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NITI Aayog

Realising the Export Potential of **India's Sports Equipment Manufacturing Sector**

MARCH 2026

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Published: March 2026

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Government of India
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MESSAGE

India's aspiration to emerge as a global manufacturing hub is inextricably linked to its capacity to compete effectively international markets. The sports equipment sector, which is the focus of this report, presents a compelling opportunity to advance this objective. With a well- established manufacturing base, a skilled workforce, and robust domestic demand, the sector is well placed to expand its global footprint and contribute meaningfully to India's export growth.

The analysis set out in this report points to a rapidly growing global market for sports equipment, driven by rising participation in sports and fitness, the increasing professionalisation of sporting activity, and a decade of forthcoming mega sporting events worldwide. These trends create significant scope for Indian manufacturers to scale exports, diversify product range, and move progressively up the value chain, particularly in high-performance and premium segments.

The Union Budget 2026-27 has allocated ₹500 crore initiative dedicated to the sports goods manufacturing sector, intended to support India's transition into a global hub for high-quality equipment. This initiative emphasizes a strategic shift toward material sciences, innovation, and R&D in equipment design. Furthermore, the government is focusing on addressing supply-side bottlenecks in raw material exploring fiscal incentives and the development of specialized manufacturing clusters to enhance global competitiveness.

At the same time, the report identifies a number of structural challenges that must be addressed if this potential is to be fully realised. Cost disadvantages, infrastructure and logistics constraints, limited access to advanced materials and technologies, and barriers relating to market access and branding call for focused and coordinated action. We remain committed to addressing these issues through close collaboration between government, industry, sports federations and other stakeholders, supported by targeted policy reforms and ecosystem-level investments.

The report titled "Realizing the Export Potential of India's Sports Equipment Manufacturing Sector" rightly underscores the centrality of quality, innovation, and adherence to international standards in strengthening export competitiveness. By reinforcing manufacturing clusters, investing in technology and skills, and deepening linkages with global brands and sporting institutions, India can position itself as a trusted and reliable supplier of high-quality sports equipment.

I would like to place on record my sincere appreciation to Shri BVR Subrahmanyam, former CEO, NITI Aayog, for his continued guidance and support in advancing this important research agenda. I also extend my thanks to Shri Sanjeet Singh, Program Director, E&F II and his team for their valuable contributions to this report. I am grateful to the Foundation for *Economic* Development (FED) for its critical, analytical and academic support in the preparation of this report. I am confident that the insights and recommendations contained herein will provide a practical roadmap for strengthening India's sports equipment manufacturing ecosystem and advancing the country's broader manufacturing ambitions.

(Suman Bery)

Place- New Delhi
Dated- 12th March 2026

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MESSAGE

India has a long-standing presence in sports equipment manufacturing, supported by established clusters and a skilled workforce, yet its participation in global trade remains modest. It has established strengths in select categories like cricket equipment and rugby balls. In these, India is a key supplier for major tournaments in India and overseas. However, India's presence across the broader range of sports equipment remains limited, reflected in an overall global export share of about 0.5%, indicating significant headroom for diversification and scale. As India bids to host the 2036 Olympic Games, it becomes imperative to build domestic capabilities and fully leverage the economic and strategic benefits that accrue to a host nation.

The recommendations in this report focus on rationalizing duties on imported raw materials while simultaneously strengthening domestic supply capabilities. The report also emphasizes the development of common facility centres to support entrepreneurship, enable technology transfer, and improve quality standards across the sector. These measures can expand trade, generate employment, and help India capture emerging opportunities linked to major sporting events in and around the region, including the Japan Asian Games, the Ahmedabad Commonwealth Games, and the 2036 Olympics.

The report thus provides policymakers, industry stakeholders, and researchers with a clear framework to unlock export potential across key sports equipment categories and to build a robust, globally integrated manufacturing ecosystem. It underscores the need for coordinated action, leveraging shared insights and collective effort to develop a sustainable, export-oriented sports goods sector that can contribute meaningfully to India's growth and broader economic objectives.

I am confident that the insights and recommendations presented in this report will be instrumental in addressing existing gaps and enabling the effective implementation of targeted interventions. I would also like to commend Shri BVR Subrahmanyam for his support to the Economics & Finance-II team in advancing key sectors. I also commend the FED and Economics & Finance II team, under the leadership of Shri Sanjeet Singh, PD, Economics & Finance II, for their dedication and efforts in timely productions of, and for addressing the challenges of the sports industry.

Arvind Virmani

New Delhi
February, 2026

(Arvind Virmani)

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MESSAGE

India aspires to play a larger role in global value chains and position itself as a trusted manufacturing partner to the world. Strengthening high-potential sectors will be critical to this transition. Boosting manufacturing, especially for labour-intensive sectors is critical to providing employment opportunities as we move towards the Viksit Bharat @ 2047 goal. An important, yet often under-recognized, component of this ecosystem is the sports equipment manufacturing sector. This report presents a comprehensive assessment of the sector in India at a timely moment, as the country seeks to strengthen domestic manufacturing capabilities and expand its presence in global value chains.

2. The report highlights the significant growth potential of the sports equipment industry, driven by rising domestic participation in sports and fitness, increasing international demand, and a decade of upcoming global sporting events. With global markets expanding and export opportunities emerging across multiple sports categories, India's sports equipment sector is well positioned to contribute meaningfully to economic growth, employment generation, and export expansion over the coming years.

3. The findings emphasize the importance of cost competitiveness, strategic investments, technology upgradation, and skilled manpower in building a globally competitive sports manufacturing ecosystem. Government initiatives such as *Make in India*, renewed focus on sports infrastructure and targeted support for MSMEs are creating a conducive environment for growth and investment. The commitment shown by domestic manufacturers to improve quality, meet international standards, and scale exports is particularly encouraging.

4. At the same time, the report provides a candid assessment of the challenges that remain. While India has demonstrated pockets of global success in select sports categories, structural constraints related to scale, technology access, logistics, branding, and market access continue to limit the sector's full potential. Addressing these issues in a coordinated manner will be critical to achieving sustained export growth.

5. I congratulate Shri Sanjeet Singh, Programme Director, NITI Aayog, and his E&F II team, as well as the team at the Foundation for Economic Development (FED), for their diligent efforts in preparing this report. I hope that the analysis and recommendations presented herein will serve as a valuable resource for policymakers, industry stakeholders, and researchers, and will support the effective implementation of measures to strengthen India's sports equipment manufacturing ecosystem

Dated: 26th February, 2026

[Nidhi Chhibber]

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MESSAGE

India is at a pivotal juncture in the global sports equipment industry, a sector that sits at the intersection of manufacturing, sports development, and international trade. With the global sports equipment market projected to grow steadily over the next decade, the opportunity for India to strengthen its position is substantial. Despite a long manufacturing legacy and strong domestic demand, India's global export share remains modest at around 0.5%. This report, developed through a collaborative effort of NITI Aayog and the Foundation for Economic Development, lays out a strategic pathway to unlock India's export potential in sports equipment over the coming decade. The goal is also to ensure that India's bid for the 2036 Olympics is strengthened by a 'Make-in-India' foundation.

The Government of India has also signaled its firm commitment to this sector. Most notably, the 2026 Budget introduced pivotal provisions specifically targeting sports goods manufacturing and export enhancements. These fiscal measures, combined with broader Make-in-India initiatives, aim to empower our MSME-led clusters to scale up and meet international quality standards.

The sports equipment industry is not only a source of economic output, but also a driver of employment, innovation, and international competitiveness. India's current exports are concentrated in a limited set of categories and markets, even though manufacturing clusters such as Jalandhar and Meerut possess deep capabilities. With the right interventions, India can significantly expand its presence across global sports categories, particularly in higher-value and performance-driven segments, generating large-scale employment across MSME-led clusters. However, challenges such as cost disadvantages relative to China, limited access to advanced materials and technology, infrastructure and logistics gaps, and weak demand-side linkages continue to constrain growth. Both the government (through its focus on sports goods manufacturing in the 2026 Budget and several Make-in-India initiatives) and industry stakeholders are keen to overcome these challenges and make India a supplier of high-quality sports equipment.

Based on extensive research, multiple factory visits, round-table consultations with industry stakeholders and task-force meetings, this report proposes a set of actionable recommendations, including the development of integrated manufacturing clusters, targeted support for technology and material access, market-access and branding reforms. Together, these measures aim to improve the competitiveness of our manufacturers and enable scale-ups in the sector.

I would like to express my sincere appreciation to the Hon'ble Vice Chairman, NITI Aayog, for his invaluable guidance. I particularly wish to acknowledge the vision and direction provided by Sh. BVR Subrahmanyam, then CEO of NITI Aayog, whose continued support and guidance was instrumental throughout the preparation of this report. I am grateful to the industry leaders and stakeholders who generously shared their insights and time. I am confident that this report will serve as a valuable resource for policymakers and industry alike as India works to strengthen its sports equipment manufacturing ecosystem and global standing.

संजीत सिंह

(Sanjeet Singh)

New Delhi
02 March, 2026

MESSAGE – Ashish Dhawan

Sports equipment occupies a unique position in manufacturing: it is among the few product categories where performance, safety, and quality matter as much as cost. Whether used by professional athletes or young players, sports equipment is subject to visible scrutiny - failure is immediate, reputational, and often public. As a result, global markets for sports equipment are shaped not only by price competitiveness, but by quality and brand-pull built over time.

India's sports equipment ecosystem has historically been led by organic cluster growth and legacy manufacturing skills. While this model has sustained production in several clusters and allowed India to manufacture high quality products, the sector's ability to scale into demanding global markets that require cost competitiveness, continuous tech upgradation and international visibility remains constrained. This report starts from the premise that the next phase of growth in sports goods must therefore be anchored in international market penetration and brand-building.

The report is designed as a decision framework, not a generic sector overview. It evaluates sports categories based on their manufacturing requirements, domestic supply ecosystems, certification intensity, key competitors etc. and uses this lens to identify where India can realistically build trust-based competitiveness. It also highlights gaps in testing infrastructure, certification pathways, athlete endorsement and coordination between manufacturers and sporting institutions—areas that are essential for building reputation at scale. The recommendations focus on strengthening these trust enablers: shared testing and certification facilities, clearer alignment with international standards, structured use of athletes and institutions for product validation and eased policy frameworks that allow manufacturers to invest with confidence.

At the Foundation for Economic Development, we believe that sectors which provide large scale employment and have high export demand must be strengthened from ground-up - this is a sincere attempt at facilitating the same. We are grateful to NITI Aayog for partnering with us on this effort, and acknowledge the guidance of Shri BVR Subrahmanyam, as well as the leadership of Shri Sanjeet Singh and the E&F II team. We hope this report contributes to a stronger and globally recognised sports equipment ecosystem in India.

Ashish Dhawan

Member of Board of Advisors & Governing Council
Foundation for Economic Development

MESSAGE – Piyush Doshi

India's growth story over the coming decades will be shaped by its ability to create large-scale employment while expanding its footprint in global markets. Labour-intensive, export-oriented manufacturing is central to this objective, and the sports goods sector represents a powerful yet underutilised opportunity in this regard. With its high employment potential, strong MSME participation, and alignment with global demand, sports equipment manufacturing can play a meaningful role in driving inclusive and sustained economic growth.

What distinguishes the sports equipment manufacturing is its inherent diversity. It is not a single industry, but a collection of multiple sub-industries—each with distinct raw materials (rubber, polymers, composites, wood, metals), manufacturing processes (cutting, stitching, molding, machining, finishing), and skill requirements. As a result, strengthening sports equipment manufacturing creates shared capabilities across design, quality control, supplier networks, and shop-floor productivity that can be leveraged by several other labour-intensive sectors. This interlinkage makes sports goods particularly well suited to cluster-led development and MSME-driven growth.

This report takes a differentiated, evidence-based approach by assessing global demand and export capabilities across sports to provide targeted interventions and identify key opportunity areas. By aligning policy support, cluster development and industry capabilities around priority segments, India can use sports equipment manufacturing as a catalyst for strengthening a wider ecosystem of labour-intensive industries.

At the Foundation for Economic Development (FED), we believe that such ecosystem-oriented thinking is essential to building sustainable manufacturing growth. I thank NITI Aayog for its close partnership in developing this report, and express my appreciation to Shri BVR Subrahmanyam for his guidance, as well as Shri Sanjeet Singh and the E&F II team for their leadership and collaboration. It is our hope that this report supports informed decision-making and helps unlock the broader industrial and employment potential embedded within India's sports equipment sector.

Piyush Doshi

Operating Partner
Foundation for Economic Development

Preface

India's relationship with sport is ancient and enduring. Long before stadiums and scoreboards, physical excellence found expression in the traditional wrestling akharas, the discipline of archery, and indigenous games like kabaddi and kho-kho, which have been woven into the cultural and civilisational fabric of the country since Vedic times. Sport in India has never been merely recreational; it has been a marker of strength, resilience, community, and identity.

Over the decades, this relationship evolved. The colonial period introduced modern competitive sports such as cricket and hockey, which India did not just adopt, but made its own. As a nation, we have been united by moments of sporting triumph - Major Dhyan Chand's unmatched dominance in hockey, Milkha Singh's unforgettable runs that redefined courage and perseverance, India's historic 1983 & 2011 Cricket World Cup win and Abhinav Bindra's Olympic gold that marked a turning point in India's individual sporting excellence.We have cheered from our homes, our streets, our stadiums, and we have proudly hosted international sporting events, welcoming the world to compete on Indian soil.

This national momentum around sport is set to accelerate further as India prepares for the next phase of its global sporting engagement. With the country set to host the Commonwealth Games in the coming decade and actively pursuing a bid for the Olympic Games, sport is increasingly being viewed not only as a source of national pride but as a strategic economic and industrial opportunity. Large-scale international events bring with them sustained investments in infrastructure, training ecosystems, and sporting culture, while also creating long-term demand for high-quality sports equipment across disciplines. For India, this presents a timely opportunity to align its manufacturing capabilities with its ambitions on the global sporting stage.

Yet, while India's emotional and cultural engagement with sport runs deep, its participation in sports equipment manufacturing has remained relatively modest. The foundations of the industry were laid in Sialkot (now in Pakistan) before gradually shifting to manufacturing clusters such as Jalandhar and Meerut. Over time, these clusters developed strong artisanal capabilities and a dense network of small and medium enterprises. However, the sector has largely remained fragmented and has not fully transitioned to the scale-driven, technology-enabled manufacturing that defines today's global sports equipment industry.

Globally, the sports goods and equipment market has expanded rapidly, driven by rising participation in sports and fitness, increasing professionalisation of leagues, growing youth engagement, and the emergence of new materials and performance technologies. This growth has not been captured by a single country alone. While China continues to play a dominant role, several other countries, including Pakistan and Vietnam, have successfully integrated themselves into global value chains, building scale, specialisation, and export competitiveness across a wide range of sports categories. These examples demonstrate that sports manufacturing is not merely capital-intensive, but ecosystem-driven, thriving where policy, infrastructure, skills, and market access align.

India, in this context, finds itself well-positioned at the cusp of opportunity. The country already possesses many of the foundational elements required for growth - a large domestic market with rising sports participation, a deep base of skilled and semi-skilled labour, established manufacturing clusters, and increasing policy focus on manufacturing and exports. While the ecosystem today remains relatively small in global terms, it carries significant potential to expand, provided key structural and operational barriers are systematically addressed and the sector is enabled to modernise, integrate, and compete.

This moment of opportunity is further reinforced by recent policy signals from the Government of India. For the first time, the Union Budget 2026 explicitly articulated India's ambition to emerge as

a global hub for high-quality, affordable sporting goods. A dedicated allocation of ₹500 crore for the Promotion of Sports Goods Manufacturing marks a significant inflection point for the sector. The budget places strong emphasis on innovation in equipment design and material sciences, revival and upgradation of key manufacturing clusters such as Jalandhar and Meerut, and strengthening cost competitiveness through improved infrastructure and technology adoption. Complementary measures, including a ₹10,000 crore SME growth fund, enhanced support for branding and market access, and closer alignment with sports infrastructure development, signal a coordinated push to unlock scale, reduce import dependence, and position Indian manufacturers more competitively in global markets.

Through this report, we undertake a comprehensive examination of the sports goods manufacturing sector, both globally and within India. The analysis maps the size and structure of the global opportunity, assesses India's current positioning, and identifies the segments and categories where the country can realistically build scale and competitiveness. It examines both demand-side factors, such as market access, branding, procurement norms, and export linkages, as well as supply-side challenges, including technology adoption, raw material access, quality standards, compliance, and workforce capabilities.

The report concludes with a set of targeted, actionable recommendations aimed at unlocking growth across the value chain. If implemented, these measures have the potential to significantly boost domestic manufacturing, enhance exports, generate employment, particularly within MSMEs, and create sustained economic value. Beyond numbers, strengthening this sector offers India the opportunity to align its manufacturing capabilities with its long-standing sporting passion, ensuring that the equipment used on fields across the world increasingly carries the mark of Indian craftsmanship and capability.

This study is grounded in extensive primary and secondary research. It draws on consultations with over 50 stakeholders, including manufacturers across clusters, industry bodies, exporters, and ecosystem participants, supplemented by detailed secondary analysis of trade data, policy frameworks, and global benchmarks. To the best of our knowledge, this represents one of the most comprehensive, first-of-its-kind assessments of India's sports goods manufacturing ecosystem, aimed not just at diagnosing challenges, but at charting a credible path forward for the sector.

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List of Abbreviations

Abbreviation	Full Form
BSI	British Standards Institution
BWF	Badminton World Federation
CE	Conformité Européenne (European Conformity)
CNC Machine	Computer Numerical Control Machine
DD	Duty Drawback
DFIS	Duty Free Import Scheme
EVA Foam	Ethylene Vinyl Acetate Foam
FIBA	Fédération Internationale de Basketball (International Basketball Federation)
FIFA	Fédération Internationale de Football Association (International Federation of Association Football)
FIH	Fédération Internationale de Hockey (International Hockey Federation)
FIVB	Fédération Internationale de Volleyball (International Volleyball Federation)
FTA	Free Trade Agreement
ICC	International Cricket Council
ITTF	International Table Tennis Federation
MC	Machinery related costs
PU/TPU	Polyurethane/Thermoplastic Polyurethane
QCO	Quality Control Order
RM	Raw Materials
RoDTEP	Remission of Duties and Taxes on Exported Products
UCI	Union Cycliste Internationale (International Cycling Union)

Executive Summary

The sports goods industry encompasses a wide range of products including apparel, footwear, equipment, accessories and infrastructure, covering the entire range of athletes' sporting needs. Sports equipment in particular forms an important pillar of this ecosystem, supporting the core growth of sporting culture across professional tournaments, grassroot participation in schools and clubs. This report highlights the significant growth potential of sports equipment sector for India's manufacturing and export ambitions. With the global sports equipment market currently valued at $140bn and projected to expand to $300bn by 2036, the sector offers a substantial opportunity for India to increase its global market share, generate large-scale employment, and move up the value chain. This executive summary presents the report's key insights, covering global market trends, India's current manufacturing and export position, the untapped export opportunity, supply and demand-side constraints and a targeted roadmap to position India as a competitive and reliable global supplier of sports equipment.

Global Market Overview and Trends

The global sports goods market (including sports apparel and footwear, sports equipment, and sports accessories) was valued at approximately $700bn in 2024 and is projected to grow at a CAGR of 4.6%, crossing $1 trillion by 2036. Within this broader market, sports equipment constitutes around 20%, representing a $140bn segment that is expected to grow steadily over the next decade.

While global exports for sports goods stood at $132bn, for equipment in particular, the exports were valued at approximately $52bn in 2024. China dominates sports equipment exports, with a 40-50% share across categories. Beyond China, the market is shared among the United States, Taiwan, Germany, and Vietnam.

Additionally, while Vietnam and India held comparable export shares in 2013, Vietnam has since expanded nearly threefold, whereas India has stagnated. Vietnam's growth has been driven by an ecosystem-led manufacturing strategy anchored by long-term partnerships with global brands, aggressive utilization of free trade agreements, cost-efficient raw material sourcing from China, and coordinated policy support – a trajectory that India must look to replicate.

India's Position in the Industry

India's global footprint in sports equipment exports remains limited at around 0.5% market share, despite a sizeable domestic manufacturing base. In 2024, the country exported $275Mn worth of sports equipment which was concentrated in a narrow set of products like cricket equipment, inflatable balls, boxing gear and athletic/weightlifting equipment. On the other hand, India's reliance on imports is heightened by the lack of scale and a holistic ecosystem for all sports goods. Manufacturing is clustered in legacy hubs such as Jalandhar and Meerut and is overwhelmingly MSME-led, which constrains scale, technology adoption, and export readiness.

Recognizing this untapped potential, recent policy momentum (including a dedicated allocation of INR 500 Cr for sports goods manufacturing in Budget 2026, cluster revitalization, MSME scaling support, and institutional realignment under the Ministry of Youth Affairs and Sports) provides a foundation to address these constraints.

The report identifies an $8.1bn export opportunity over the next decade, achievable by targeting an 11% export market share in sports equipment. This ambition could generate ~54 lakh additional jobs by 2036, significantly boosting employment opportunities in the country.

2036: Olympics and the Make-in-India Opportunity

A decade-long global sporting event cycle (including the Los Angeles Olympics 2028, Commonwealth Games 2030 in Ahmedabad, Brisbane Olympics 2032, and India's planned bid to host the 2036 Olympic Games) creates a continuing opportunity for large-scale procurement of sports equipment. India's ambition to host the 2036 Olympics must come with a strong emphasis on Make in India, as these games can act as a powerful demand anchor, boost MSMEs and provide global visibility. Leveraging this 10-year event-led demand can help Indian manufacturers integrate into international supply chains well ahead of the Olympic Games.

The export opportunity for India's sports equipment sector is therefore not aspirational but anchored in India's legacy manufacturing capabilities, which can be bolstered, especially given the global opportunity and upcoming events within the sports ecosystem. While Vietnam and Pakistan have capitalized on the China +1 opportunity, India is yet to do so. India currently faces a 10-20% cost disadvantage relative to China/Pakistan, primarily due to higher raw material costs, lower levels of mechanization, high land costs and inland logistics inefficiencies. Systematically addressing these cost drivers, while leveraging event-led demand and policy momentum, could enable India to scale exports and establish itself as a competitive global supplier of sports equipment.

Key Challenges Facing the Sports Equipment Industry

The sports equipment industry can be classified into 4 sub-groups that vary by manufacturing processes and raw material inputs, machinery requirements, domestic capabilities etc. (as elaborated further in the report). However, the key pain-points that persist across categories are as follows:

Supply-Side Challenges:

(i) **Raw material costs:** These are the largest contributor to the manufacturing cost gap. While China has locally integrated supply chains, Pakistan imports most raw materials duty free. On the other hand, Indian manufacturers pay high customs duties (10-20%) on raw materials that are not available in India. Some raw materials also face additional anti-dumping measures. Even metals available domestically are 10-15% costlier in India than in China due to Quality Control Order restrictions. These significantly increase input costs.

