implants, Neurosurgical Instruments, etc.
11	M/S. Safe Scientific Inc,	21.01.2023	1.07	Manufacturing of Andrology Workstations, Vertical Laminar Biosafety Cabinets, Dry Incubators, etc.
12	M/S. Cistron Systems Pvt. Ltd	21.01.2023	1.95	Manufacturing of Cylindrical sterilizers, rectangular sterilizers, table-top sterilizers, etc.
13	M/S. Hebbar Surgical Instruments	27.01.2023	1.38	Manufacturing of Forceps, Scissors, Retractors, Rongeurs, etc.
14	M/S. 7K Healthcare Ltd.	31.01.2023	2.51	Manufacturing of Total Knee replacement, Instrument sets, etc.
15	M/s.Cryo Scientific Systems Pvt. Ltd	18.03.2023	0.48	Manufacturing of Medical Freezers, Deep Freezers, etc.
16	M/S. ppv Technology Pvt. Ltd.	17.08.2023	0.5	Manufacturing of Wearable Sensor Shoes, Medicine Tracker, Nurse Call System
17	M/S. Re Dia Solutions	07.03.2024	1	Dialysis Machine, Fluid Therapy & Haemodialysis Concentrate
18	M/S. St. Luke Med Flair Pvt. Ltd	07.03.2024	1.94	Video Bronchoscope, Vacuum Assisted Wound System, Rigid Bronchoscope, Rigid Thoracoscope, HME Filters, Bacterial Viral Filters, etc.
19	M/S. Agada Diagnostics Pvt. Ltd	14.03.2024	3.18	Medical-related products, including clotting time machine, auto analyzer, and automated coagulometer.
20	M/S. Anderson Diagnostics	16.03.2024	4.55	Manufacture of Fluor Deoxy Glucose for ET CT Scan

33Land Allotment in MP Medical Device Park

S. No.	Allotee Name	Plot Size (Acres)	Medical Segment	Date of Commercial Operation
1	M/s Shriji Polymers India Ltd.	10.34	Nasal/Pulmonology actuators, Insulin Dispensing Devices, Self-Administered Hormone Applicators, Spray Pumps for dermatological applicators.	2025
2	M/s Perkant Tech Pvt. Ltd.	1.91	Abhay Parimiti- a multi-disease prognosis system	2025
3	M/s Vansushi Private Ltd.	0.68	In-Vitro Diagnostic Medical Devices (IVD-Analysers)	2025
4	M/s YA-SAN(India)	0.53	In-Vitro Diagnostic Medical Devices (IVD-Analysers)	2025
5	M/s Bhandari Labs Pvt. Ltd.	2.02	In-Vitro Diagnostic Medical Devices, Dental Implants, kits for biochemistry	2025
6	M/s One Wonder Wellness Pvt. Ltd.	5	Hollow needles for injections, Aspiration, Biopsy, & Transfusion	2025
7	M/s HC Lifeline	1	IV infusion set, cannula, catheter, syringes, and other medical devices	2026
8	M/s Ciro Pharma Pvt. Ltd.	5.05	Pre-filled syringes	2025
9	M/s Forever Image Pvt. Ltd.	3.08	Orthopaedic implants	2026
10	M/s Virohana Health Pvt. Ltd.	2.1	IVD self-testing kits, Reagents/Kits for biochemistry, serology and antigen detection, hollow needles for injections/biopsy/transfusion, and haemodialyser	2026
11	M/s Clinisupplies India Pvt. Ltd.	4.2	Catheter, bags, and other urology devices	2025
12	M/s Meeple Technologies Pvt. Ltd.	0.57	Vacuum suction device for women's health	2025
13	M/s Microgen Hygiene Pvt. Ltd.	2.5	Hip implant, knee implant, trauma implant, instrument care products, wound dressing products, surgical dressing, medical adhesive, disinfectant, and sterilization products.	2025
14	M/s Bioline India Pvt. Ltd.	0.71	Blood Collection Monitor, Portable Blood Bag Tube Sealer, Table Top Blood Bag Tube Sealer, Tube Stripper, Donor Station,	2025
15	M/s L2M TECH India Pvt. Ltd.	3	Drug Eluting, Stent, Drug Eluting Balloons, Peripheral Stent.	2025
16	M/s IRES India Pvt. Ltd.	1.41	Titanium Dental Implants for permanent Teeth.	2025
17	M/s Caladrius Medical Pvt. Ltd.	0.37	Cardiology Devices are intended to be used for cardiology procedures like Angiography, Angioplasty, and Cardiac Surgery	2025