(ii) **Land prices:** High land prices prevent expansion that is necessary for scale ups. Currently, Indian units are much smaller than Chinese and Pakistani units, affecting efficiency.

(iii) **Certification costs:** Manufacturers need internationally accredited certifications to supply for competitions and improve global visibility. These usually carry high upfront costs, thereby causing an additional burden to manufacturers already facing significant cost disabilities.

(iv) **Other factors:** Inefficient in-land logistics, high costs of importing machinery in India (due to domestic unavailability of quality, up-to date machinery) and limited availability of skilled labour/tech know-how further erode cost competitiveness and put Indian manufacturers at a disadvantage.

(v) Additionally, certain categories like turfs and floorings, protective gear don't face significant cost disabilities. However, restrictions on Indian manufacturers in tenders released by the government prevent growth (in the case of synthetic floorings). For helmets, the lack of a robust testing & research ecosystem prevents Indian manufacturers from innovating and garnering approvals at the pace of their UK counterparts.

Demand-Side Challenges:

(i) **Weak demand-side pull and branding constraints:** Indian manufacturers lack strong forward linkages with global anchor brands and a cohesive Brand India narrative, resulting in low global visibility despite adequate manufacturing capability. Limited athlete endorsements of Made-in-India gear, low focus on manufacturing development through CSR initiatives, weak

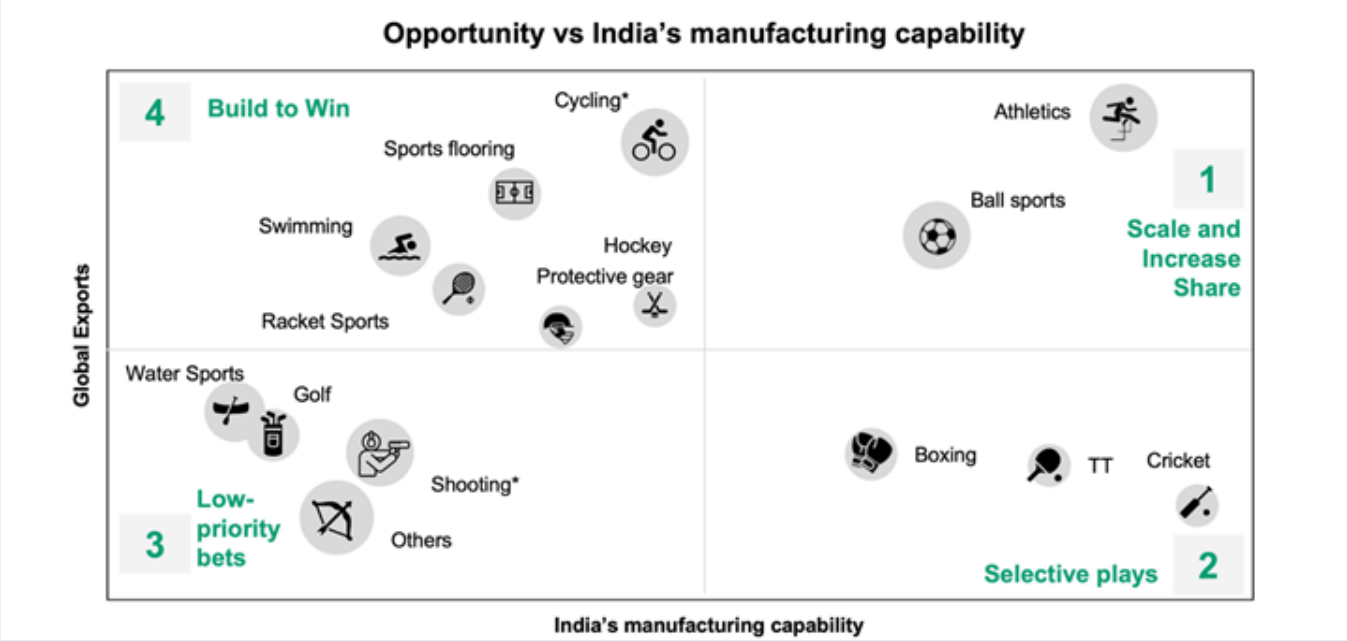
co-branding through international federations and underutilised roles of National Sports Federations in ecosystem building have further exacerbated these challenges.

(ii) **Structural market-access barriers:** Trade policy asymmetries and retail regulations constrain access to both global and domestic markets. India currently does not have sports focus in its existing FTAs (except the recent EU and UK FTAs). This limits brand building, distribution reach, and the ability to capture demand at scale.

Strategic Roadmap and Policy Interventions

To reach the target of $8.1bn exports by 2036, we need a phased approach towards prioritising key sports segments based on two things: the size of the global export market today, and India's current manufacturing readiness in each segment.

The sports goods market is divided into four groups.



Quadrant 1 includes categories where India already has strong capabilities and there is high export potential. This includes ball sports such as inflatable and hard balls, supported by established manufacturing clusters in places like Jalandhar and Meerut.

Quadrant 2 covers niche segments where India already produces but the overall global export opportunity is smaller. Examples include table tennis, boxing, and cricket.

Quadrant 3 includes smaller categories where both current capability and export potential are low. These include water sports, shooting, and golf. These will need longer term development before they can scale.

Quadrant 4 includes categories with large global demand but limited Indian presence today. These are "next wave" opportunities such as cycling, sports flooring, hockey equipment, protective gear, racket sports, and swimming. India will need to build new capabilities here.

A three-stage roadmap shows the above sports categories prioritised over time. Horizon 1 focuses on scaling existing strengths in Quadrants 1 and 2. Horizon 2 focuses on building capabilities in Quadrant 4, supported by better access to specialised inputs and a few anchor investments. Horizon 3 targets a future presence in more specialised and smaller categories, so that India can gradually broaden its global sports equipment portfolio.

While the sector has significant export potential, it remains severely constrained by competitiveness gaps that limits its ability to win global orders, meet lead time expectations and showcase compliance readiness. Under a business-as-usual trajectory, India's exports would continue to grow at 0.6% CAGR (historical growth rates) and plateau through 2036, with its global share remaining marginal at 0.4%

To reach the $8.1bn mark and hence, ~11% of the global share, India needs a coordinated set of structural reforms, targeted fiscal support and ecosystem building measures to expand manufacturing capability while improving credibility and market access.

Our analysis reveals ~15% cost disability compared to leading Asian peers. Over 2027-2031, this gap can be closed by structural fixes and a small fiscal outlay; key reforms in this area include: rationalizing import duties and QCOs on raw materials including carbon fiber, PU/TPU, and EVA, to eliminate inverted duty structures; accelerating duty drawback and other refund cycles, easing restrictions on export-linked machinery & tooling. Other beneficial measures include streamlining customs for product samples, harmonizing GST to reduce working capital blockages, and enabling faster tech transfer through faster visa processes for foreign technical experts.

Even after structural fixes, a residual competitiveness gap (largely existing due to lack of scale) should be bridged through targeted fiscal support over 2027-31 with an outlay of ~₹2,000 crore. This should include co-funding export-enabling investments like capex support for MSMEs, bulk procurement programs for machinery and critical raw materials, and certification & testing support to meet international standards for procurement eligibility.

Beyond immediate actions, three key long-term solutions are essential. First, the sector requires a cluster-led development approach involving four greenfield clusters in port-proximate locations/ states. This will require an outlay of ₹4,000 crore (for four new clusters). Readiness assessment of key states on parameters such as strong plug and play infrastructure, policy favourability, logistics infrastructure, and event-led tailwinds reveal that Gujarat, Andhra Pradesh and Tamil Nadu can serve as initial prospects. Simultaneously, upgrading legacy clusters like Meerut and Jalandhar with ₹1,000 crore enables quick wins by modernizing infrastructure and scaling production in established ecosystems. Secondly, India must build a strong testing infrastructure to help manufacturers reduce the costs associated with getting certified, as well as reduce lead times and boost innovation. Thirdly, India must also look to develop a domestic raw material ecosystem by anchoring critical upstream capacities in key advanced inputs (like carbon fiber or composites). Manufacturing nodes within or around clusters can be set up through PPP models or JVs, inviting global anchor investments, to reduce import dependence in the long-term.

On the demand side, a unified 'Brand India' framework (₹500 crore outlay) coordinated by the Ministry of Youth Affairs and Sports as a facilitator is essential to complement supply reforms with building global demand and credibility. This requires a multi-stakeholder collaboration including anchor brand partnerships to create demand pull and transfer quality systems; federation engagement to improve representations in International Federation committees for securing approvals for major events; manufacturers adopting quality standards and compliance, and government led promotion through international trade fairs, buyer roadshows, and co-funding certifications and accredited testing labs within clusters. Corporates can speed this up, shouldering responsibility with the government with a 'One Corporate, One Sport' model, offering not just CSR funding and sponsorship support for brand amplification but also building operational depth of grassroots level sports academies, ecosystems and building visible credibility as evidenced in Odisha's successful hockey ecosystem.

Sports equipment manufacturing as a sector should be prioritised as it offers credible export-oriented manufacturing opportunity. It offers an opportunity where targeted interventions can help industry players integrate into global markets, create jobs at scale, and build capabilities in adjacent manufacturing ecosystems. The policy case should focus on removing competitiveness bottlenecks and accelerating global market integration.

Implementation and Impact

The proposed interventions for the sports equipment sector require coordinated action across the Ministry of Youth Affairs and Sports, central and state governments, athletes, corporates, manufacturers and sports federations. Easing duties and QCOs and the eventual development of domestic ecosystems for raw materials like carbon fibre can reduce per-unit costs and improve competitiveness, thereby enabling scale. The development of integrated, world-class manufacturing clusters would address constraints related to scale, infrastructure and technology adoption. Targeted market-access and branding reforms would improve global competitiveness and demand visibility. Transitional support mechanisms can help sustain momentum where structural reforms take time to materialise. Collectively, these measures can position India as a credible global manufacturing hub for sports equipment, enabling it to capture share from established exporters such as China, Vietnam, and Pakistan.

The potential economic impact is significant. Scaling India's participation in global sports equipment value chains would strengthen the country's trade balance while generating large-scale employment across MSMEs that dominate the sector. Thus, over the next decade, the sports equipment sector can evolve from a domestically oriented industry into a competitive export engine.

Conclusion

The report on 'Realising the Export Potential of India's Sports Equipment Manufacturing' India's makes a strong case for targeted, long-term investment to unlock India's global potential. India is at a critical inflection point, with shifting global supply chains, a decade of upcoming mega sporting events, and growing policy momentum creating a unique opportunity to scale exports and reduce import dependence. By addressing structural cost disadvantages, strengthening anchor brand partnerships, upgrading manufacturing clusters, and improving market access and branding, India can transform its sports equipment industry into a globally competitive export sector over the next decade. Achieving this vision will require coordinated policy action, close collaboration between government, industry, and sports institutions, and sustained execution to overcome legacy constraints. The potential upside is substantial: $8.1 bn in equipment exports and the creation of 54 lakh additional jobs (cumulative) by 2036 across MSME-led clusters. These are certain to establish India as a trusted global supplier of high-quality sports equipment.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Chapter 1: Understanding the Sports Goods Ecosystem

The sports goods ecosystem comprises of four major sub-segments. These include:

Sports Apparel & Footwear

Clothing designed for sports and active use, offering comfort, performance, and for team identity. Footwear includes shoes engineered for physical activities, and optimised for performance, and sport-specific movements. Key product segments:

- Team kits, performance tops, tees, shorts, track pants.
- Outerwear (jackets, hoodies, windcheaters) and innerwear/compression wear.
- Swimwear or specialized sportwear (e.g. wrestling singlets, leotards).
- Running & training shoes, sport-specific shoes, indoor/outdoor court shoes, and athleisure shoes.

Sport Equipment

Core hardware/equipment used to play or practice a sport including gear and protective equipment. Key segments include:

- Balls, Sticks, Bats, Rackets, Goals, Nets.
- Training and Fitness equipment, Gym equipment, among others.

Sports Accessories

Supporting items and add-ons that enhance participation, convenience, safety, or monitoring in sports but are not core equipment. Key segments include bags/carry gear, headwear, socks, wearables and tech.

Others

Others include ancillary industries such as sports infrastructure (stadium seats, electronic signages), sports ticketing, sports tourism.

Chapter 2: Objective of the Study

Objective

The study aims to identify the key structural and operational challenges faced by manufacturers in India's sports goods sector and to recommend targeted interventions to strengthen domestic manufacturing capabilities, expand sectoral exports, and increase India's participation in the global sports goods market.

Target

- **Exports:** Increase India's share in global exports in sports goods from $2 bn to ~$24 bn and in equipment from current $275 Mn (0.5% global share) to $8.1bn (11% global share) by 2036.
- **Domestic Production:** Increase India's domestic production from current $183Mn to $800Mn by 2036.

Impact

The proposed growth trajectory is expected to generate ~54 lakh cumulative jobs by 2036.

Chapter 3: Global Market Overview

The global sports goods market, encompassing sports apparel and footwear, sports equipment, and sports accessories, was valued at around $700 billion in 2024. It is projected to grow at a compound annual growth rate (CAGR) of 4.6%, expected to cross $1 trillion by 2036. [Figure 1]

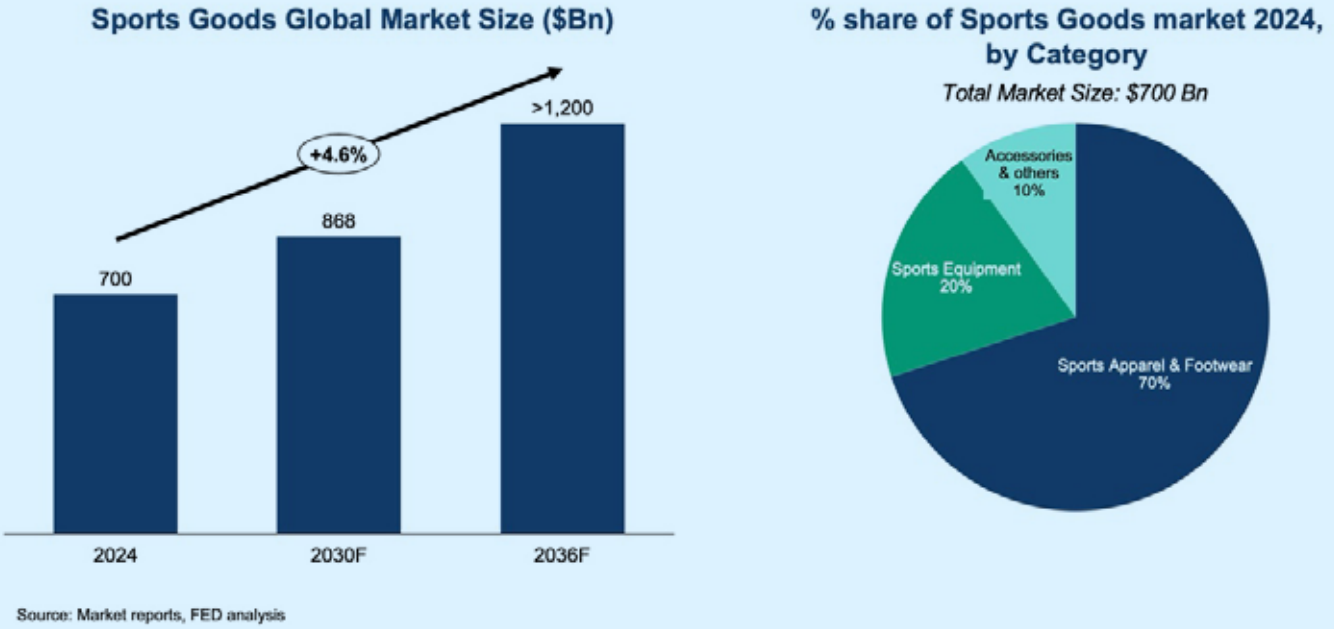


Figure 1: Global Market Size (in $ bn) for Sports goods and percentage share by category (in 2024)

Sports equipment market represents 20% of the $700 billion market, sized at $140 billion and expected to reach $283 billion by 2036, growing at the CAGR of 6%. It is dominated by Fitness & Strength equipment (33%) like treadmills and Ball games equipment (32%) like footballs etc, followed by Athletic training equipment (14%) and Racket/Net games (10%). [Figure 2]

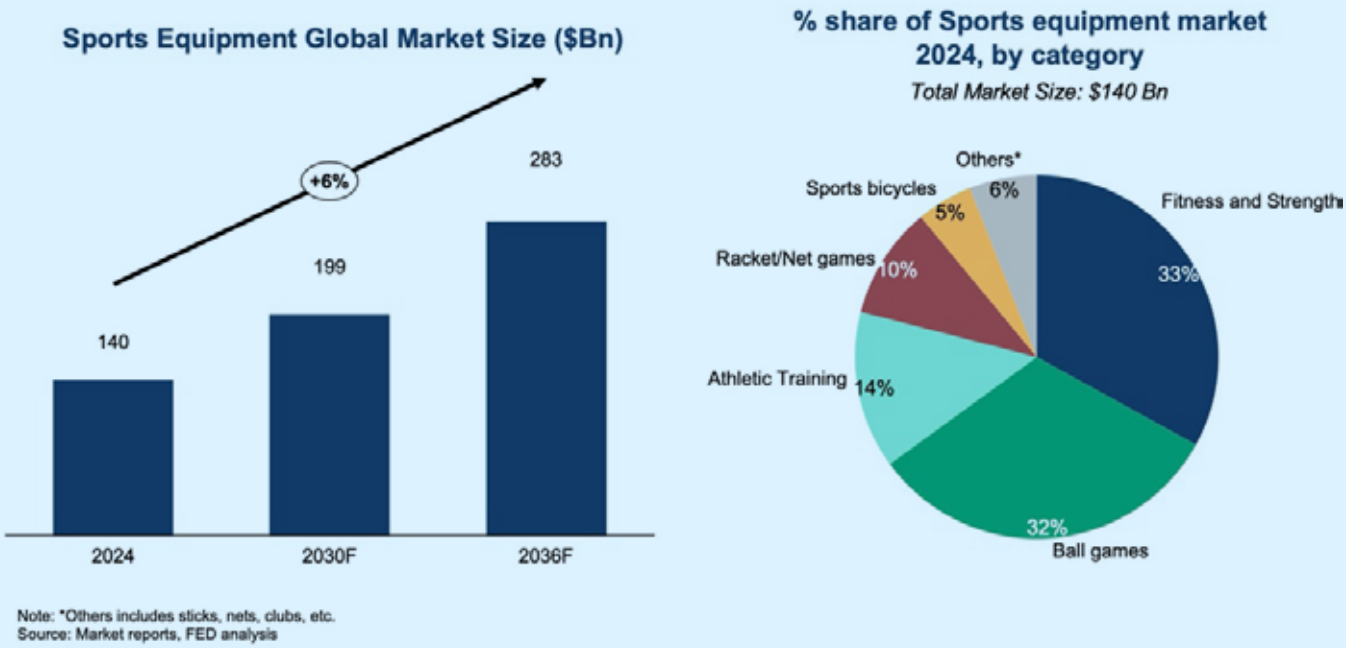


Figure 2: Global Market Size (in $ bn) for Sports equipment & percentage share by category (in 2024)

World exports of sports equipment were valued at approximately $52 billion in 2024, rising at the CAGR of 2.4%. It is majorly led by gym and athletic equipment (27%) and bicycles (17%) as the largest export categories, followed by leg pads, nets, bats, and golf gear. [Figure 3]

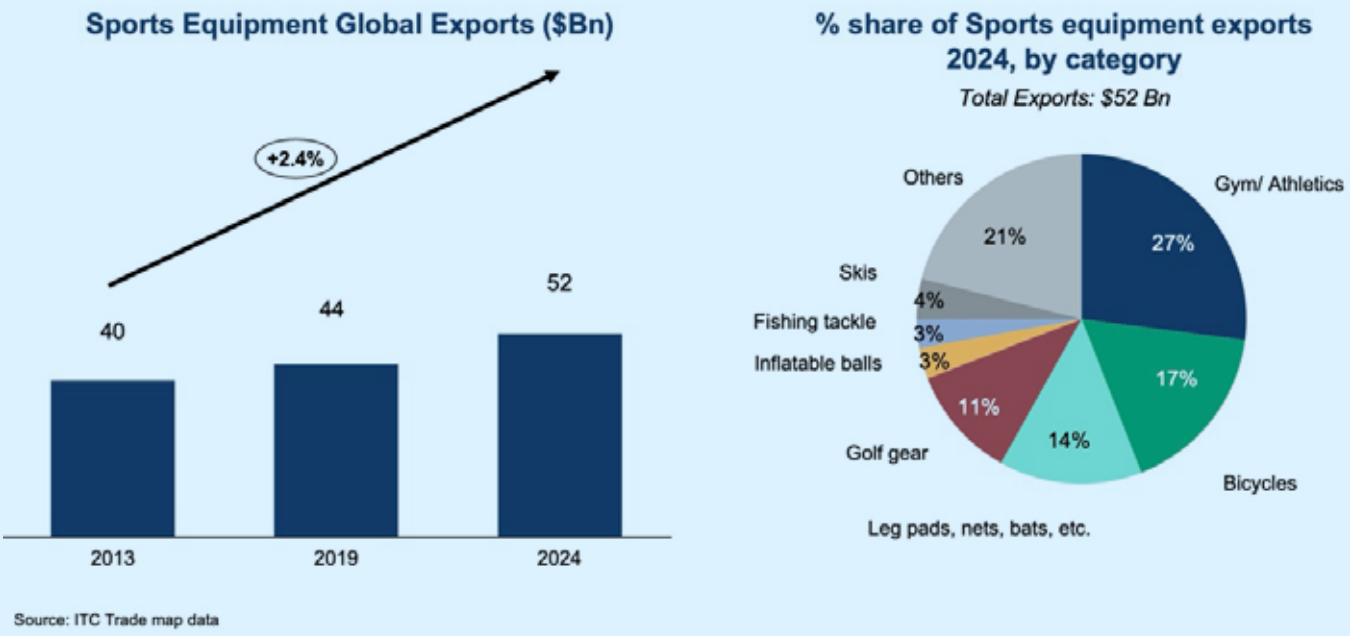


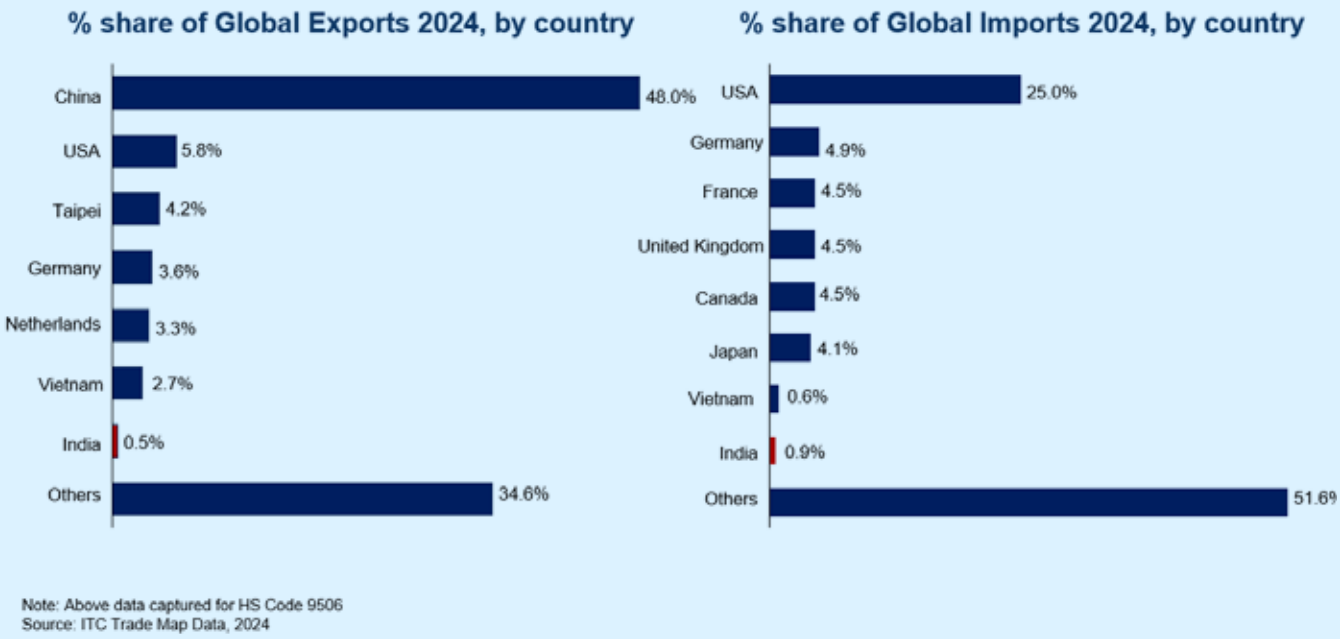
Figure 3: Global Exports (in $ bn) for Sports equipment and percentage share by category (in 2024)

The global sports equipment market comprises a diverse set of sports categories. Within the top ten categories by export value, India's export footprint remains relatively small, with a combined share of around 0.5 percent. [Figure 4]

HS Code	Category	Global Export Value (in $Mn)	India Export Value (in $Mn)	India's share in global exports	Top global exporters (% share)
9506 (91)	Exercise, Gymnastics & Athletics Gear[1]	14,081	29.7	0.21%	China (65%), USA (5%), Taiwan (4.5%)
8712 (00)	Bicycles (sports)	8,833	67.3	0.76%	China (30.5%), Taiwan (11.7%), Germany (10.4%)
9506 (99)	Misc. equipment including cricket bats, sports nets	7,356	110	1.5%	China (41.9%), USA (6.5%)
9506 (39)	Golf equipment (excl. balls and complete clubs)	2,667	0.1	0%	China (31.4%), Hong Kong (18%)
9506 (29)	Water-sport gear (water-skis, surf-boards, sailboards)	1,998	3	0.16%	China (46.8%), Italy (6.2%), Netherlands (5.5%)
9506 (31)	Golf clubs	1,994	0	0%	Mexico (21.9%), China (15.9%), Japan (12%)
9506 (62)	Inflatable balls	1,797	21.3	1.2%	China (48.8%), Pakistan (13.8%), Vietnam (7%)
9304 (00)	Spring-, air- or gas-powered guns & pistols, etc.	1,575	1	0.06%	China (54%), USA (5%)
9507 (90)	Fishing tackle, landing/butterfly nets, decoys	1,478	9.9	0.67%	China (54.7%), USA (5.2%)
9507 (10)	Fishing Rods	1,054	0	0%	China (62.9%), Vietnam (6.4%)
	Others	9,411	32.3	0.3%	China, USA, Taiwan, Germany
	Total	**52,243**	**275**	0.5%	

Figure 4: Top 10 categories of Global Exports (in $ bn) for Sports Equipment (in 2024)

The export market is dominated unsurprisingly by China. After China, the market is fragmented with USA, Taiwan, Germany, and Vietnam taking 3-6% share each. USA is the largest consumer of sports goods and is also the largest importer. USA is followed by European countries such as Germany, France, and the UK. India, also, is an importer of sports goods. [Figure 5]



Note: Above data captured for HS Code 9506
Source: ITC Trade Map Data, 2024

Figure 5: Percentage share of countries in Global Exports and Global Imports for Sports Equipment

If we examine the export trends for the last ten years, telling trends emerge. China's dominance in sports equipment exports is driven by export-facilitation zones located near major ports and a highly localized supply ecosystem that lowers raw-material and input costs. Taiwan has carved out a niche in high-end, premium manufacturing, particularly in bicycles supported by strong R&D capabilities and well-integrated manufacturing clusters. Vietnam and India held comparable export shares in 2013; however, Vietnam has since expanded its share by nearly threefold, supported by development of adjacent industries like footwear, extensive free trade agreements (including CPTPP and EVFTA), cost-efficient sourcing of raw materials from China, and a growing presence of global brands leveraging the China+1 strategy. Contrarily, India's marginal share has reduced from 0.7% in 2014 to 0.5% in 2024. [Figure 6]

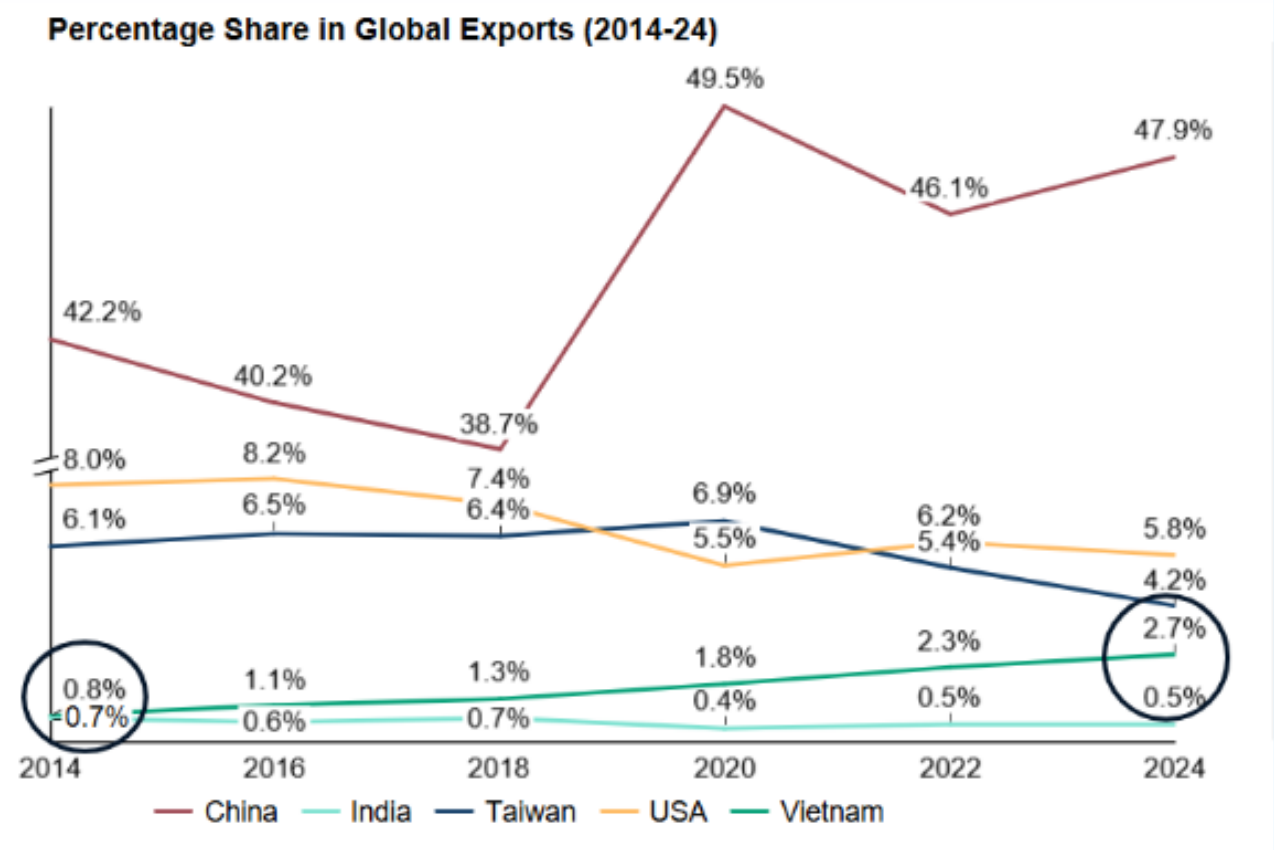


Figure 6: Percentage share of countries in Global Exports of Sports Equipment

Case Study 1: Understanding Vietnam's Growth Story

Vietnam's more than 3x growth in sports equipment exports over the past decade highlights the importance of a long-term, ecosystem-led manufacturing strategy anchored by global brands.

Deep-dive: Vietnam's >3x growth indicates how crucial it is to bring anchor brands, develop manufacturing clusters

Phase 1: Foundation *1990s – early 2000s*

- **In 1994-98, Taiwanese and Korean contractors** (Pou Chen, Yue Yen) established **early footwear clusters** in South Vietnam
- **Doi Moi Reforms** (1986) and the **US-Vietnam bilateral trade agreement** (2001) unlocked market access
- $30B textile/garment base created a **strong, skilled workforce** in precision manufacturing

Phase 2: Ecosystem creation *Mid 2000s – Mid 2010s*

- **Nike and Adidas** anchor investments created **supplier clusters** for foam, EVA, and laces in Ho Chi Minh region
- **Localization of components** rose substantially between 2010-20, enabling '**speed to market**'
- **Labour cost** ($3/hr vs. China's $6.5/hr), **port proximity** attracted Tier-2,3 brands like Puma, Under Armour

Phase 3: Trade acceleration *Mid-2010s*

- **17+ FTAs** launched (e.g., CPTPP 2019, EVFTA 2020) eliminated majority tariffs to EU/US markets
- Nike began **major production shift** from China, ramping up to **100+ factories** in Vietnam
- Vietnam-EU trade grew, with **94%** increase in total apparel & footwear imports from Vietnam between 2008-16
- Reached **~$19B** in footwear exports in 2019 (pre-COVID), a 350% jump over previous decade

Phase 4: Sustained growth *Late 2010s - Present*

- Global trade tensions (2018-2020) and COVID-19 (2020-22) accelerated **China+1 diversification** for brands
- As of Apr 2025, Vietnam accounted for **25%** of all Nike's factories, China at **24%**
- Vietnamese govt. implements a unified national framework, an efficient single window (VNACCS), and offers 10-17% corporate tax for 10-15 years

Vietnam's 20-year compounding advantage required: 1) Anchor investor strategy – landing a long-term partnership with Nike and Adidas that catalysed ecosystem development 2) FTA aggressiveness enhancing competitive free trade access 3) Unified policy under a single national framework, and 4) Infrastructure investment with textile and footwear cluster hubs in Southern Vietnam offering faster port access.

Source: Secondary research

Figure 7: Ecosystem development in Vietnam for Sports goods manufacturing (phase wise)

Vietnam's 20-year compounding advantage required: [Figure 7]

- Anchor investor strategy - landing a long-term partnership with Nike and Adidas that catalysed ecosystem development.
- FTA aggressiveness enhancing competitive free trade access.
- Unified policy under a single national framework.
- Infrastructure investment with textile and footwear cluster hubs in Southern Vietnam offering faster port access.

Chapter 4: India Market Overview

India's sports goods market remains relatively small in scale. The total market size is currently estimated at approximately $2.5 bn, of which around $0.5 bn comprises sports equipment. India's domestic market accounts for less than 1% of the global sports goods market, underscoring the limited scale of consumption relative to global demand. This makes it imperative for India to focus not only on domestic market expansion but also on export-led growth as a primary driver of sectoral scale and competitiveness.

At present, India imports nearly 63% of the sports equipment consumed domestically. This import dependence reflects gaps in technology adoption, manufacturing scale, and access to specialised raw materials across several product categories. Addressing these constraints will be critical for expanding domestic production and reducing reliance on imports, particularly in high-volume and performance-sensitive segments. [Figure 8]

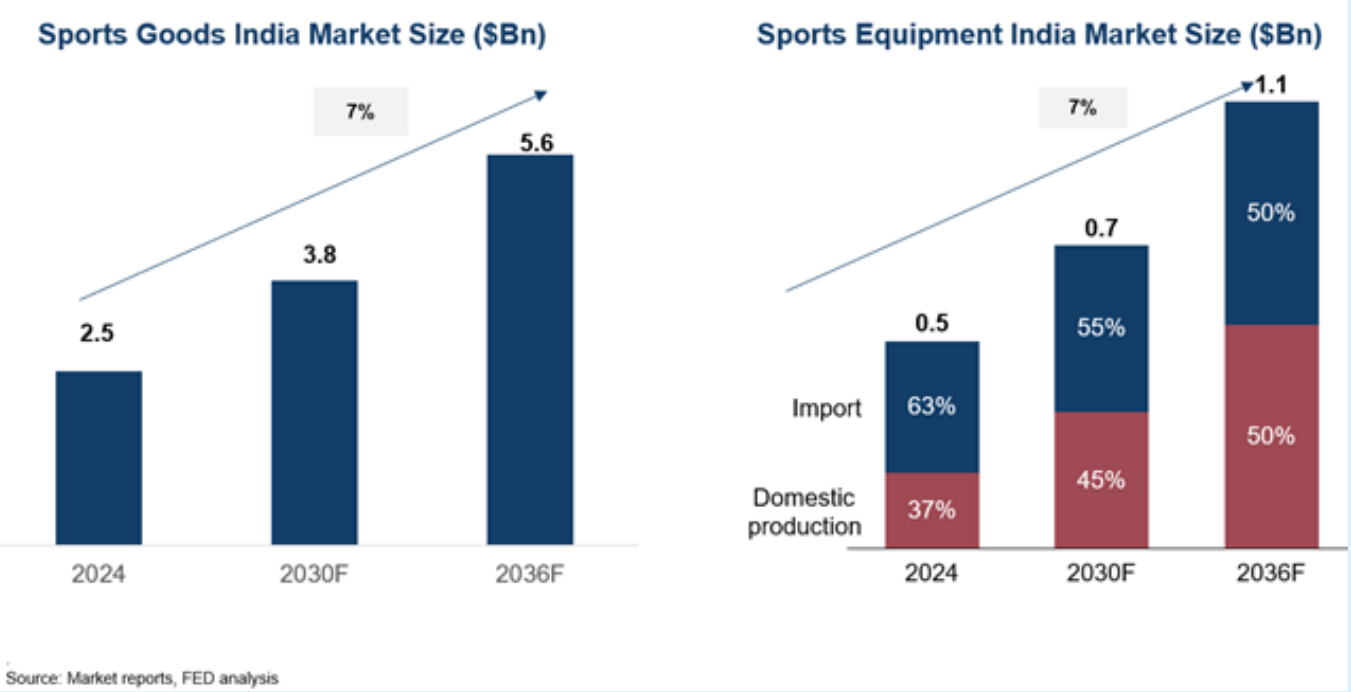


Figure 8: Market Size (in $ bn) of India's sports goods and sports equipment

On the export front, India's sports equipment exports are geographically concentrated. Over 50% of the exports are directed to the United Kingdom, the United States, and Australia. Major export products include protective gear, cricket bats, gym and athletic training equipment, hard balls, and inflatable balls. On the import side, more than 60% of India's sports equipment imports originate from China, followed by Japan and the United States, highlighting India's dependence on a narrow set of global suppliers.

Manufacturing activity within India is concentrated in a few key clusters. Jalandhar (Punjab) and Meerut (Uttar Pradesh) form the backbone of the sports goods manufacturing ecosystem, together comprising approximately 250+ exporting units, 1,000+ domestic-market-focused units, over 4,000 micro enterprises, and nearly 20,000 household units. Other notable clusters include Ludhiana (bicycles), Delhi and Mumbai (sports accessories and apparel).Overall, India's sports manufacturing landscape is predominantly MSME-led, with nearly 90% of the production driven by small and micro enterprises. [Figure 9]

Figure 9: India's major sports goods manufacturing clusters

Despite its modest scale, India has produced several globally recognised brands that demonstrate the sector's underlying capability and potential. [Figure 10]

India's sports manufacturing landscape is MSME-led, with 90% production driven by small players

Retailers

Large Exporters

Other Key Manufacturers

Select Large Manufacturers	Category	Location	Turnover (in Cr)
Garware Technical Fibres Limited	Sports nets, textiles, and ropes	Pune	1250-1500
Soccer International Pvt Ltd	Inflatable balls	Jalandhar	300-400
Freewill Sports (Nivia)	Inflatable balls	Jalandhar	300-400
Sanspareils Greenlands Pvt Ltd	Cricket	Meerut	300-400
Cosco India Ltd.	Multi-sport equipment	Delhi	150-200
Bhalla International	Athletics, Fitness equipment	Meerut	115-120
Natspo Industries Pvt Ltd	Fitness accessories	Meerut	100-120
Sporting Syndicate International	Inflatable balls	Jalandhar	75-100
Savi International	Inflatable balls	Jalandhar	60-65
Universal Sports Industries	Boxing	Jalandhar	50-55

Source: Stakeholder consultations, secondary research

Figure 10: Represents India's major sports retailers, exporters and manufacturers

Government Initiatives

*"India has the potential to emerge as a **global hub for high quality, affordable sports goods**. I propose a dedicated initiative for sports goods that will **promote manufacturing, research and innovation in equipment design as well as material sciences**."*

- Nirmala Sitharaman, Hon. Finance Minister of India (Budget 2026)

For the first time, Budget 2026 has highlighted India's potential to become a global hub for high quality, affordable sporting goods. It provides support through dedicated focus on sports goods manufacturing, legacy clusters revival and equity support for SMEs. Key highlights are:

- A **first-ever allocation of ₹500 crore** specifically for the "**Promotion of Sports Goods Manufacturing".**
- The initiative emphasises **innovation in equipment design and material sciences** to create lighter, stronger, and more ergonomic sports gear.
- **Scheme to revive 200 industrial clusters (e.g. Jalandhar, Meerut)** to improve tech infrastructure, cost competitiveness.
- **10,000 Cr SME growth fund (equity & scaling support)** to benefit sports manufacturers, 90% of the sector comprises MSMEs.
- Provisions to strengthen marketing capabilities & **build India's brand presence,** reducing import dependency.

The government has also recognised the sector's potential and has initiated policies to serve as necessary momentum.

Central Government-Led Push

1. **Institutional Realignment**
    - Sports goods manufacturing has officially moved to the **Ministry of Youth Affairs and Sports** (previously under the Ministry of Commerce).
    - There is also a large focus on the creation/upgradation of sports infrastructure.
2. **Khelo Bharat NITI 2025**
    - The new **National Sports Policy** recognises 'Sports Equipment Manufacturing' as **essential for economic growth** and strengthening India's sports ecosystem.

Cluster-Led Scheme Enablers

- The Ministry of MSME's **MSE-CDP scheme** provides grants for developing Common Facility Centres and other shared facilities such as testing labs, and R&D centres.

State Government-Led Push

1. **Gujarat Sports Policy (2022-27)**
    - Highlights sports goods manufacturing as a **key priority,** with an intent to set up a dedicated manufacturing cluster.
    - Specifies a list of **state incentives offered** for sports & apparel manufacturers as part of policy.
    - **Vibrant Gujarat** proposed cluster for sports goods & apparel, citing port proximity (Mundra/ Kandla).
2. **Andhra Pradesh Sports Policy (2024-29)**
    - Promotes creating **Sports Economic Zones,** to boost local sports equipment and apparel production.
    - Aims to establish a global sports commerce hub and a world-class '**Sports City**' in Amravati, with private sector involvement.

Chapter 5: Unlocking India's Olympic Opportunity

India is all set to host the Commonwealth Games 2030 and has bid to host 2036 Olympics, which is supported by strong precedents. This move could provide a significant demand-side tailwind for domestic sports equipment manufacturing, as historical evidence shows that host nations capture substantial economic and industrial benefits. Previous Olympic hosts have leveraged large-scale procurement to strengthen local manufacturing and SME participation.

Paris Olympics, 2024

- Awarded approximately €5 bn ($5.4 bn) in contracts, 90% of service providers are French, and 78% are SMEs, involving over 500 local/social-economy enterprises (employment generated: 181,000).
- The games have generated between €6.7 - 11.1 bn in net economic benefits in the Paris region, with an intermediate scenario projecting € 8.9 bn in net economic impact.

London Olympics, 2012

- Required a total procurement of £6.9 bn ($11 bn), of which 98% contracts were awarded to UK based companies. Majority of them were awarded to SMEs. These contracts included both development of infrastructure and sporting goods.

With the right long-term strategy, India's 2036 Olympics bid could catalyse capacity creation, supplier upgrading, and global competitiveness in the sports equipment sector.