S. No.	Allotee Name	Plot Size (Acres)	Medical Segment	Date of Commercial Operation
18	M/s Sunfox Technologies Pvt. Ltd.	0.61	ECG Military Grade, ECG Space Grade, ECG Consumer Grade, ICU Monitor Consumer Grade, and Diagnostic ECG Machine	2025
19	M/s Microgen Hygiene Pvt. Ltd.	1	Disinfectant, Wound Care, Orthopedic Implants, Hernia Mesh	2025
20	M/s Bionic Medical Devices Pvt. Ltd.	0.98	Surgical implants, general surgery patches, neuro patches, and staplers	2025
21	M/s Yuvitel Technologies Pvt. Ltd.	0.5	Patient Monitor, ICU Monitor, Primary diagnostic Kit	2025
22	M/s SPM Medicare Pvt. Ltd	4.87	Medical consumables	2025
23	M/s Bhandari Labs Pvt. Ltd.	1.03	Biochemistry Kits, Hematology Kits, and ELISA Kits.	2025
24	M/s Pancham Infinity Pvt. Ltd.	1.7	PI Tree (Health ATM)	2025
25	M/s US Herbals	3.08	Blood Bags	2025
26	M/s Samson Scientifics and Surgicals	3.34	Orthopedic Appliances	2025
27	M/s Bansi Surgical Solutions	0.99	ENT Workstation	2025
28	M/s Medqverse Private Limited	6	Radiotherapy Cancer Treatment	2025
29	M/s Labvision Technologies	2	Portable Ventilator and Incinerator.	2025
30	M/s VRM Molecular and Nuclear Medicines Private Limited	7.5	Fluorine-18 (F-18), Carbon-11 (C-11), Nitrogen-13 (N-13), Oxygen-15 (O-15),Gallium-67 (Ga-67), Iodine-123 (I-123), Thallium-201 (Tl-201)	2025
31	M/s Clinisupplies India Private Limited	4	Catheters: SensaCath Intermittent Catheter, SensaCath Aqua Intermittent Catheter, SensaCath Aqua Tiemann Intermittent Catheter, Prosys Urine Bags, Flofit Urinary External Catheter, All-Silicone Prosys Foley Catheter, Bandages & Tapes, Female Compact Catheter, Male Compact Catheter, Next Generation Compact, Set Catheter.	2025
32	M/s Magpie Medical Devices Pvt. Ltd.	2	Minimal Invasive Surgical Instruments and ENT Work Station	2025
33	M/s Remote Healthcare Private Limited	1.5	Diagnostic Equipment	2025
34	M/s Technoplast Packaging Private Limited	7	Blood Collection System and Insulin Syringes.	2025
35	M/s Lifepace Medica Pvt Ltd	1.5	A Cardiac Pacemaker for stimulating the heart.	2025
36	M/s Mohini Hygiene Care Products Pvt Ltd.	5	Digital Thermometer, Finger Oximeter, Blood Pressure Monitor, and Nebulizer Machine.	2025

S. No.	Allotee Name	Plot Size (Acres)	Medical Segment	Date of Commercial Operation
37	M/s Singhsa Medicare Pvt Ltd.	0.4	Hospital Beds, LED OT Light, Medical Equipment	2025
38	M/s Supplymatic Sheba India Pvt Ltd.	2.46	Enzymatic Disinfectants	2025
39	Dr. Sumit Kumar Verma (Proprietership)	2	Surgical Dressing Material. 1st Phase - 5 Lac Kits, 2nd Phase 10 Lac Kit.	2026
40	M/s Prasiddhi Mahant (Proprietership)	2	Orthopedic Implants: Nails, Plates, Screw	2026
41	M/s KVMG Medisafe Private Ltd.	3	IV set, IV catheter, Urine bags, etc.	2026
42	M/s Anviti Healthcare Pvt. Ltd.	8	Cannulae, Urine Bags and Catheters	2026
43	M/s KRM Healthcare Pvt. Ltd.	2	In Vitro Devices and Rapid Test Kits	2026
44	M/s Amulyam Global Pvt. Ltd.	0.25	Medical consumables - Disposable syringe, IV Infusion set, Mouth - mirror probe, twizzer, catheter, etc.	2026
45	M/s IISEQ Scientific	0.6	Critical Care Respiratory Equipment Used for Newborns	2026
46	M/s Kamla Sales Surgical	3	Surgical Instruments & Implants for Human Body Uses.	2026
47	M/s 360Digital Printing Innovations Pvt. Ltd.	2.72	3D Printer	2026