Olympics games currently have 51 sports across 6+ categories, many of which we can manufacture globally competitive products in. [Figure 11]

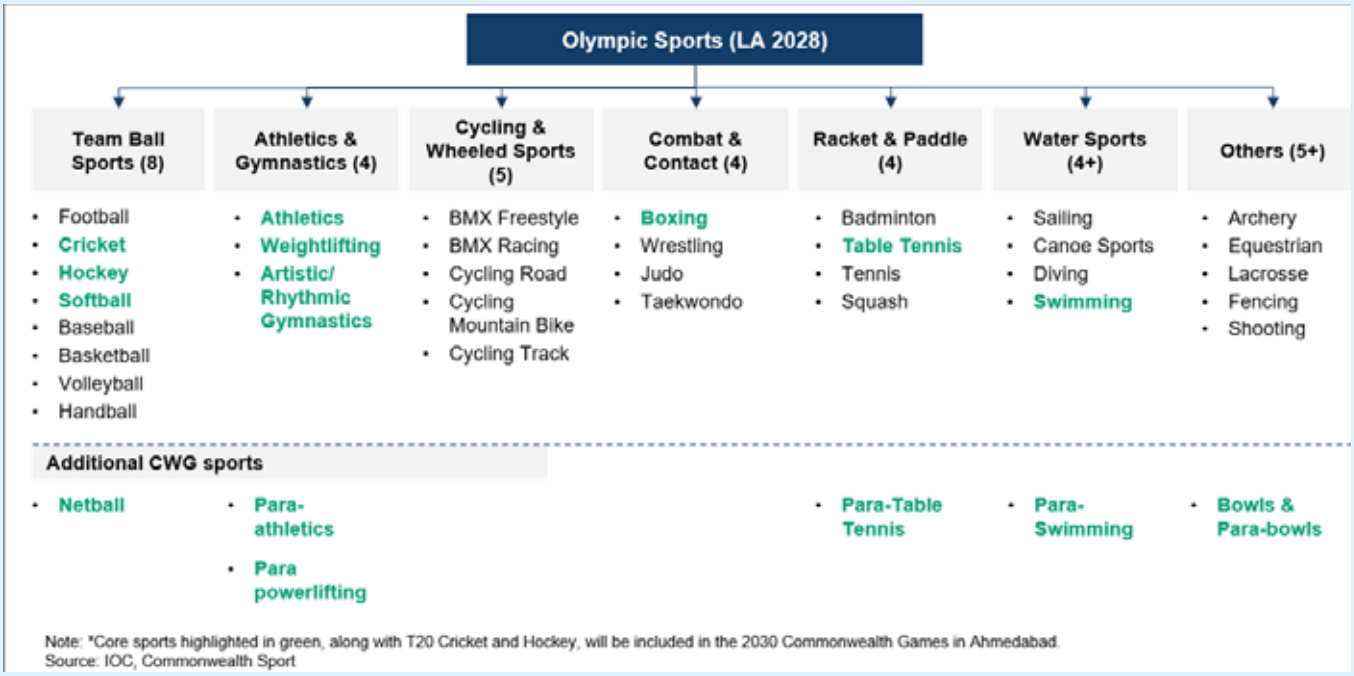


Figure 11: Represents sports included in the Olympic games to be held in 2028 in LA, USA

If planned strategically, Indian sports equipment manufacturers can capture incremental export opportunity every 1-2 years through 2036, build domestic supply capacity, and leverage Ahmedabad 2030 to showcase strong Indian-made brands. [Figure 12]

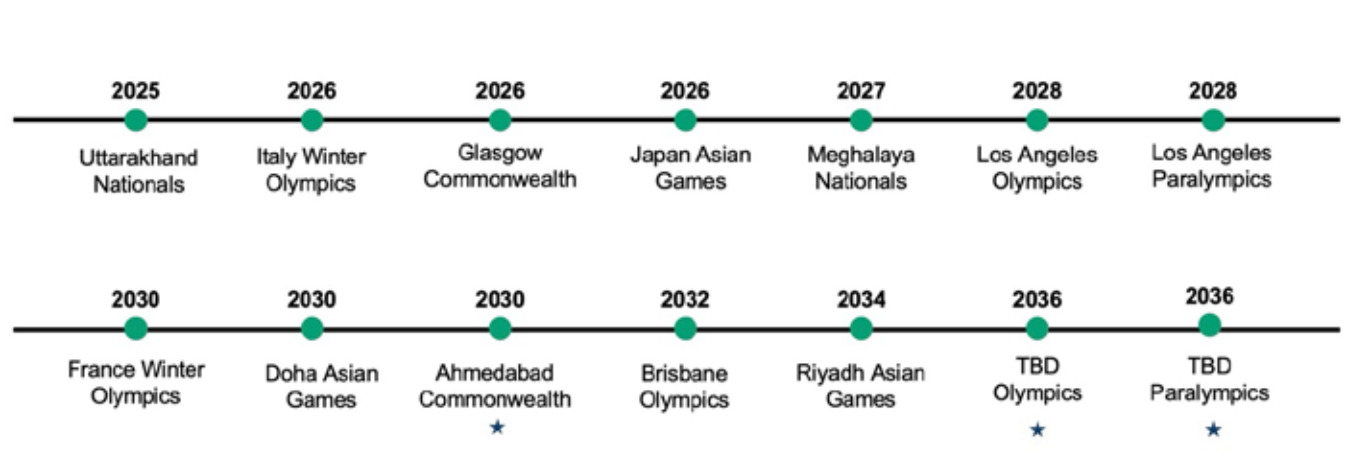


Figure 12: Major sports events to be held between 2025 and 2036


BLADE

Chapter 6: Opportunity

Taking a broader ecosystem view, India can potentially target approximately $24bn in sports-related exports by 2036, spanning equipment, apparel, footwear, accessories, and allied services. This opportunity is underpinned by India's manufacturing base, expanding global sports participation, and India's growing integration with global supply chains. Sports-related exports also benefit from strong global demand, product diversification across price segments, and high employment elasticity, making the sector well aligned with India's objectives of export-led growth, job creation, and MSME expansion. [Figure 13]

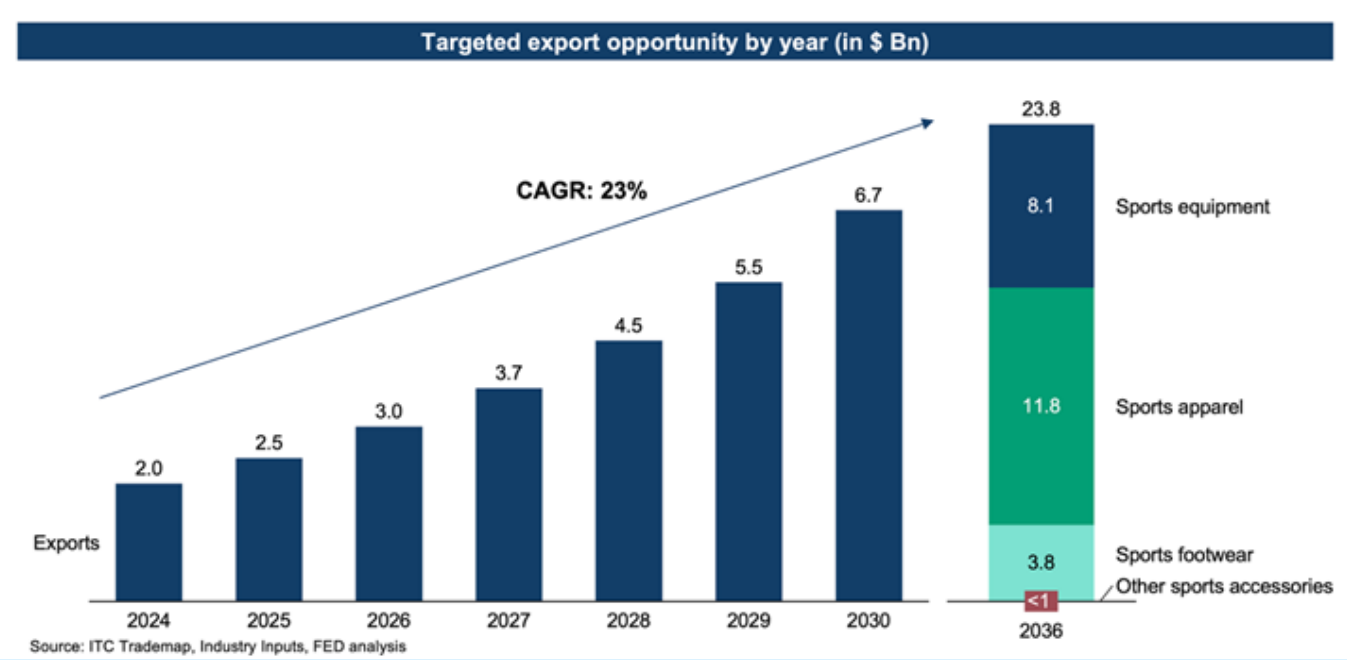


Figure 13: Target export opportunity for India's sports goods (year-on-year)

Within sports goods manufacturing, sports equipment represents a particularly high-impact opportunity for India. By strategically focusing on this segment, India can potentially target exports of approximately **$8.1 bn by 2036**, while creating nearly **54 lakh additional (direct and indirect) jobs**. [Figure 14]

Figure 14: Targeted export opportunity for India's sports equipment (year-on-year)

Chapter 7: Challenges

India's limited share in the global sports equipment market, at approximately 0.5%, is not the result of a single constraint, but of a combination of interlinked demand and supply side challenges.

Supply side challenges include high cost of raw materials, high landed cost of capital goods, limited and expensive land, high costs of inland logistics among others.

On the demand side, limited forward linkages hinder Indian manufacturers' global accessibility and potential demand. These include lack of a brand India sentiment in the sports manufacturing sector, no key partnerships with anchor brands that bring with them global value chains and technology and lack of representation in international forums.

Supply Side Challenges

High factor-market costs and infrastructure gaps significantly increase the cost of manufacturing in India.

Raw Material

- **Limited accessibility to key inputs** such as PU/TPU, imports attract significant duties.
- **Costlier domestically available materials**, such as steel, compared to other countries.

Capital Goods

- Limited domestic production of key capital goods (machinery/moulds) drives **higher import cost**.
- Many government export incentive schemes exclude sports goods, while existing eligibility criteria often sideline large exporters.

Infrastructure

- Existing players require expansion which is constrained by land scarcity and high land costs in existing manufacturing clusters.
- **High logistics costs** from inland clusters such as Punjab and Meerut to ports and airports reduce export competitiveness.
- **Shortage of skilled labour**
- **Weak R&D ecosystem** for inputs & tech development.

Technology Transfer

- **High dependence on foreign consultants** for tech transfer; has high costs.
- **Delays in visa clearance** slows down the process of technology transfer.

Certifications

- Exorbitant costs of equipment certifications for supply to international tournaments effectively shut Indian MSMEs out.
- Lack of globally recognised domestic testing labs adds to the already high-cost burden.

These challenges lead to a cost disability for India as compared to its peers. A summarized version is available in Figure 15. Numbers indicate the delta v/s competitor countries which leads to total disabilities highlighted in red. A scale disability has also been introduced to capture loss due to lack of scale.

	India vs China			India vs Pak	
Cost Heads/ Representative Sports	Footballs*	Solid Athletics	Boxing**	Hard Balls, Cricket Bats	Hockey Sticks
Raw Material	12	8	13	0-5	20
Labour	6	5	8	0	0
Logistics	1.5	3	2.5	2	2
Power & Taxes	0.25	0.1	0.15	1	1
Financing cost	0.7	0.4	0.2	0.5	0.7
Machinery cost	0.2	0.3	0.03	0	0
Other	0.3	0.2	0.15	0	0
Overall cost disability (%)	10%	7%	7%	Nil (0-5% ability)	20%
Scale Disability (%)	4-6%	5-6%	9-10%	-	5-6%
Total Disability (%)	14-16%	12-13%	16-17%	Nil (0-5% ability)	25-26%

Cost advantage | Cost disadvantage

Figure 15: India's cost structure vs key competitors

To understand this disability better, we can evaluate the overall industry through four sub-groups. [Figure 16]

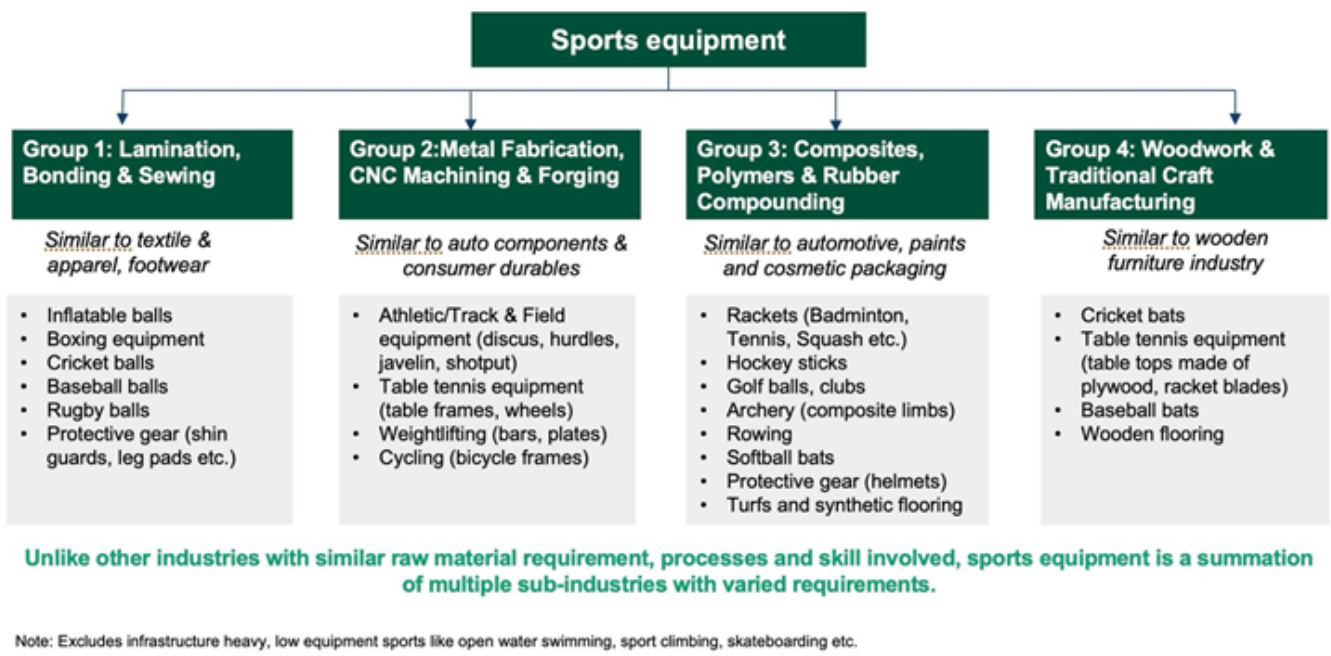


Figure 16: Sub-groups in the sports equipment segment based on manufacturing processes

We have deep-dived into each of these groups to understand in depth the key challenges.

Group 1: Lamination, Bonding & Sewing

Includes Inflatable balls, Boxing equipment, Cricket, Baseball, Rugby balls, & Protective gear (leg pads, shin guards, etc.)

a) Inflatable Balls

Overview

Inflatable balls include sports equipment like footballs, basketballs, volleyballs, netballs, handballs designed for competitive play with specific sizes and bounce properties.

In terms of exports, India has a mere 1% share in global exports, while China & Pakistan hold >60% of the market. Pakistan has 14% share, which signifies a strong China+1 opportunity that India has not yet capitalized. [Figure 17]

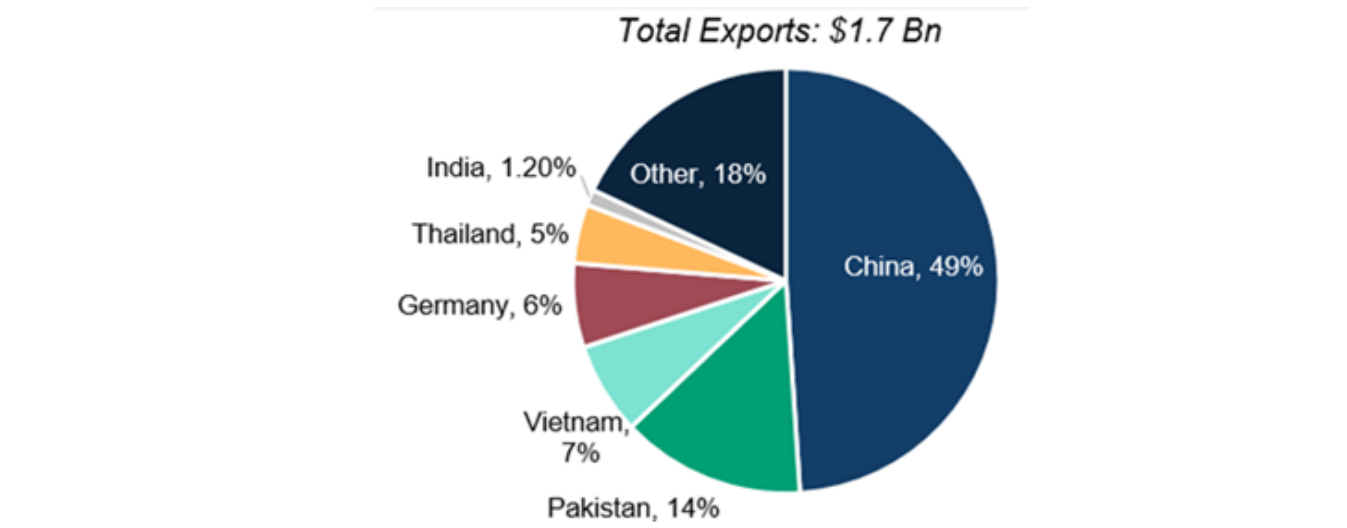


Figure 17: Percentage share of countries in global exports of Inflatable balls

Key global brands & domestic manufacturers include the following:

International Manufacturers	Domestic Manufacturers
adidas, NIKE, PUMA, DECATHLON, Kempa, molten, Mitre, MIKASA, SPALDING, Wilson	Soccer International, Nivia Sports, Sporting Syndicate International
DECATHLON, Kempa, SPALDING, Wilson	COSCO SPORTS | FITNESS Cosco, RABRO One Spot. All Sports. Rattan Brothers

Manufacturing Process: Footballs

Typically, footballs are manufactured using 3 main methods. Each varies on labour and capital intensity. They are as follows:

Method	Process	Investment	Avg. Daily Output
Hand-stitching (training/ match balls)	1. PU/PVC Panels are cut 2. Hand stitched by skilled workers 3. Bladder is inserted, final seam closed, ball inflated	<1 lakh	4 balls per person
Machine-stitching (entry level balls)	1. PU/PVC Panels are cut 2. Stitched by machines 3. Bladder is inserted, final seam done by hand stitching, ball inflated	2-2.5 lakh for machinery	50 balls (machine stitching) 20 balls (final hand stitching)/per person
Thermo-bonding (official match balls)	1. PU/PVC Panels are glued 2. Fused under heat/ pressure in molds 3. Bladder is inserted, sealed, and ball inflated	75 lakh-1cr per 500 balls produced, machines mostly imported from China	8 balls per person

Other types include moulded balls (method used across basketballs, footballs etc., this needs an average investment of 1.5-2 cr.

Hand stitching is commonly preferred for training and match balls due to its stronger and more durable seams. High-end tournament balls use thermo-bonding technology as this method significantly reduces water absorption and helps the ball retain its weight, shape, and performance across varying weather conditions. However, as seen above, this process is highly capital-intensive and depends on specialised thermo-bonding machines and moulds that are largely imported from China.

Industry Specifics

Factor	Machine Stitched	Thermo-Bonded	Hand Stitched
Mfg. Processes Distribution	70-75%	5-10%	20-25%
Labour intensity	Moderate	Low	High
Capital Intensity	Moderate	High	Low

Machine-stitching is the most common method of manufacturing, requiring an equal mix of labour & capital intensity. However, this is usually used to manufacture low-end, promotional balls.

Raw Materials: Inflatable balls across categories use a common set of raw materials, including PU/TPU leather covers, rubber bladders, EVA foam, and polyester. Among these, PU/TPU leather and EVA foam are largely imported from China, while most other raw materials are sourced domestically.

Key Buyers and India's Positioning

Current export demand in the football segment is largely driven by global brands such as Adidas, Nike, Puma, and Mitre through contract manufacturing arrangements. While Indian manufacturers do participate in such contracts, Pakistan holds a structurally dominant position, particularly in football manufacturing, supported by duty-free access to key raw materials and decades-long partnerships with anchor brands. A significant share of global hand-stitched football production for major brands is concentrated in Pakistan's Sialkot cluster, which has emerged as the preferred sourcing base for high-specification match balls.

Engagement with anchor brands enables manufacturers to adopt best-in-class production processes, quality standards, and advanced materials and tooling. These relationships also generate strong signalling effects, as smaller international brands tend to source from the same supplier ecosystems trusted by global majors. India's relatively weak anchor brand presence has therefore limited the diffusion of technical know-how across the industry and constrained demand from smaller global buyers.

This cumulative advantage has allowed Pakistan to scale credibility and market share, including serving as the official football supplier for three FIFA World Cups, a milestone that India has yet to achieve.

Adjacent industries

The industry shares similarities with apparel & footwear manufacturing.

- **Apparel**: The primary mode of manufacturing is stitching, similar to football production. The machinery and equipment used are largely common across both industries.
- **Footwear**: The industry uses similar raw materials such as PU and foam. There is overlap in input requirements and processing techniques.

Cost Structure Analysis

For this segment, the manufacturing costs were benchmarked against China & Pakistan. **Indian manufacturers face a 14-16% disability vs**. **competitors** in footballs made of PU/TPU. [Figure 18]

Particulars	India	China	Pakistan	Delta v/s China	Remarks
Raw materials	**67**	**54.5**	**57**	**12**	
PU/TPU	34	24.5	25.5	10	• PU/TPU: ~30% disability, driven by 20% customs duty + $0.46/m anti-dumping duty; Pakistan largely imports raw materials duty free
Rubber /Bladder	15	15	15.5	0	• Rubber/Bladders sourced domestically at competitive prices in India. Pakistan imports the same from China, Thailand etc.
Other (Foam, Polyester etc.)	18	15	16	3	• High import duties of 20% on polyester, limited domestic suppliers. Foam must be imported due to lack of quality domestic availability
Labour	**23**	**29**	**23**	**(6)**	• China's wages 2-2.25x higher than India's; productivity is 80-85% higher
Logistics	**3**	**1.5**	**2**	**1.5**	• India's inland logistics costs are 2-2.5x China's due to distance from ports. Pakistan's dry port in Sialkot helps reduce costs
Power	**1**	**1**	**1.5**	**0**	• Similar power costs to China, but Pakistan's costs are higher
Taxes	**1.25**	**1**	**1.5**	**0.25**	• India & Pakistan's tax structure higher than China's
Financing Cost	**1.5**	**0.88**	**2.2**	**0.7**	• China lends at 3-4%, India's rate higher at 6% (after 3% subvention), Pakistan's averages at 9% (after 3% export subvention)
Machinery Cost	**2**	**1.8**	**2**	**0.2**	• Surcharges, freight and insurance costs increase landed price
Other	**1**	**0.7**	**1**	**0.3**	• Includes royalties, administration costs etc.
Overall cost	**100**	**90**	**90**	**10%**	
Scale disability				**4-6%**	
Total disability				**14-16%**	

Figure 18: Cost structure comparison for football production

This is mainly due to high duties which makes raw materials i.e. PU/TPU 30% more expensive in India compared to China. Higher logistics costs due to distance from port add to this burden.

Certification Costs

In addition to a significant cost disability, manufacturers also face high upfront certification costs which are as follows: [Figure 19]

Certification body	Certification	Est. cost (in INR)	# of certified Indian manufacturers	# of total certified players	Remarks
FIFA	Quality/Quality Pro (4-year certification)	Admin/Testing fee: 5 lakhs per ball Licensing Fee: 22 lakhs per year Royalties: 80-160 per ball **Total:** 27 lakhs per ball*	4	50+	• China - 6 certified providers • Pakistan - 10 certified providers
FIBA	Level 1/Level 2 Size 5,6,7 (4-year agreement)	Handling Fee: 1 lakh Testing: 2-3 lakhs Licensing Fee: 35-70 lakhs **Total**: 40-70 lakhs*	3	25-30	• China - 7-8 approved brands • 1-3 approved brands from countries like Brazil, Colombia, Japan, etc.
FIVB FÉDÉRATION INTERNATIONALE DE VOLLEYBALL	Homologation Certificate	Total Homologation Cost: 1 Cr*	nil	5	• Mikasa, Synsheen, Milton, Gala & Wilson only approved brands • Mikasa & Molten (Japan); Synsheen (Korea), Gala (Europe) & Wilson (USA)

Note: *Estimate derived through primary consultations

Figure 19: Certification costs for inflatable balls

These costs make it challenging for Indian manufacturers to gain certifications, acting as a barrier to gaining international visibility (at competitions, tournaments).

Conclusion

Inflatable balls represent one of the largest global sports goods segments, with exports valued at USD 1.7 billion in 2024. Despite having more than ten established manufacturers, India accounts for only about 1% of global exports, while Pakistan's 14% share highlights a significant China+1 opportunity for India.

Reducing customs duties and anti-dumping measures on critical raw materials not available domestically, such as PU/TPU would improve cost competitiveness and support scale-up. Greater scale can, in turn, strengthen the domestic supply chain and encourage local development of machinery and capabilities.

Anchor brands are central to this transition, as they drive demand and facilitate technology and know-how transfer. Competitive input pricing can lower per-unit costs and make India a more attractive sourcing base for global brands such as Nike and Adidas. In the long term, we can also look to strengthen our own brands and not just work as contract manufacturers.

b) Boxing Equipment

Overview

Boxing equipment includes competition and training gloves, punching bags, hand-wraps, mouth guards etc. engineered primarily to absorb impact and protect athletes, while also enabling high-performance.

In terms of trade in this segment, exports have grown at 8% since 2014 while imports have stagnated. However, boxing equipment makes up less than 2% of India's exports & its scale is significantly lesser than that of its competitors (China & Pakistan). [Figure 20]

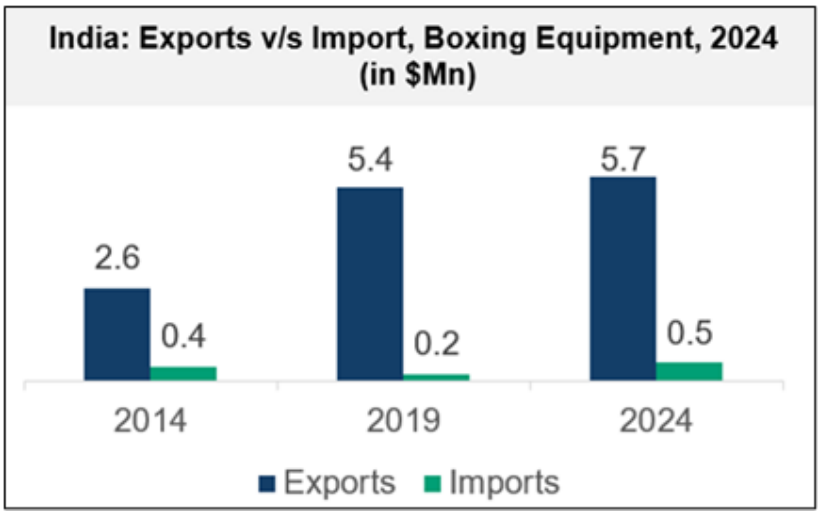


Figure 20: India's export and import value for boxing equipment (in 2024)

Key global brands & domestic manufacturers include the following:

Global brands	Domestic Manufacturers
adidas, STING, RDX, EVERLAST	Universal Sports Industries; KL Mahajan & Sons; Krishna Sports Industries; Leisure Exports Worldwide

Manufacturing Process: Boxing gloves

Typically, boxing gloves are manufactured using two methods:

Method	Step 1: Foam Processing	Step 2: Outer Skin Cutting	Step 3: Shaping & Sewing	Investment	Avg. Daily Output
Mechanised	Uses automated cutting and lamination systems (similar to footwear sole processing) for higher volumes	Leather or synthetic material is cut into pre-measured pieces using die-cutting machines /laser cutters- multilayer cutting for PU, single-cut for leather	Material is embossed with logos & stitched. Foam is then inserted into the glove; shape & fit is checked by a worker The glove is then sealed with a final stitch, Velcro etc.	15-35 lakh	1000 pairs per day
Manual	Involves hand-cutting and hand-gluing the foam layers using knives, cutters etc.	Cutting knives, scissors, or rotary cutters are used to cut the leather or synthetic material	Similar process as above. However, smaller factories use makeshift machines/ manually insert the foam into the glove	2-3 lakh	100 pairs per day

Although there is limited scope for mechanisation in this segment due to highly labour-intensive processes like sewing & shape/fit checks, large factories mechanise cutting & lamination wherever possible. This is because tech upgradation & mechanisation is necessary to be competitive globally & meet international deadlines for large volumes. It also facilitates market differentiation of the product.

Industry Specifics

Factor	Mechanised	Manual
Labour Intensity	Moderate	High
Capital Intensity	Moderate	Low

The raw materials & glove types can be elaborated upon as follows:

- **Entry level gloves:** PU/PVC skin, PU/EPE foam
- **Mid-range gloves:** PU Microfibre skin, PU/EVA/Latex foam
- **High-end gloves:** Genuine leather skin, latex/EVA/EPE foam

In terms of sourcing, some manufacturers source PU leather domestically while others source it from vendors who import it in bulk from China. Most other raw material inputs are sourced locally.

Key Buyers and India's Positioning

Demand for boxing equipment is largely driven by global brands such as Adidas and Sting, who rely on contract manufacturers for production. Currently, Pakistan commands a higher share of such OEM manufacturing compared to India. Pakistan has achieved this mainly due to cheaper raw material costs, which enable it to lower per-unit prices and garner scale.

Adjacent Industries

The industry shares similarities with apparel & footwear.

- **Apparel:** The primary mode of manufacturing is stitching. The machinery and equipment used are largely common across both industries.
- **Footwear:** The industry uses similar raw materials such as PU and foam. There is overlap in input requirements and processing techniques.

Cost Structure Analysis

For this segment, the manufacturing costs were benchmarked against China & Pakistan. For PU (low-end) gloves, **Indian manufacturers face a 17-20% disability**. [Figure 21]

Particulars	India	China	Pakistan	Delta v/s China	Remarks
Raw materials (PU, EVA/PE/PU foam etc.)	63	50	52	13	• 20% customs duty on PU/TPU imports, $0.46 ADD per metre • Leather is also used for export-oriented gloves & is 25% costlier in India compared to Pakistan due to limited supply, lack of an organized animal husbandry system
Labour	30	38	30	(8)	• China's wages are 2-2.25x higher than India's, productivity is 80-85% higher.
Logistics	5	2.5	3	2.5	• Additional cost incurred due to distance from ports, usually 2-2.5x China's cost. Pakistan has an effective dry port and airport in Sialkot, reducing costs
Power	1	1	1.5	0	• Similar costs across India & China, Pakistan's costs are higher
Financing cost	0.5	0.3	0.75	0.2	• China lends at 3-4%, India's rate higher at 6% (after 3% subvention), Pakistan's averages at 9% (after 3% export subvention)
Machinery cost	0.35	0.32	0.35	0.03	• Surcharges, freight and insurance costs increase landed price
Other	0.75	0.6	0.9	0.15	• India & Pakistan's tax structure higher than China's. Includes administration fee, royalty costs etc.
Overall cost	100	93	89	7-11%	
Scale disability				9-10%	
Total disability				17-20%	

Figure 21: Cost structure analysis for Boxing gloves

This is mainly due to domestic unavailability of PU & high duties/anti-dumping duties on its imports.

For genuine leather (high-end) gloves, the overall cost disability stands at 25-30% compared to Pakistan as leather is approximately 25% more expensive in India due to limited supply & lack of an organised animal husbandry system.

Certification Costs

In addition to a significant cost disability, manufacturers also face high upfront certification costs which are as follows: [Figure 22]

Certification body	Certification	Est. Cost (in INR)	# of certified Indian manufacturers	# of total certified manufacturers	Remarks
IBA	Approved/Inspected /Licensed	Gloves: Approved: 30-35 lakhs* Inspected: 20-25 lakhs*	0	6-7	2 of these brands are Chinese manufacturers; strong manufacturing and sourcing factories/offices in Sialkot (Pakistan) for brands like RDX Sports, Green Hill etc.

Figure 22: Certification costs for boxing

However, for boxing, these costs are indicative as IBA is no longer the governing body. It has been replaced by World Boxing.

Conclusion

Boxing is a smaller global market compared to larger segments such as football and basketball; however, India's growth potential relative to Pakistan remains significant as the primary constraint is the industry's lack of scale. Enabling scale is the single most important growth lever for the domestic boxing equipment industry. Reducing duties on critical raw materials not available domestically (such as PU) and streamlining and securing the supply of leather from tanneries to manufacturers would help improve cost competitiveness and unlock the aforementioned scale.

Bringing in key anchor brands to drive demand is imperative to this sector. However, over the medium to long term, parallel efforts should focus on enabling Indian brands to build scale, credibility, and market access, allowing them to generate sustained demand pull independently.

Group 2: Metal Fabrication, CNC Machining & Forging

Includes Athletic Equipment (discus, hurdles, javelin, shotput), Table Tennis equipment (table frames, wheels), Golf Clubs, Weightlifting (bars, plates), Protective gear (helmets), Cycling (bicycle frames).

a) Athletic Equipment

Overview

Athletic equipment includes implements such as shot puts, javelins, discus along with protective and training accessories. These are designed to meet strict weight, dimension and material standards for safe training and regulated competitive use.

In this segment, exports and imports have grown at a comparable pace since 2014; however, in value terms, India remains a net importer. This is largely because the segment also includes fitness equipment such as treadmills and other large machines, where India currently has limited domestic manufacturing capability. As a result, imports dominate the value of trade, highlighting a significant opportunity for capacity creation and import substitution in fitness equipment manufacturing. [Figure 23]

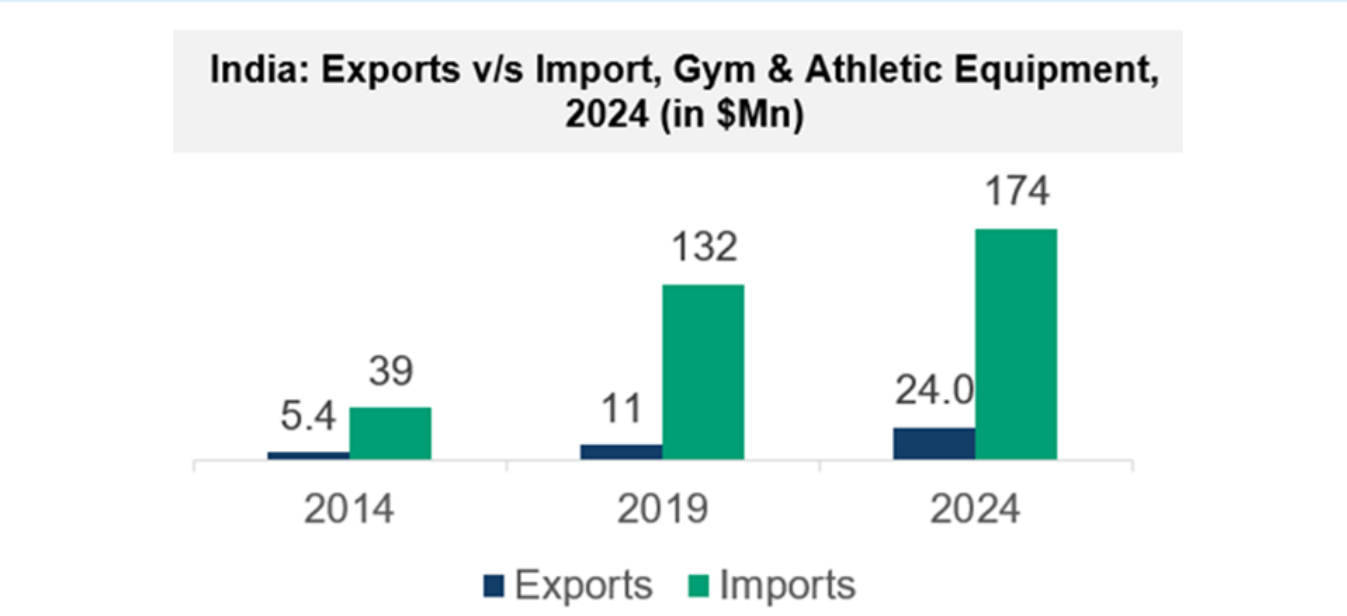


Figure 23: India's export and import value for gym & athletic equipment (in 2024)

Key global brands and manufacturers in this segment include the following:

Global brands	Domestic Manufacturers
GILL ATHLETICS polanik Nordic Sport	Vinex Nelco Bhalla International Nelco COUGAR National Sports ATE Anand Track & Field Equipment

Manufacturing Process

Typically, manufacturing processes in athletics involve two-three key processes i.e. CNC machining, welding & assembly. This can be elaborated upon as follows:

Discus:

Metal rim is forged and machined to the required diameter and weight	→ Two identical side plates made of metal or composite (fiberglass/carbon fiber) are molded using machines	→ Key parts (rim, plates) & an aluminum/steel core assembled; manual smoothening of rim edges to improve grip, tested & then packed for shipment

Hurdles:

Aluminum or steel tubes are cut using CNC machines to the required lengths/angles for uprights and bases; plastic bars are prepared for crossbars	→ Uprights and bases are welded together to form the frame structure; chemical processing (anti-rust) treatment, followed by coating	→ Assembly of base, uprights & crossbar is done manually; hurdles are painted/powder-coated, height-adjusted, inspected for balance, and packed

The manufacturing process is moderately capital intensive and relies on imported CNC machines to reduce manual error and deliver standardized, high-precision metal cutting. These are often imported from China due to unavailability in India, thereby increasing the cost of capital goods.

Additionally, Japanese & European machinery may also be used. However, these are 2x more expensive than Chinese counterparts but are needed to surpass China in terms of productivity & efficiency.

Industry Specifics

Factor	Description
Production Rate	• Discus: 1-2 discus pp/ per shift (8 hours) • Hurdles: 3-4 hurdles/pp per day • CNC machines can forge 200 rims per shift (8 hours)
Labour Intensity	Moderate
Capital Intensity	Moderate

Raw Material: Athletics equipment uses a common set of raw materials across products, including steel, brass, and aluminium for components such as discus cores and rims, hurdles frames, javelin shafts, and shot-put balls. Composites like carbon fiber and fiberglass are used in discus side plates and javelin shafts, while plastics are typically used for hurdles' top bars and rubber for javelin grips.

Sourcing: Most of these raw materials are sourced domestically, with select inputs such as aluminium for javelin shafts, being imported.

Key Buyers and India's Positioning

For international competitions, a significant share of athletics equipment is sourced from India. Indian manufacturers also act as OEM suppliers to the limited number of global brands that exist in this segment (these are mainly based in USA, Poland, and Sweden). However, key global brands also continue to source equipment through Chinese contract manufacturers.

Adjacent Industries

The industry has similarities with the following:

- Automotive, Consumer Durables & Bicycles: Share metal forming, alloy casting etc.
- Metal Fabrication & Tooling: Provide CNC machining, welding, and surface finishing.

Cost Structure Analysis

For this segment, Indian manufacturers' costs for producing hard athletics equipment (shotput, hurdles etc.) were benchmarked against costs in China, a key competitor for OEM manufacturing. **Indian manufacturers face a 12-13% overall disability v/s China**. [Figure 24]

Particulars	India	China	Delta	Remarks
Raw materials	**70**	**62**	**8**	
Steel	30	26	4	• Steel is ~14% costlier when soured domestically due to limited suppliers & policies favouring domestic manufacturers
Specialised Aluminum	30	27	3	• Aluminum is 10-12% costlier domestically due to limited suppliers & policies favouring domestic manufacturers
Other	10	9	1	• Plastic is 8-15% costlier in India; lesser domestic scale compared to China & limited suppliers. Fibre-glass is 13-15% costlier due to imports (10% customs duty); production in India is negligible due to a lack of scale.
Labor cost	**18**	**23**	**(5)**	• China's wages are 2-2.25x higher than India's, but productivity is 80-85% higher
Logistics	**6**	**3**	**3**	• India's inland logistics costs are 2-2.5x China's due to distance from ports
Power & Taxes	**1**	**0.9**	**0.1**	• Similar power costs across nations. Taxes are higher in India than in China (25% v/s 30% effective corporate tax rate)
Financing cost	**1**	**0.6**	**0.4**	• China lends at 3-4%, India's rate higher at 6% (after 3% subvention)
Machinery cost	**3**	**2.7**	**0.3**	• Surcharges, freight and insurance costs increase landed price
Other	**1**	**0.8**	**0.2**	• Includes royalty costs, admin costs, packing etc.
Overall cost	**100**	**93**	**7%**	
Scale disability			**5-6%**	
Total disability			**12-13%**	

Figure 24: Cost structure analysis for Athletics equipment

This is driven primarily by higher domestic prices of metals and plastic in India.

Certification Costs

In addition to the above-mentioned cost disability, manufacturers also face high upfront certification costs which are as follows: [Figure 25]

Certification Body	Certification	Est. Cost (in INR)	# of Indian Players	# of Total Certified Players	Remarks
WORLD ATHLETICS	IAAF Certification	**Certification fees** (per type/model): • Implements (shot, discus, javelin): - 60k INR - Renewal/Private Label: 30k INR • Uprights / Hurdles: 1.2 lakhs • Renewal/Private Label: 60k INR • **One model = one certificate (different sizes/weights count as new types)**	8	50+	• Major brands worldwide are located in India, Poland, Sweden, China & USA. • Even for USA, Poland & Sweden, Indian brands act as OEM manufacturers • India supplies for competitions like Olympics, Asian games etc.

Figure 25: Certification costs for different certifications by IAAF

Although 8 key brands possess the requisite certifications, for a largely MSME led industry, these high upfront costs act as a barrier to gaining international visibility (such as at competitions, tournaments).

Conclusion

Athletics one of India's stronger suits in manufacturing: several Indian brands supply for international tournaments and act as key OEM manufacturers. However, a stronger scale-up can be enabled by easing QCO restrictions on Indian metals – this would help bridge the input costs gap v/s China by bringing down the prices of metals. Additionally, technology upgradation & certification support would help Indian brands improve productivity (v/s China) & garner better international visibility.

India currently does not possess capabilities in fitness equipment manufacturing – this presents a strong opportunity for market growth and reduced reliance on imports (most treadmills and capital-intensive gym equipment are imported from China). Attracting anchor brands in this segment can help catalyse demand while facilitating technology and know-how transfer across the ecosystem. Over the medium to long term, parallel efforts should focus on enabling Indian brands to build scale, credibility, and market access, allowing them to generate sustained demand pull independently.

b) Table-Tennis Equipment

Overview

Table tennis equipment includes table tennis tables, rackets (blades and rubbers), balls, and training accessories that are designed to meet strict specifications for bounce, speed, spin, and durability to ensure fair play and regulated competitive use.

In terms of exports, the value stands at $0.3bn, indicating a relatively small size. China dominates the market with almost 50% share, followed by Germany with a 13% share. However, India's share is less than <1%. This presents a strong scope for growth, albeit in a small segment. [Figure 26]

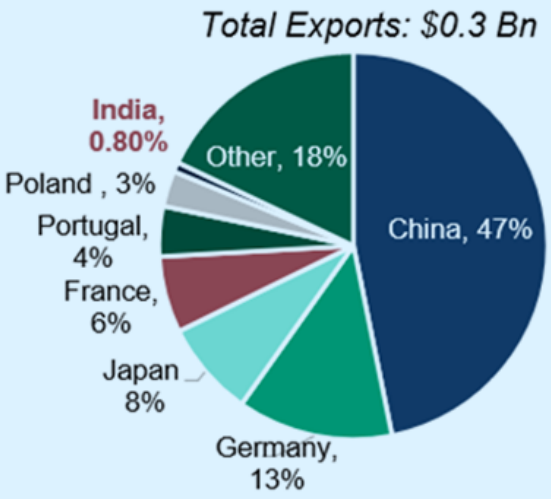


Figure 26: Global exports of Table-tennis equipment

Key global brands & domestic manufacturers include the following:

Global Brands	Domestic Manufacturers
Yasaka, Butterfly, Donic	Bhalla International; Stag Global; National Sports

Manufacturing Process: Table Tennis Tables

Table tennis equipment manufacturing is capital intensive due to extensive machining and welding requirements, while painting of tabletops and final assembly of the frame, top, and wheels remain highly manual.

Frame & Leg Fabrication: Steel sections are cut using CNC machines, welded to form the main frame and support legs according to table dimensions

→

Wheel & Mechanism Assembly: Castor wheels, locking systems, folding brackets, and hinges fitted onto the frame for stability

→

Table tops: MDF/HDF sheets/plywood are cut to the regulation size (2740 × 1525 mm) and calibrated for uniform thickness.

↓

Panels are sanded, sealed, and primed to prevent moisture absorption and ensure a smooth, even paint base

←

Matte, anti-glare PU or polyester paint is applied, cured, and followed by precise masking and painting of boundary lines and centerline

←

Final Assembly: The painted tabletop is mounted onto the frame; net posts are installed.

In some cases, tabletops are imported from China. Table tennis balls are generally not manufactured in India as local packaging costs are higher than importing finished products from China.

Industry Structure

Factor	Description
Production Rate	2-3 tables/pp per day can be assembled
Labour Intensity	Low
Capital Intensity	High

Raw Materials: Table tennis equipment uses a range of raw materials across product categories including plywood, MDF/HDF, steel, paints, hardware accessories, and cotton or polyester nets for tables; hardwood or softwood, rubber compounds, PU foam, and adhesives for rackets. For balls, ABS plastic, colour pigments and surface treatment agents are used.

Sourcing: Most of these raw materials are sourced locally.

Key Buyers and India's Positioning

India is a sourcing base for table tennis equipment used in international competitions. However, exports are highly concentrated, with more than 80% accounted for by a single Indian manufacturer despite the presence of 15+ domestic players. China remains the primary global competitor, holding a larger manufacturing share driven by higher levels of mechanization and access to cheaper raw materials.

Adjacent Industries

The industry has similarities with the following:

- Automotive, Aerospace & Bicycle: Share metal forming, alloy casting etc.
- Metal Fabrication & Tooling: Provide CNC machining, welding, and surface finishing.

Cost Structure Analysis

For this segment, the costs were benchmarked against China. **Indian manufacturers face a 30-35% overall disability**as compared to Chinese manufacturers. [Figure 27]

Particulars	India	China	Delta	Remarks
Raw Material (Steel, Aluminium, Wood etc.)	**60**	52.5	7.5	• Metals like steel are 12-13% more expensive in India due to limited suppliers & policies favouring domestic manufacturers • Plastic available domestically is 8-10% more expensive due to lack of scale in domestic production, adding to the disability
Labor cost	**20**	15	5	• Although China's wages are 2-2.5x, high mechanization in TT manufacturing reduces their costs
Logistics	**8**	2.5	5.5	• Additional cost incurred due to distance from ports, usually 2-2.5x China's cost.
Power & Taxes	**2**	1.8	0.2	• Similar power costs across nations. Taxes are higher in India than in China (25% vs 30% effective corporate tax rate)
Financing costs	**2.5**	1.5	1	• China lends at 3-4%, India's rate higher at 6% (after 3% subvention)
Machinery costs	**3.5**	3.2	0.3	• Surcharges, freight and insurance costs increase landed price
Other expenses	**4**	3	**1**	• Includes packing, administration costs etc.
Overall cost	**100**	**80**	20%	
Scale disability			10-15%	
Total disability			30-35%	

Figure 27: Cost structure for Table Tennis

This is driven primarily by higher domestic steel prices and lower levels of mechanisation (due to the high cost of technology upgradation). Lower levels of mechanisation lead to reduced manufacturing efficiency compared to China.

Certification Costs

In addition to a significant cost disability, manufacturers also face high upfront certification costs which are as follows: [Figure 28]

Certification Body	Certification	Est. Cost (in INR)	# of Indian Players	# of Total Certified Players	Remarks
ITTF HIGH PERFORMANCE & DEVELOPMENT	ITTF Approval	**Certification costs** (total: inclusive of tables, rubbers, balls, etc.): - 50-55 lakhs (annual)*	2	75+	Over 35 brands in total are of Chinese /Japanese origin

Figure 28: Certification costs for TT

These costs prevent manufacturers from gaining the certifications necessary to supply for international competitions, thereby hindering visibility.

Conclusion

Table tennis is a relatively small segment in global exports ($0.3bn). However, given that India holds <1% share (despite having 15+ manufacturers), it does present considerable scope for growth. Currently, India lacks mechanization that can enable it to scale.

To unlock this segment, the focus must be on enabling tech upgradation & reducing the domestic price of metals (like steel) by easing QCO restrictions. This could help bridge the 30-35% manufacturing cost gap v/s China and facilitate capture of greater market share.

c) Bicycles

Overview

The bicycles segment includes several types of bicycles including road bicycles, mountain bicycles, children's bicycles, hybrid bicycles and BMX bicycles. Each of these is designed for specific uses. They vary in frame design, tire size, gearing systems and riding posture, which influences their performance and suitability for different riding conditions.

In terms of exports, China & Taiwan together hold >40% of the market. Taiwan is known for producing high-quality bicycles and components that cater to premium demand in USA & Europe. On the other hand, China produces bicycles on a much larger scale, focusing primarily on mass production, lower manufacturing costs and entry- to mid-range bicycles.

Despite strong manufacturing capabilities in Ludhiana, India's share is a mere 1%. This can be scaled with the right interventions (as outlined further in this section). [Figure 29]

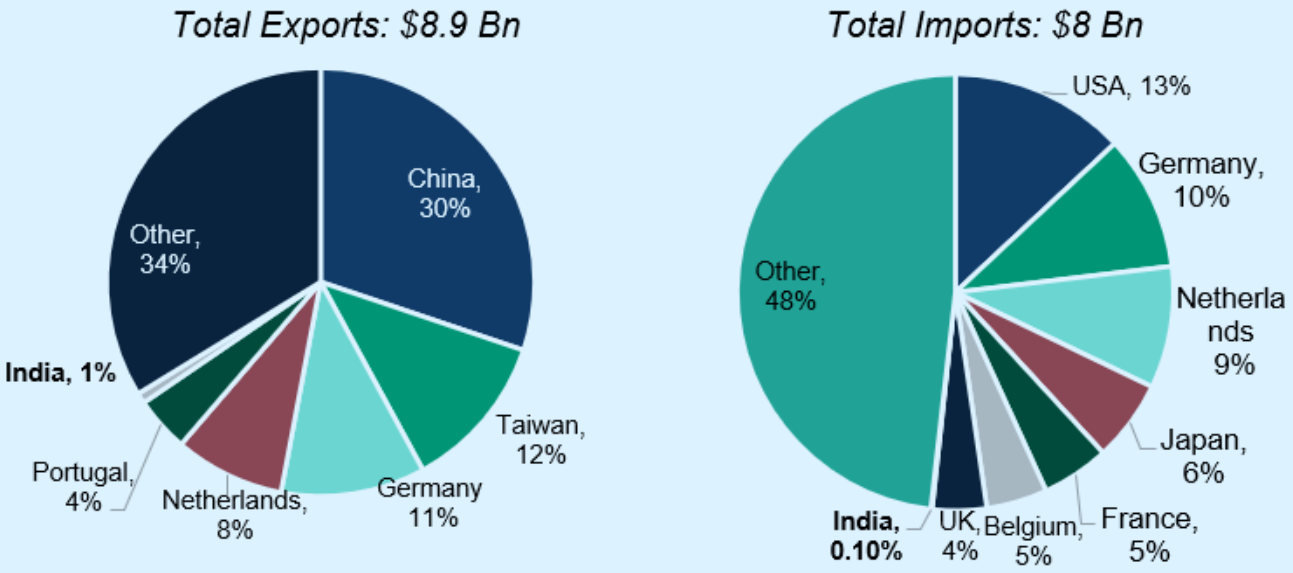


Figure 29: Global Exports and Imports of Bicycles

Key global brands & domestic manufacturers include the following:

Global Brands	Domestic Manufacturers
TREK USA; SPECIALIZED USA; GIANT Taiwan	HERO CYCLES; BSA; AVON CYCLES; Neelam; RADIANT

Industry Specifics

Ludhiana has emerged as the backbone of India's bicycle manufacturing industry, making Punjab responsible for nearly 75–80% of the country's domestic bicycle output. The region produces over 15 million bicycles each year, with an annual production value exceeding USD 1.5 billion. This extensive manufacturing ecosystem provides employment to more than one million people and is supported by over 4,000 micro, small, and medium enterprises operating in and around Ludhiana.

A large portion of this ecosystem consists of 3,500-4,000 largely unorganised small and medium enterprises engaged in bicycle component manufacturing. While component production is highly fragmented, bicycle assembly and final production are more concentrated, with four large companies collectively accounting for approximately 85% of the domestic market.

Domestic Manufacturing Split and Key Export-Oriented Challenges

Despite its large manufacturing base, the bicycle industry's export contribution remains limited, accounting for only 5-7% of total production. Additionally, the industry largely operates at a basic technological level, with a strong focus on steel bicycle production and limited capabilities in advanced components, automation, product design, and process innovation.

Premium bicycles including mountain and racing bicycles are challenging to manufacture domestically due to the limited availability and high cost of requisite aluminium alloys such as 6061 and 7005. These are also difficult to procure in small quantities. Additionally, the industry faces inadequate exposure to global best practices and internationally accredited quality standards. As a result, only a small number of firms have been able to establish direct, one-to-one partnerships with foreign manufacturers or brands.

Cost Structure Analysis

For this segment, India was benchmarked against China/Taiwan. As seen below, Indian manufacturers face a 25-30% overall disability in the manufacturing of sports bicycles. [Figure 30]

Particulars	India	China/ Taiwan	Delta	Remarks
Raw Materials (steel, aluminium alloys, carbon fibre etc.)	**70**	61-63	**7-9**	• Steel is 15% more expensive in India; aluminium alloys & carbon fibre used are either unavailable domestically or expensive to procure • Premium parts (gears, disc brake etc.) are imported in India; China produces them locally
Labor cost	**15**	12	**3**	• Manual welding & assembly compared to usage of robotic welding, automated assembly & GR Painting in China
Logistics	**6**	3	**3**	• High freight costs, driven by in-land logistics due to distance of Punjab from port (2-2.5x China's cost)
Power & Taxes	**2**	1.8	**0.2**	• Similar power costs across nations. Taxes are higher in India than in China (25% v/s 30% effective corporate tax rate)
Financing costs	**2**	1.2	**0.8**	• China lends at 3-4%, India's rate higher at 6% (after 3% subvention)
Machinery costs	**4**	3.6	**0.4**	• Surcharges, freight and insurance costs increase landed price
Other expenses	**1**	0.8	**0.2**	• Includes financing, administration costs, depreciation etc. – depreciation & financing costs are higher in India than China
Overall cost	**100**	**83-85**	15-17%	
Scale disability			~10%	
Total disability			25-30%	

Figure 30: Cost structure analysis of bicycles

This is driven primarily by the high prices of steel in India and the unavailability/expensive procurement of certain aluminium alloys needed for manufacturing.

Additionally, mechanisation in this segment would help improve efficiency and reduce the labour disadvantage.

Certification Costs

In addition to a significant cost disability, manufacturers also face high upfront certification costs which are as follows: [Figure 31]

Certification Body	Certification	Est. Cost (in INR)	# of Indian Players	# of Total Certified Players	Remarks
UCI	UCI approval for models of wheels, framesets, prototypes etc.	**INR 20k** per wheel approval application; upto INR **6L** for varying levels of frameset approval	0	100+	• Heavy concentration of European brands from Italy, France, Belgium etc. • Other countries with brand representation include USA, Japan, China, Taiwan etc.

Figure 31: Certification costs for bicycles

Currently, Indian manufacturers have limited presence in the sports bicycles i.e. export-oriented segment. Building capabilities in the same should be prioritised. Thereafter, the focus could be on garnering certifications and international visibility.

Conclusion

India has a strong domestic bicycle manufacturing base concentrated in Ludhiana, but its presence in the global export market remains limited. This is primarily due to lack of access to requisite raw materials (steel/aluminium alloys) at competitive prices. Moreover, the industry lacks high level of mechanisation and tech-know possessed by peers including China and Taiwan. This has led to very minimal competitive sports bikes production.

To unlock this segment, investment must be made to invest assembly automation. Additionally, easing QCO restrictions would allow for access to raw materials at competitive prices. Indian manufacturers must also be made aware of global best practices & industry standards. Bringing in anchor brands (like Giant) could facilitate this, develop supply chains and drive demand.

Group 3: Composites, Polymers & Rubber Compounding

Includes: Rackets (Badminton, Tennis, Squash etc.), Hockey sticks, Golf balls, clubs, Archery (composite limbs), Rowing, Softball bats, Protective gear (helmets), Turfs and synthetic flooring.

a) Rackets, Hockey, and Golf

Overview

This group includes badminton/tennis rackets, hockey sticks and golf balls, representing a large and fast-growing segment of the global sports equipment trade.

In terms of exports, global trade data highlights the limited role played by India in this segment. In badminton and other rackets, global exports stood at approximately $0.8 bn in 2024, with China accounting for nearly 59% of exports, followed by Japan (around 6%). India's share remains negligible at around 0.1%. [Figure 32]

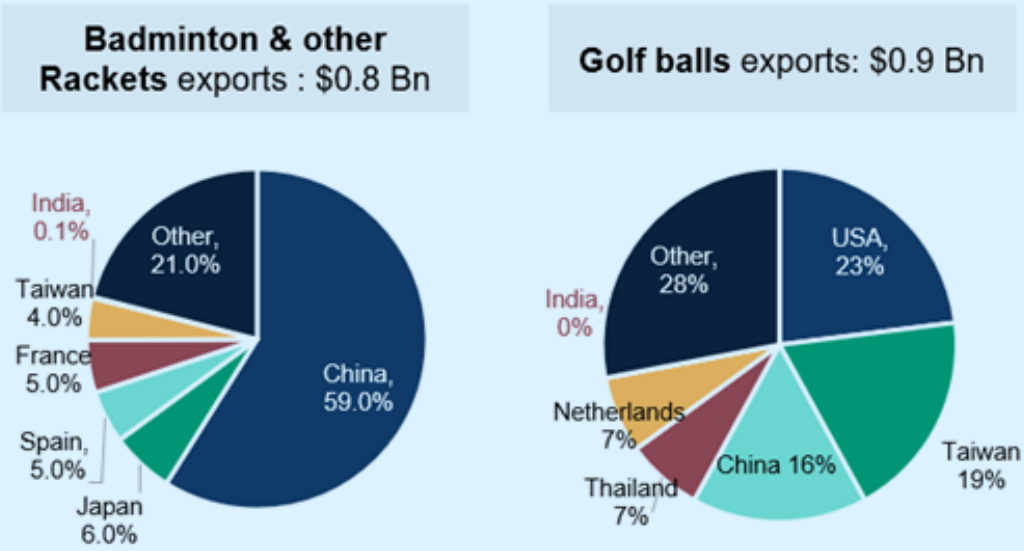


Figure 32: Global exports Rackets and Golf

Similarly, global exports of golf balls were valued at approximately $0.9 bn in 2024. While the United States accounted for about 23% of exports, followed by Taiwan (around 19%) and China (about 16%), India's share in global golf ball exports was negligible, at close to 0%. [Figure 32]. Thus, despite a small exports market, India's negligible presence presents a strong opportunity to build capabilities and capture a higher market share.

Key global brands and domestic manufactures include the following:

Global Brands		Domestic Manufactures	
Wilson Tennis Rackets	YONEX Badminton Rackets	ALFA CHASE THE DREAM Alfa: Hockey Sticks	+91 Plus91 (Tee Ventures): Golf Balls
BAUER Hockey Sticks	Callaway Golf Balls	exergy Exergy (Arvind composites) Badminton Rackets	

Manufacturing Process: Hockey Sticks

Hockey sticks are manufactured using three broad methods, depending on the level of technology, materials used and the intended end market. These range from traditional wooden sticks used largely for grassroots training to composite and full-carbon sticks designed for professional and match-grade play.

Method	Process	Investment	Avg. Daily Output
Wooden Hockey Sticks (Traditional / Training)	1. Mulberry/Sheesham wood planks cut 2. Stick shape carved & pressed 3. Toe bending using steam/heat 4. Sanding, painting, grip added	5–10 lakhs	30–50 sticks per worker

Method	Process	Investment	Avg. Daily Output
Composite Hockey Sticks (fiberglass / carbon blends)	1. Fiberglass/carbon sheets cut 2. Wrapped around core (foam/wood) 3. Moulded under heat & pressure 4. Trimming, sanding, painting, grip added	50–75 lakhs	100–120 sticks
Full Carbon / Elite Composite Sticks (professional match sticks)	1. High carbon prepreg layup 2. Precision moulding with resin control 3. Heat curing & stiffness calibration 4. Advanced finishing & QA	1–1.5 Cr+	100–120 sticks

Overall, hockey stick manufacturing is moderately capital intensive, with significantly higher investment required for producing match-grade and professional sticks.

Industry Specifics

The table below outlines the key differences between wooden and composite hockey stick manufacturing, including process distribution, labour and capital intensity, and raw material sourcing.

Factor	Wooden Hockey Sticks	Composite Sticks
Manufacturing Processes Distribution	10%	90%
Labour Intensity	Medium (70%)	Medium (50%)
Capital Intensity	Medium (30%)	Medium (50%)

Raw Material & Sourcing: Availability is a key differentiator between wooden and composite hockey sticks. While inputs for wooden sticks such as wood, wood adhesives, and PU paint are largely sourced domestically at competitive prices, composite sticks rely almost entirely on imported materials, particularly carbon fibre sheets, and PU.

Key Buyers and India's Positioning

Manufacturing in India is both brand-led and contract-led, with a primary focus on mid-range sticks. High-end product design, advanced materials, and branding activities continue to remain offshore. As a result, Indian manufacturers are largely positioned in lower- to mid-value segments of the global hockey equipment market.

Unlike Pakistan, India has not emerged as a preferred global hockey manufacturing hub and lacks deep supplier relationships with leading international brands. Pakistan can import key raw materials such as carbon fibre at duty-free rates, whereas India does not enjoy similar advantages. Easing raw material sourcing and strengthening supplier relationships with dominant countries such as Japan and China could unlock manufacturing for multiple sports equipment categories including hockey, racket sports, and golf clubs.

Adjacent Industries

The industry shares similarities with the following:

- **Composite pipes and tubes (industrial / infrastructure)**: The process involves carbon fibre winding or wrapping over mandrels, resin impregnation, heat curing, trimming, and

finishing. Equipment such as filament winding machines, curing ovens, and sanding units closely mirrors that used for composite hockey stick shafts.

- **Automotive composite components (lightweight parts):** Non-structural parts such as spoilers, interior panels, battery casings, and fairings are produced using carbon or fibreglass layups, compression moulding or RTM, along with controlled curing processes.

Cost Structure Analysis

The table below compares the cost structure of composite hockey stick manufacturing in India and Pakistan. It indicates a total cost disadvantage of around **25%-26%** for Indian manufacturers. [Figure 33]

Particulars	India	Pakistan	Delta	Remarks
Raw materials *composite hockey sticks* **(carbon fibre, fiberglass, Kevlar etc.)**	80	60	20	• Raw materials like carbon fibre have little to no domestic availability • 100% of raw materials are imported, thereby increasing costs due to duties
Labor cost	10	10	0	• Despite similar minimum wages, Pakistan's scale reduces labour costs
Logistics	5	3	2	• Effective dry port in Sialkot reduces logistics costs
Power & Taxes	2	3	(1)	• Pakistan's power costs are 50% higher than India's, 15-20% higher tax rates also increase costs
Financing costs	1.5	2.25	(0.7)	• India's interest rate higher at 6% (after 3% subvention), Pakistan's averages at 9% (after 3% export subvention)
Machinery costs	1	1	0	• No major disability in machinery costs
Other	0.5	0.5	0	• Includes admin costs, royalty fees etc.
Overall cost	100	80	20%	
Scale disability			5-6%	
Total disability			25-26%	

Figure 33: Cost structure analysis of Hockey

Raw materials for composite hockey sticks cost ~25% more in India than in Pakistan This is primarily because raw materials such as carbon fibre have little to no domestic availability, and 100 per cent of these inputs are imported, increasing costs due to duties.

Certification Costs

In addition to the significant cost disability, manufactures also face high upfront certification costs, which are as follows: [Figure 34]

Certification Body	Certification	Est. Cost (in INR)	# of Indian Players	# of Total Certified Players	Remarks
BWF	BWF Approval	3 lakhs for shuttlecocks, INR 27K for nets (portion of these are refundable if test fails)	1-2 for net posts, none for shuttlecocks	30+ across nets, shuttlecocks	• >65% of brands approved for shuttlecocks are of Chinese, Malaysian or Taiwanese origin
FIH	FIH Approval/Certification	Costs for FIH approved equipment aren't publicly listed	None for balls, field equipment etc.	10+ across sports equipment, field equipment etc.	• Balls approved by FIH are from brands like Kookaburra (Australian origin), Grays (UK), Anwar Khawaja Composites (Pakistan) etc.

Figure 34: Certification costs for different certifications by BWF and FIH

These costs limit participation in global tournaments, thereby constraining export opportunities and OEM manufacturing demand.

Conclusion

Rackets, hockey equipment, and golf products form growing segment of the global sports equipment market. Despite this, India's presence across these categories remains negligible (<1% share).

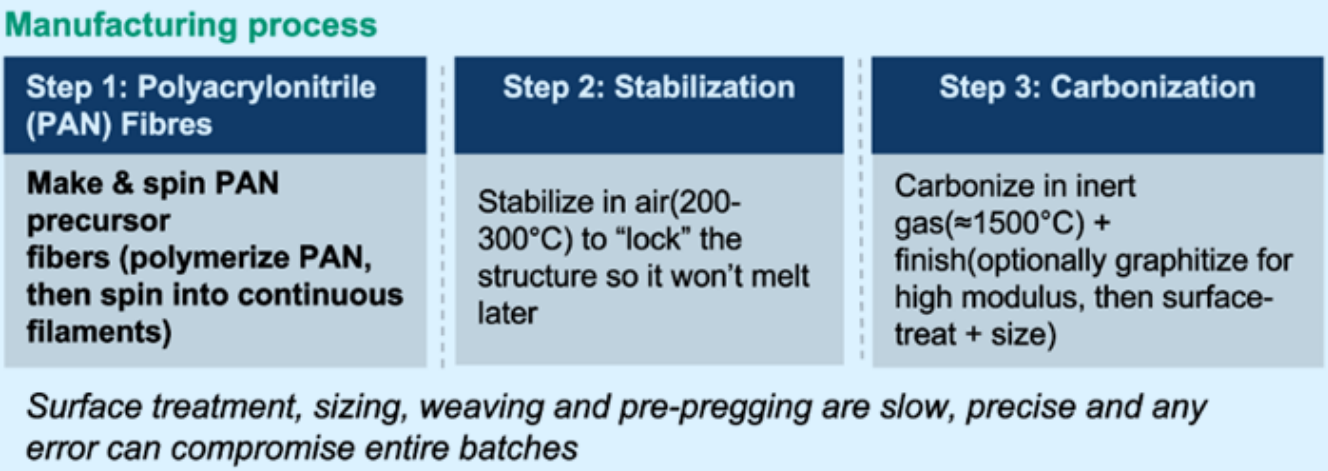
The above analysis highlights that India's limited global presence is due to multiple factors but is primarily driven by high raw material costs. The lack of a domestic ecosystem for carbon fibre manufacturing leads to high dependence on imports, with freight costs, duties etc. significantly increasing input costs. Beyond this, the lack of requisite tech know-how and high costs of machinery needed to manufacture rackets, golf balls etc. prevents manufacturers from entering & scaling in this segment.

To unlock exports, the focus must be on developing a robust raw material ecosystem for carbon fibre and rationalising duties on its imports. Further, bringing in anchor brands could help drive demand and provide tech-know to Indian manufacturers in segments like racket sports, golf etc. However, in the long term, we can also look to strengthen our own brands and not just work as contract manufacturers.

Case Study 2: Carbon Fibre

Carbon fibre is a lightweight, ultra-high-strength material composed of carbon filaments, widely used in applications where high strength, stiffness, and low weight are critical. In the sports sector, carbon fibre is extensively applied in the manufacture of high-performance equipment such as badminton, tennis, and squash rackets, hockey sticks, softball bats, and golf clubs, enabling superior performance and durability. Beyond sports equipment, it is widely used in aerospace, automotive components, wind energy, medical devices, and high-end industrial applications where performance and weight reduction are critical.

Manufacturing Process and Challenges:



Carbon fibre manufacturing can be understood in three main stages, each with a clear bottleneck. First, the PAN precursor fibre must be produced with highly consistent chemistry and filament uniformity as small variations in chemical stability and purity can render the fibre unstable. Second, the precursor is converted through stabilisation and high-temperature carbonisation. These steps require high-cost specialised infrastructure (such as high-temperature furnaces, autoclaves for pressure curing and advanced fibre placement (AFP) systems). These must be supported by energy-intensive utilities that must operate uninterrupted as well as a skilled workforce in composite layup, curing, and quality assurance to consistently meet performance specifications.

Currently, this limits carbon fibre manufacturing to specialised firms in nations like Japan, USA, China and Europe. India does not produce any carbon fiber and relies completely on imports from these countries

Way Forward

Building domestic carbon fibre production can unlock India's entry into high-value sports equipment categories such as rackets, golf clubs, and hockey sticks, where its current market share is negligible, and where competitiveness is closely tied to access to advanced materials. Given the high R&D intensity and capital costs involved in carbon fibre manufacturing, targeted government support becomes critical—through focused R&D funding, shared infrastructure and cluster-led development, and rationalisation of import duties on key inputs to enable downstream manufacturers to scale, build demand, and create a viable domestic market for high-performance composite products.

b) Protective Gear

Overview

Protective gear includes sports safety equipment such as helmets, face masks, leg pads/guards etc.

India has established a meaningful presence in cricket helmets, accounting for an estimated 30-35% of the market and with 1-3 key global brands. However, its export footprint across other segments of protective gear remains limited. Protective gear in this context includes sports equipment such as helmets, leg guards, shin guards, and face masks.

Key global brands & domestic manufacturers include the following:

Global Brands		Domestic Manufactures	
MASURI Cricket protective gear	OBO Hockey protective gear	SHREY Cricket helmets	PROTECT Combat sports protective gear
NIKE Football Shin guards			

Manufacturing Process: Cricket Helmets

The manufacturing of cricket helmets involves three broad stages - outer shell processing, fabric and foam processing, and final assembly.

Step 1: Outer Shell Processing	Step 2: Fabric & Foam Processing	Step 3: Final Assembly	Investment (₹)	Avg. Daily Output
The hard shell is made using injection moulding/ thermoforming (plastic) or fiber After forming, the shell is cooled/cured The shell is trimmed and smoothed, vents/ openings are cut- this is largely labour intensive	Fabric cover is fitted over the shell (like a tight skin) The impact liner (usually EPS/EPP foam) is molded separately. The liner is then bonded to the inner side of the shell Comfort forms & sweat pads are added to improve fit & stability. These fitting processes are labour – intensive	Steel/titanium cage is formed and finished; mounted to the shell Straps, visors etc. are added. Post final assembly & quality checks, the helmet is packed	2-2.5 Cr	2-3 units pp/per day

Cricket helmet manufacturing is labour-intensive due to trimming, smoothening, and fitting processes. Hockey helmet manufacturing follows a similar process, but is more capital-intensive, with investment requirements typically ranging from ₹3-4 crore.

Industry Structure

Factor	Cricket Helmets	Hockey Helmets
Labour Intensity	High (75%)	Medium (50%)
Capital Intensity	Low (25%)	Medium (50%)
Machinery procurement	Most machinery is procured domestically	Higher capital intensity; some machinery may be imported

Raw materials & sourcing: Around 80% of raw materials for helmets are sourced domestically. However, critical raw materials such as EVA foam, titanium, and carbon fibre are imported from countries such as Germany and Vietnam.

Material composition also varies by product. Cricket helmets typically use an ABS or polycarbonate shell, or a fibreglass/carbon composite shell, combined with an EPS foam liner, along with steel or titanium grills and nylon straps. Hockey helmets, in contrast, use high-impact plastic or fibreglass/ composite shells with EPS/EPP multi-foam liners, and include steel cages or polycarbonate visors with heavier-duty straps and hardware.

Key Buyers and India's Positioning

Demand for protective gear is largely driven by global brands that rely on contract manufacturers for production. Indian manufacturers, particularly non-OEM players lose market share not due to manufacturing inefficiencies but because of lengthy and cumbersome testing processes that raise costs and extend delivery timelines.

In addition, high import duties on critical inputs such as titanium further weaken competitiveness. Unlike England, India does not benefit from duty-free access to key raw materials such as carbon fibre from China or Taiwan, which places domestic manufacturers at a disadvantage in global sourcing decisions.

Adjacent Industries

The industry shares similarities with the following:

- **Industrial PPE (hard hats/face shields):** Uses impact-resistant plastics, thermoforming or injection molding, strap and harness assembly, edge trimming, and compliance testing.
- **Automotive foam & NVH components (seats/headrests/insulation):** Involves molding EPS/EPP/PU foams, bonding and lamination, and cover stitching, similar to helmet impact liners and comfort padding.

Cost Structure Analysis

For this sector, manufacturing costs for helmets in India were benchmarked against the UK. The comparison indicates an overall cost advantage of approximately **23% for India**. [Figure 35]

Particulars	India	UK	Delta	Remarks
Raw materials (titanium, carbon, steel etc.)	73	66	7	• Raw materials like titanium & carbon are available duty free in the UK; these aren't available domestically & duties on imports increase costs
Labor cost	20	50	(30)	• Higher minimum wages in the UK (15-20x that of India's); higher capital intensity & lower labour reliance mitigate UK's costs
Logistics	3	2	1	• Better connectivity to airports/ports compared to inland areas in India (Meerut/Jalandhar) reduces logistics costs
Power & Taxes	1	2	(1)	• Tax rates lower in the UK (20-25% v/s 30% in India). Power costs in UK are 3x that of India's
Financing cost	1	1.25	(0.25)	• India lends at 6% (after 3% subvention), average lending rates in the UK are 7-8% for SMEs
Machinery costs	0.75	0.75	0	• No major disability in machinery
Other	1.3	1	0.3	• Includes royalties, admin costs etc.
Overall cost	100	123	(23%)	

Figure 35: Cost structure analysis for protective gear

The analysis shows that India faces a minor cost disadvantage in raw materials, as inputs such as titanium and carbon are available duty-free in the UK, while imports in India attract duties. Despite this, Indian manufacturers have a cost advantage in labour and financing.

However, the absence of domestic, third-party certified helmet testing laboratories significantly constrains innovation and scale. Products must be sent to Europe for CE testing, adding 3–6 months to timelines and increasing freight and courier costs by approximately ₹15 lakh. Unlike facilities such as Loughborough University's lab, India lacks integrated ecosystems and partnerships for R&D, innovation, and standards development. These gaps prevent Indian manufacturers from innovating and securing approvals within competitive timelines.

Certification Costs

Accessing international markets for helmets requires compliance with CE and BSI certification standards, which involves long lead times and high courier and freight costs. These requirements impose a significant cost and time burden on MSMEs, particularly as testing and approvals are largely conducted through overseas laboratories. [Figure 36]

Certification	Certification	Est. Cost (in INR)	# of recognised Indian manufacturers	# of total recognised manufacturers	Remarks
 	• **BSI standards** must be met for recognition by ICC (for cricket helmets) • **FIH Recommended:** Protective equipment that meets required recommendations (for hockey headgear) • **CE Product Testing:** CE mark needed for sale within the EEA (European Economic Area), for various protective equipment across sports	• **BSI standards**: usually done by INSPEC, a UK based lab. Costs vary & are not public • **CE Product Testing:** 2-8 lakhs INR for CE mark from a third party notified body	**BSI standards: 5** manufacturers **FIH Recommended**: 0 manufacturers	**BSI Standards:**10 manufacturers **FIH Recommended:** 5 manufacturers	• **Most brands(3/5)** recommended by FIH **are European based** • **50% of hockey brands** that are FIH recommended **& sell in EEA have the CE mark**

Figure 36: Certification costs for protective gear

These certification-related costs and delays make it difficult for MSMEs to scale and compete in global markets.

Conclusion

India has demonstrated competitive strength in select segments of protective gear, particularly in cricket helmets with a meaningful 30-35% global market share. Production processes are well understood, and labour availability supports cost competitiveness (v/s United Kingdom). These factors provide a strong base for further growth in the segment.

However, greater scale in protective gear could be unlocked by addressing gaps in domestic testing and certification infrastructure. Currently, India lacks internationally qualified testing labs, which causes manufacturers to incur high costs and timelines for approvals. Moreover, the lack of a robust R&D ecosystem makes innovation timelines longer, decreasing competitiveness. Additionally, easing access to critical imported raw materials (carbon fibre, titanium) through duty rationalization and domestic ecosystem building would ease the minimal cost disability

c) Turfs & Synthetic Floorings

Overview

The turfs and synthetic flooring segment include products such as synthetic tracks, PU sports flooring and acrylic sports flooring. India has 3+ domestic manufacturers with international-standard capabilities; however, limited scale continues to constrain exports and weaken competitiveness against established global players.

Key global brands and domestic manufacturers include the following:

Global Brands		Domestic Manufacturers	
MONDO	BEYNON A Tarkett Sports Company	RIDSPORTS	GALLANT SPORTS
CONNOR SPORTS		EBACO	

Industry Structure

Factor	Synthetic Turfs & Floorings
Labour Employment	50-100 per factory; high employment potential
Machinery Procurement	Most machinery is procured domestically; Chinese machinery is needed to increase capacities

The industry structure for synthetic turfs and flooring reflects high employment potential, largely domestic machinery sourcing, and a relatively high degree of local raw material availability.

Around 70 per cent of raw materials used in synthetic turfs and flooring are procured domestically. Key inputs include polymers and resins such as PU, EPDM, SBR, and PE, along with fillers like silica, calcium carbonate, and rubber granules. Production also relies on specialised chemicals and additives, including curatives, stabilisers, pigments, and softeners or plasticisers.

Key Buyers & India's Positioning

Demand for synthetic turfs and sports flooring in India is largely driven by central/state governments and public institutions, with limited participation from the private sector. Government tenders often include restrictive origin norms that mandate products from the USA, Australia, or Europe. This excludes Indian manufacturers and reflects a bias towards international products even when comparable domestic alternatives exist.

Tenders released by the Government of India show that 30+ of those released since 2022 have restrictions on Indian origin products (further details of tenders available in the appendix A7) Also, less than 4% of India's Class 2 athletic tracks are domestically manufactured, compared to near-complete local manufacturing in countries such as Japan and Korea.

These restrictions limit domestic participation and reinforce dependence on imports. Further, low and uncertain demand also increases entry risk, discouraging new investment and resulting in a small number of active players in the segment. This lack of scale and competitiveness makes exports unviable and limits India's ability to compete in synthetic turfs and flooring.

Industry Similarities

Manufacturing of synthetic turfs and sports flooring shares similarities with paint manufacturing, as both use comparable mixing, dispersion, and formulation equipment to process polymers, fillers, pigments, and additives.

Certification Costs

Access to export and domestic markets for turfs and synthetic flooring requires multiple international certifications, which involve significant upfront costs. [Figure 37].

Industry Similarities

Certification Body	Certification	Est. Cost (in INR)	# of Indian Players	# of Total Certified Players	Remarks
BWF	BWF Approval	3-4.5 lakhs for floorings	11 for floorings (3-4 for PU floorings, rest for wooden)	65+	• 45-50 brands are of Chinese origin
FIH	FIH Approval/Certification	26 lakhs membership fee for certified turf manufacturers (excludes lab testing fee)	8 certified field builders, 0 for turfs	35+ across turf manufacturers & field builders	• 8 certified field builders for hockey from India compared to 10 from UK, 1 from Pakistan & 5 from Ireland & USA
WORLD ATHLETICS	IAAF Certification	27 lakhs for 4 years Testing fee: 3-4 lakhs **Total: 30-31 lakhs**	2-3	40+	• >50% are of Chinese, Japanese & German origin

Figure 37: Certification costs for turfs

These certification costs and requirements raise entry barriers and limit the ability of Indian manufacturers to scale and compete globally.

Conclusion

India has developed credible technical capabilities in turfs and synthetic sports flooring, with 3+ domestic manufacturers meeting international standards across products such as synthetic tracks, PU sports flooring, and acrylic surfaces. A large share of raw materials and machinery is sourced domestically, and the segment offers meaningful employment potential, indicating a sound manufacturing base.

Greater scale, however, could be achieved through more predictable and supportive domestic demand, particularly by addressing restrictive government tender norms and reducing bias towards imported products. Lower certification-related costs, improved access to international approvals, and demand aggregation could help Indian manufacturers achieve economies of scale, strengthen export competitiveness, and increase domestic adoption of locally manufactured systems.

Group 4: Woodwork & Traditional Craft Manufacturing

Includes: Cricket, Wooden Baseball bats, Table Tennis equipment (table-tops, racket blades).

Overview

Woodwork and traditional craft manufacturing includes cricket bats, wooden baseball bats, table tennis table-tops etc, where material quality and artisanal skill are critical to performance.

Overall, India is a global market leader in cricket bats but holds a negligible share in similar wood-based products such as baseball bats.

Key brands in cricket include the following:

Indian Brands			Other	
Sanspareils Greenlands	Sareen Sports	BD Mahajan & sons		

Key global brands in baseball include the following:

Global Brands		

Manufacturing Process: Cricket Bats

The manufacturing process for cricket bats includes two main steps, as explained in the following table:

Step 1: Willow Selection & Pressing	Step 2: Handle Fitting & Shaping	Investment (₹)	Avg. Daily Output
High-quality English or Kashmir willow is selected. Logs are cut into clefts and air-dried for several months These clefts are rough shaped & pressed using rolling machines to give it a curved shape & improve structure Pressing compresses the willow fibers, improving durability and impact absorption	The top of the blade is spliced into a deep 'V' shape; a handle (made of cane) is pushed into the gap This is followed by the final shaping, sanding &weight-balancing of the bat. After adding requisite logos, quality checks are performed before the bat is packed	5-10 lakh	1-3 bats pp/ per day

Cricket bat manufacturing is **highly labour-intensive,** with limited scope for mechanisation, as critical stages such as willow selection, customisation, and bat shaping rely heavily on manual skill and craftsmanship. Capital equipment usage is relatively less intensive and largely limited to basic machinery such as saws, splicing jigs, sand-papering tools, and pressing machines, reinforcing the sector's dependence on skilled artisanal labour rather than automated production systems.

Industry Structure

Factor	
Labour Intensity	**High (75-80%)**
Capital Intensity	**Low (20-25%)**

The table highlights that cricket bat manufacturing is characterised by very high labour intensity and low capital intensity, underscoring its dependence on skilled manual work rather than mechanised production.

Labour intensity remains persistently high, as machines are unable to replicate the precision required in cleft selection, shaping, balance correction, and customisation. At the same time, shortages of skilled artisans continue to constrain production capacity and limit the sector's ability to scale sustainably.

Raw materials and sourcing: Most critical raw materials including English Willow and Singapore cane (used in handles) are imported. Domestic sourcing- particularly of Kashmir willow is restricted by regulatory and movement limitations, preventing its effective use in manufacturing clusters outside the region.

Over the long term, dwindling availability of quality willow poses a structural risk to the industry

Key Buyers & India's Positioning

India is home to 2-3 global brands that together account for around 40-50% of the global cricket bat market, while additional brands and OEM manufacturing based in India contribute a further 30-35%. As a result, India dominates the global market with a combined share of approximately 75-80%, supported by a strong and mature domestic base.

This scale enables cost distribution efficiencies and attracts demand from both established international brands and smaller global players. However, despite this leadership position, the scope for further market share expansion remains limited, as cricket is played competitively in only around 10-11 countries such as Australia, New Zealand, South Africa, etc.

Adjacent Industries

Craft-led wood industries- such as premium furniture and musical instruments- exhibit strong similarities with cricket bat manufacturing, as they rely on wood as the primary input, depend heavily on skilled manual labour, emphasise hand-finishing, and operate with relatively low levels of automation.

Cost Structure Analysis

For this segment, manufacturing costs of cricket bats were benchmarked against Pakistan, which holds around 20-25% of the global market share. The comparison indicates an overall cost advantage of approximately 0-5% for India. [Figure 38]

Particulars	India	Pakistan	Delta	Remarks
Raw materials (wood, cane)	65	65-70	(0-5)	• Despite restrictions on movement of Kashmir willow, Indian manufacturers are able to procure English willow & other raw materials at competitive prices
Labor cost	25	25	0	• Similar wage rates in India & Pakistan
Logistics	6	4	2	• Pakistan has an effective dry port and airport in Sialkot, reducing costs.
Power & Taxes	2	3	(1)	• Pakistan's power costs are 50% higher than India's, tax structure is also 15-20% higher
Financing costs	1	1.5	(0.5)	• India's interest rate higher at 6% (after 3% subvention), Pakistan's averages at 9% (after 3% export subvention)
Machinery costs	0.5	0.5	0	• No major disability in machinery
Other	0.5	0.5	0	• Similar costs across nations
Overall cost	100	100-105	(0-5%)	

Figure 38: Cost structure analysis for Cricket Bats

The analysis indicates that India faces a modest logistics-related cost disadvantage, as Pakistan benefits from a well-integrated dry port and airport ecosystem in Sialkot, highlighting clear scope for India to strengthen its logistics infrastructure. At the same time, despite India's deep expertise and global leadership in wooden cricket bat manufacturing, this capability has not translated into a meaningful presence in other wood-based sports equipment such as baseball bats, representing an under-exploited diversification opportunity.

Certification Costs

Access to global baseball bat markets is governed by WBSC certification, which entails significant upfront testing and administrative costs. [Figure 39]

Certification body	Certification	Est. Cost (in INR)	# of certified Indian manufacturers	# of total certified manufacturers	Remarks
WBSC WORLD BASEBALL SOFTBALL CONFEDERATION	WBSC Approval	7 lakhs for baseball bat testing, administration etc. (4-year term)	0	35+	40-45% of approved bats are from American brands

Figure 39: Certification costs for WSBC

The high certification cost of around ₹7 lakh per product cycle acts as a major entry barrier, particularly for MSMEs, and explains the absence of certified Indian manufacturers despite strong wood-working capabilities.

Conclusion

India's woodwork segment demonstrates a clear global strength in cricket bat manufacturing, underpinned by deep craft skills, scale, and strong brand presence. However, this capability has not translated into adjacent wood-based products such as baseball bats and table tennis equipment, where certification barriers, limited market access, and lack of scale constrain participation.

With targeted interventions around certifications, logistics, and market access, India could leverage its existing craftsmanship and manufacturing base to diversify into similar wood-intensive sports equipment and expand its global footprint beyond cricket.

General Challenges

a) Capital Goods

A significant percent of key machinery used to produce sports equipment (including thermo-bonding moulds, CNC machines etc. used across fabrication and metal intensive manufacturing) is imported from countries like China, Japan & Europe.

This is primarily due to the unavailability of quality, up-to-date machinery in India. The industry lacks scale, thereby lowering the incentive for domestic tech development and R&D. In several segments, tech-upgradation is imperative due to the capital intensity of the segment (table tennis, athletics) – efficiency cannot be improved without the same. In India, domestic machinery and tech-know how to manufacture equipment such as rackets, golf equipment is severely lacking. This makes it extremely necessary to ease the costs of tech acquisition & upgradation. [Figure 40]

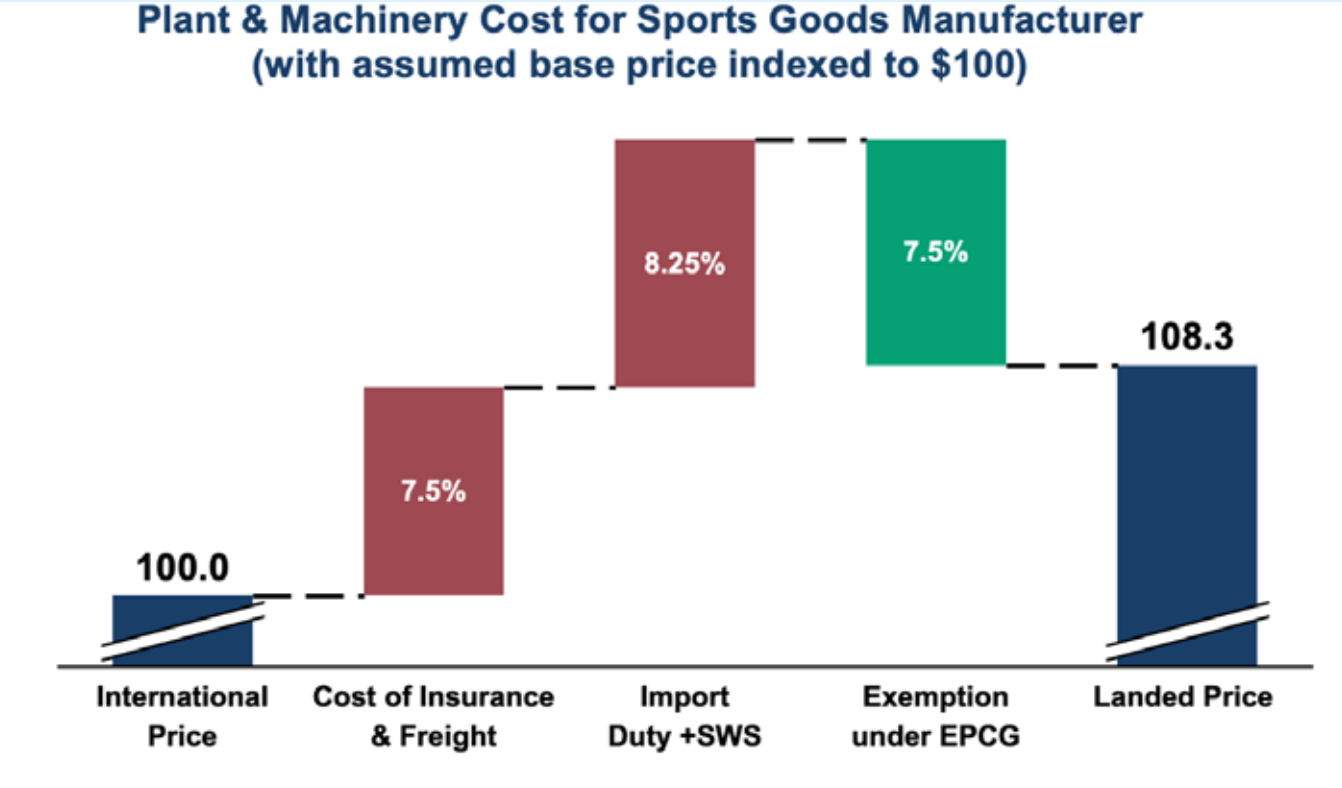


Figure 40: Plant and Machinery cost comparison for sports goods manufacturers

CIF Costs: Freight, insurance, and duties significantly increase the landed cost of imported machinery in India. CIF costs add approximately 7.5% to the landed price due to shipping and insurance expenses.

Duties & SWS: While manufacturers are eligible for an exemption of **7.5% Basic Customs Duty (BCD)** under the EPCG scheme, the **10% Social Welfare Surcharge (SWS)** is not exempt, and must be borne by manufacturers.

As a result, the surcharges and freight costs raise the landed price of machinery in India by at least 8.25% compared to China.

In addition, capital goods attract 18% GST, which is ideally creditable; however, since output goods are taxed at only 5%, manufacturers often have insufficient tax liability to fully utilise or claim refunds of the IGST paid. Where this GST credit cannot be availed, the effective landed cost disadvantage relative to China increases sharply up to ~26%, materially discouraging capital investment and mechanisation.

b) Land

India's sports manufacturing clusters face significant structural constraints that limit scale and efficiency. Land prices in established clusters are prohibitively high, ranging from INR 900-1,100 per sq. ft. in Meerut to INR 1,700-2,000 per sq. ft. in Jalandhar's Leather Complex. Additionally, no new sports industrial complexes have been developed in these clusters for over 30 years. As a result, manufacturers are unable to create integrated factory spaces and are forced to operate out of fragmented, multi-floor rental units within existing buildings. The lack of adequate space further leads to logistical inefficiencies, as suppliers outside the sports complex are compelled to dispatch smaller, piecemeal shipments using trolleys that require subsequent consolidation. This increases handling costs and reduces overall productivity.

Due to these constraints, Indian manufacturers typically operate on plots of just 1-2 acres, compared to 20-25 acres in Pakistan and China, enabling the latter to maintain integrated layouts and streamlined operations. Developing new, larger factories with streamlined manufacturing processes is critical to improving efficiency and meeting international delivery timelines and supply requirements. Land availability and the creation of integrated manufacturing clusters is hence a major unlock across product segments.

c) Logistics

India's manufacturing clusters face a significant logistics disadvantage due to the lack of streamlined inland infrastructure. The absence of nearby ports or effective dry ports around key hubs such as Meerut and Jalandhar results in inland transport costs that are 2-2.5 times higher than those in China. Distance from ports and indirect routing also extends delivery and procurement timelines, making Indian shipments 10-12 days slower than global competitors. These issues are further exacerbated by weak air and rail connectivity, including limited cargo capacity at Amritsar and slow, unreliable rail freight from ports such as Mumbai, particularly during the monsoon season.

In contrast, competitors benefit from the existence of streamlined logistics. Sialkot, Pakistan benefits from a dry port with 24/7 customs clearance, lower local haulage costs. Sialkot Dry Port is also a TIR hub, providing direct access Central Asia, Russia etc. without exchange of trucks, cross loading at borders etc. The presence of an international airport further improves logistics, whilst also easing buyer visits. China's Europe-bound rail network reduces transit times by 50% compared to sea freight. The absence of comparable infrastructure in India erodes cost and time competitiveness.

d) Tech Limitations

India's sports manufacturing ecosystem is constrained by limited domestic technological innovation, resulting in a high dependence on imported machinery. This significantly increases tech-upgradation costs (as elaborated upon above).

The absence of common facility centres (CFCs) further exacerbates these challenges, forcing individual firms (especially MSMEs) to invest independently in machinery, testing, and R&D infrastructure. As a result, technology adoption remains fragmented and scale efficiencies are limited. In addition, technical expertise is often accessed through expensive external consultants, placing a disproportionate cost burden on smaller firms seeking to upgrade capabilities. Many MSMEs wish to upgrade technology and acquire know-how for manufacturing various products but are unable to do so due to the high investment necessary.

In contrast, in peer nations like China, rapid tooling cycles and scale enable continuous innovation; mould development happens within weeks rather than years (as is the case in India). This significantly erodes India's competitiveness. Similarly, Sialkot's government-supported shared machinery and prototyping hubs allow even small manufacturers to meet global quality and export standards.

Demand-Side Challenges

Indian sports equipment manufacturers face an array of market access constraints that limit their ability to scale globally and capture demand. The primary bottleneck stems from a lack of a credible global branding 'Made in India' narrative for sports equipment. This is compounded by trade policy headwinds and underdeveloped forward linkages with global anchor brands that drive demand and facilitate visibility.

Beyond market structure, the lack of significant federation representation in global sporting bodies (FIFA, FIBA) limits India's ability to create co-branding opportunities and marketing channels for domestic manufacturers, while underdeveloped institutional sports infrastructure and weak university-industry partnerships further constrain ecosystem maturity.

Anchor brands

- **Lack of tier-1 brand partnerships** restricts sustained demand, investments, and scale manufacturing
- Anchor brands ensure stringent quality standards, global demand pull, and credibility unlocking global markets
- **No Indian brand has a strong demand pull yet** (except in cricket, protective gear)

Trade Facilitation

- **Most current FTAs do list sports goods as a focus area**, further adding to the burden on Indian manufacturers
- **FTA with Vietnam allows duty-free imports of finished goods**, undercutting Indian manufacturers that already face higher RM costs

Federation Representation

- **India lacks any significant representation** in global federations like FIFA, FIBA etc. Increasing this would provide a networking & marketing channel for Indian manufacturers
- **This would also facilitate co-brand approvals and testing facilities**, helping them supply for global events & build brand visibility and credibility

Promotions

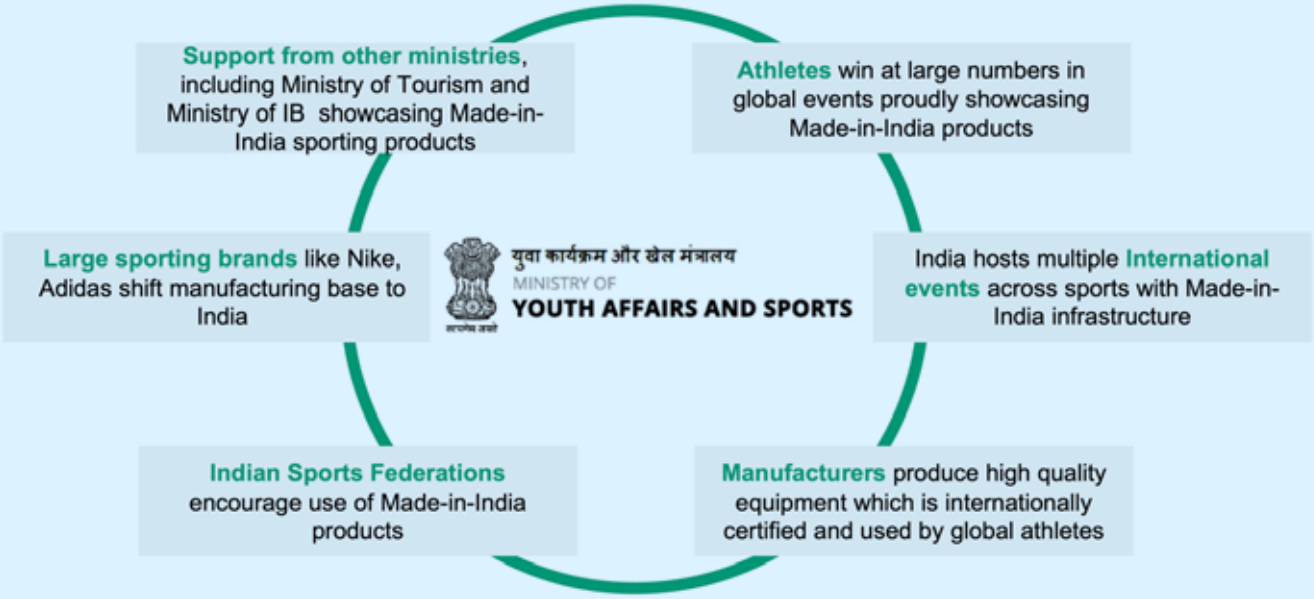
- To enhance the brand value of 'Make in India' products, **concerted efforts must be made to secure partnerships with global brands**, showcase quality & innovations **through certifications, international event sponsorships**, etc.

Ecosystem Development

- **Underdeveloped institutional sports infrastructure** and lack of tie-ups with universities, academies, etc., limit domestic demand
- **Lack of quality equipment and facilities** further deters sports participation, preventing further development of a robust sports ecosystem in India

Easing these demand-side challenges, requires concerted branding effort across various stakeholders like athletes, ministries, national sports federations, manufacturers etc. This would ideally be centred around the core ministry i.e. Ministry of Youth Affairs and Sports:

Ideal Scenario for branding; Currently, none of these exist for India



Some of the challenges can be elaborated upon as follows:

(a) Branding

(i) Brand-India Story

The primary branding challenge for Indian sports goods lies in the absence of a unified and sustained "Brand India" narrative. While multiple stakeholders operate across the sports ecosystem, efforts to collectively promote Indian-manufactured sports goods remain fragmented and uncoordinated, limiting global visibility and recall.

Athletes, who are the most visible and credible brand ambassadors, have been underutilised for sustained promotion of Made-in-India sports equipment. This stands in sharp contrast to international examples such as Anta, which built global brand visibility through a 16-year partnership with the Chinese Olympic Committee, enabling over 120 Olympic champions to consistently showcase the brand on the world stage.

Linkages between manufacturers and universities, sports academies, and high-performance centres also remain underdeveloped, reducing opportunities for product validation, co-development, and institutional endorsement. In parallel, corporate participation through CSR has not been strategically aligned with sports equipment manufacturing, leaving a significant opportunity to support both athlete development and domestic manufacturing untapped. Sports equipment is not explicitly prioritised within CSR guidelines or public sector undertaking themes, further limiting structured support.

In addition, National Sports Federations and government agencies have played a limited role in enabling Indian manufacturers to gain visibility and representation within global sporting organisations and platforms.

This lack of coordination across stakeholders has resulted in a gap where India possesses manufacturing capability and quality products, but lacks the integrated branding, endorsements, and institutional backing required to strengthen the "Made in India" perception and capture a larger share of global sports goods markets.

(ii) Anchor Brands

India's sports equipment manufacturing ecosystem lacks transformative anchor brand partnerships across product categories. In global markets, anchor relationships have played a crucial catalysing role in creating predictable demand, stringent quality systems, and enabling supplier investments in automation and scale.

For example, Pakistan's football manufacturing hub in Sialkot illustrates the transformative impact of long-term anchor brand partnerships. The region has collaborated closely with Adidas since 1982, building deep manufacturing expertise and trust over several decades. Sialkot's role as the exclusive supplier of FIFA World Cup footballs for three consecutive tournaments in 2014, 2018, and 2022 has firmly established its global reputation for quality and reliability. This sustained association with a leading global brand has concentrated an estimated 60-70% of global football demand in Sialkot, enabling significant economies of scale and driving the development of robust local supply chains. Over time, this scale has also facilitated technology transfer, skill upgrading, and the accumulation of specialised manufacturing know-how across the cluster.

India too has established a strong, albeit category-specific, position in the global rugby ball market, driven largely by manufacturing capabilities concentrated in Jalandhar. Leading international brands such as Gilbert source primarily from this region - Jalandhar alone accounts for approximately 60% of Decathlon's global rugby ball production. Indian manufacturers

collectively hold a higher share than all the other countries combined, a notable achievement given the broader dominance of Pakistan and China across most other inflatable and hard-ball sports equipment categories. However, this remains confined to rugby balls and has not yet translated into a comparable presence across other sports equipment segments.

(b) Role of National Sports Federations (NSFs)

National Sports Federations (NSFs) in India play a central role in governing and developing their respective sports, with primary responsibilities spanning regulation, promotion, competition management, athlete and coach development, equipment procurement, and grassroots programs aligned with international and Olympic norms. Their current focus is largely oriented toward training, event organisation, and athlete management, with mandated allocations for youth and grassroots development. However, NSFs have invested relatively limited effort in building a strong domestic sports manufacturing ecosystem or engaging systematically with industry stakeholders as part of their broader developmental mandate.

As a result, gaps persist in domestic ecosystem creation and industry coordination. Many NSFs lack structured mechanisms to engage with or guide domestic manufacturers on equipment specifications, standards, or emerging requirements, limiting alignment between sporting needs and manufacturing capabilities. Several NSFs spent only 50-65% of their allocated budgets in FY 2024-25, indicating untapped capacity to support holistic ecosystem development. The recently mandated Make-in-India committees within NSFs present an opportunity to address these gaps, provided they are supported by sustained industry-federation engagement and stronger accountability frameworks.

(c) Market Access

Market access for Indian sports goods manufacturers is constrained by a combination of trade agreements and investment-related policy dynamics. Under the ASEAN–India FTA, finished sports goods imported from countries such as Vietnam enter India at zero duty, creating a cost-advantaged sourcing route for global brands with operations in India. This has enabled imports to undercut domestic manufacturers, who already face relatively higher raw material and input costs, intensifying competitive pressure in key product categories such as inflatable balls.

At the same time, sports goods have not featured prominently in India's trade negotiation priorities, limiting the country's ability to secure favourable tariff outcomes, address non-tariff barriers, or proactively shape market access conditions that support export competitiveness for domestic manufacturers.

Chapter 8: Where to Play: Strategic Prioritisation of Sports Categories for Export Competitiveness

Achieving the ambitious export target of $8.1 billion by 2036 will require a focused and coordinated strategy rather than a fragmented, category-agnostic approach as evident through the challenges as well. To this end, we have identified priority sports equipment categories using a structured "Where to Play" matrix that assesses global export opportunity, measured through current global export size, against India's existing manufacturing capability, including current production capacity and overall ecosystem maturity.

Based on the analysis, we can categorise the sports goods universe into four strategic quadrants to guide investment prioritisation and policy support.

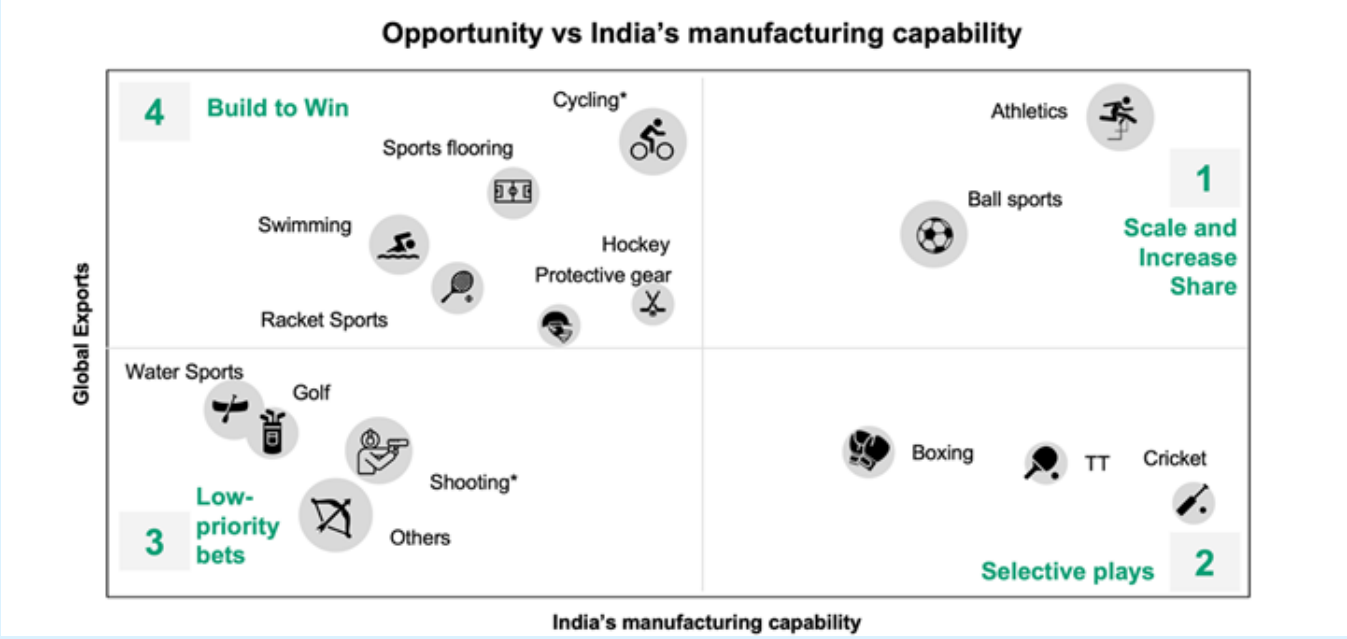


Figure 41: 4 quadrants guiding investment and policy support

Quadrant 1 - Scale and Increase share (High capability, High export potential): This quadrant represents India's immediate 'engine of growth' for exports. It covers Ball sports (Inflatable and Hard Balls). India already possesses a relatively strong manufacturing base in clusters like Jalandhar and Meerut for these goods.

Quadrant 2 - Selective plays (High capability, Low export potential): This quadrant includes niche sports that have relatively established manufacturing presence in India. For example, Table Tennis, Boxing, and Cricket.

Quadrant 3 - Long-term bets (Low capability, Low export potential): This includes categories like Water sports, Shooting, Golf, and other smaller sports categories. These require fundamental shifts in local demand and infrastructure before they become viable for export-led manufacturing at scale.

Quadrant 4 - Build to Win (Emerging capability, High export potential): This quadrant represents sports categories where global demand is massive, but India's footprint is limited. It covers categories like Cycling, Sports flooring, Hockey, Protective gear, Racket sports, and Swimming.

The Three-Horizon Prioritisation Roadmap

A phased 10-year roadmap can be charted out to prioritise specific sports segments, aligning policy support with category readiness:

- **Horizon 1 (Unlock $3.4 bn, 42% of total export potential):** Focuses on 'low hanging fruits' by scaling existing strengths in sports categories from Quadrants 1 and 2. This would require debottlenecking current clusters, improve infrastructure gaps, and eliminate cost disabilities.
- **Horizon 2: (Unlock ~$2.4 bn, 29% of total export potential):** Focuses on 'building a capability at scale', focusing on sports in Quadrant 4. This horizon is expected to be defined by entry into high-tech segments like Racket sports, Sports flooring, and Cycling. Success here would require ensuring domestic availability of specialized raw inputs that are currently imported (Carbon fibre, EVA, etc.) along with other structural fixes in place. Further to scale capabilities, existing clusters would need to be established, inviting large global anchors to attract quality, scale, and investment into domestic production.
- **Horizon 3: (Unlock ~$2.4 bn, 29% of total export potential):** Focuses on niche dominance in the long run. By 2036, India aims to establish a presence in specialized sports (Water sports, Shooting, Golf, etc.), and to complete a comprehensive global sports equipment manufacturing portfolio under the 'Made in India' brand.

Chapter 9: Key Recommendations

Achieving India's ambitious 2036 export goal requires a fundamental shift in India's sports manufacturing ecosystem. This section highlights a seven-pronged strategy to address the structural, supply-side and demand-side challenges persisting in the sector, the competitiveness gap and the need for fiscal support to bridge it, and a five-year proposed scheme for the same. These solves are:

Supply Side Solves – Immediate Action Items

Structural reforms are crucial to ensure cost competitiveness for Indian sports goods manufacturers.

Key Recommendations – Structural Solves

(i) **Raw Material costs:** Current duty structures often increase costs for value-adding exporters. India imports most high-end raw materials for sports equipment. Policy measures should focus on rationalisation of duties on specialised inputs like carbon fibre, PU/TPU sheets, EVA foam, etc. Furthermore, for raw materials sourced domestically, e.g. steel, polyester, plastics etc., QCO restrictions should be eliminated and domestic prices should be ensured to be at par with global prices. In addition, import processes should be eased for exporters, with fast-tracked duty refunds for export-oriented manufacturers. Long-term solves should include focusing on building a robust domestic raw material ecosystem to reduce global import dependence.

- **Land & Logistics:**
  - » The mature nature of legacy clusters like Jalandhar and Meerut adds land-related challenges. Policy should require to make land easily available without prohibitive upfront capital expenditure for MSMEs.
  - » There is also a need to strengthen 'last-mile' connectivity from cluster to major ports like Mundra/JNPT etc. This can be achieved by constructing better multi-modal hubs (e.g. Greater Noida, Ludhiana, new cluster zones) to act as dry ports for expedited shipping, along with improved roadways.

(ii) **Taxation and Customs:** Currently, we import all machinery required for high-end sports equipment manufacturing. Policy reforms should ensure eliminating all duties and levies on export-linked machinery, components and specialised tools required to mass-produce high quality sports equipment. Further, implementing a 'Single Window' for customs clearance of export-linked inputs as well as export samples sent abroad can help avoid delays in

sending/receiving samples that currently stunt the design-to-market product cycles. Lastly, harmonising GST rates on sports goods, sport equipment and inputs can help improve overall export competitiveness and reduce blockage in working capital for manufacturers.

(iii) **Certification & Quality infrastructure**: The lack of quality globally certified institutions in India adds a hidden cost to Indian exports given the 'double testing' burden as they send their products abroad for certification. Key competing nations all have internationally accredited testing labs in their countries which reduces lead time, cost and enables quick innovation. Policy reforms should focus on engaging with global international sports federations/bodies like FIFA, FIBA, BWF, etc. in establishing globally accredited testing labs in India.

(iv) **Technology and knowledge transfer:** Visa process and visa clearance for foreign technical experts (including from China) required for manufacturing set up, specialised moulding and tech upgradation, should be expedited to improve technology transfer process. Also, enabling local JVs could help move from high-cost consultants to facilitate permanent knowledge transfer to the Indian workforce.

(v) **Public tenders:** Domestic demand for several sports' equipment categories, especially turfs and synthetic flooring, is still driven largely by central/state governments. In this context, restrictive tender conditions mandating specific foreign origins or brands (e.g. USA, Australia, Europe) can unintentionally exclude capable Indian manufacturers from participating, locking in import dependence even when domestic options exist. Government should encourage sourcing in line with required quality and cost standards without any discrimination on the basis of country of origin. They must also create reforms to improve domestic innovation pilots for Indian suppliers to demonstrate performance through field trials, encouraging them to improve quality to meet global standards over time.

Need for Fiscal Support

(i) **Quantifying the competitiveness gap** As highlighted in the challenges section, India currently faces a ~15% cost disability compared to global manufacturing rivals like China. For an industry where global procurement decisions are made on margins of 2-3%, this gap is a huge barrier to entry for all buyers. To reach a target of $8.1 bn by 2036, we should aim to capture 3% of the market by 2031 resulting in ~$2 bn of exports. Since the disability is 15%, to be globally competitive and achieve this ambition, we will need to fulfil this disability.Over the five-year period (2027-2031), the cumulative financial impact of this disability for sports equipment categories is estimated at **~₹7,300 crore**. [Refer to Appendix A8. for detailed calculation] The gap is comprised of:

- **Structural disabilities (~77% share of gap):** These include high raw material (RM) import duties and machinery costs.
- **Additional gap (23% of gap):** Even if structural challenges are solved for, a residual cost of ₹1,700 crore remains to be bridged due to lack of scale. Additional factors like lack of testing infrastructure, international certification fees, market access, lack of accessibility of specialised RM inputs, also play a role.

Structural Fixes and Targeted Fiscal Incentives

While there are a list of 23 raw materials permitted to be imported duty free under the DFIS scheme (see appendix A6), consultations with manufacturers reveal that the list of eligible materials under this scheme is narrow and static. Input requirements for sports equipment manufacturers extend beyond the 23 raw materials, leaving a substantial share of input costs outside of duty-free perimeter. Further, a majority of manufacturers are MSMEs and not 100% EOUs. For such players, duties are paid upfront, followed up slow refund mechanisms and administrative burden.

The Government should address structural inefficiencies by rationalising import duties on specialised inputs (carbon fibre, EVA, TPU, etc.), removing QCOs on key input material (steel, aluminium) and removing import duties for specialised machinery not made in India.

If structural reforms are not undertaken, the Government will have to compensate for structural weaknesses purely through fiscal subsidies to achieve the desired target. This would require an incentive of ~₹7,300 crore. This would not only be fiscally unsustainable and continue to render an uncompetitive environment but would not address the underlying inefficiencies of the ecosystem and develop scale in the industry.

However, if the structural challenges are addressed, a corpus of only ~₹1,700 crore is required to be supported through a targeted scheme to provide the "extra mile" assistance needed for Indian sports equipment manufacturers to become globally export competitive.

A detailed deep-dive of impact of reforms on sub-groups is available in Appendix (see A10).

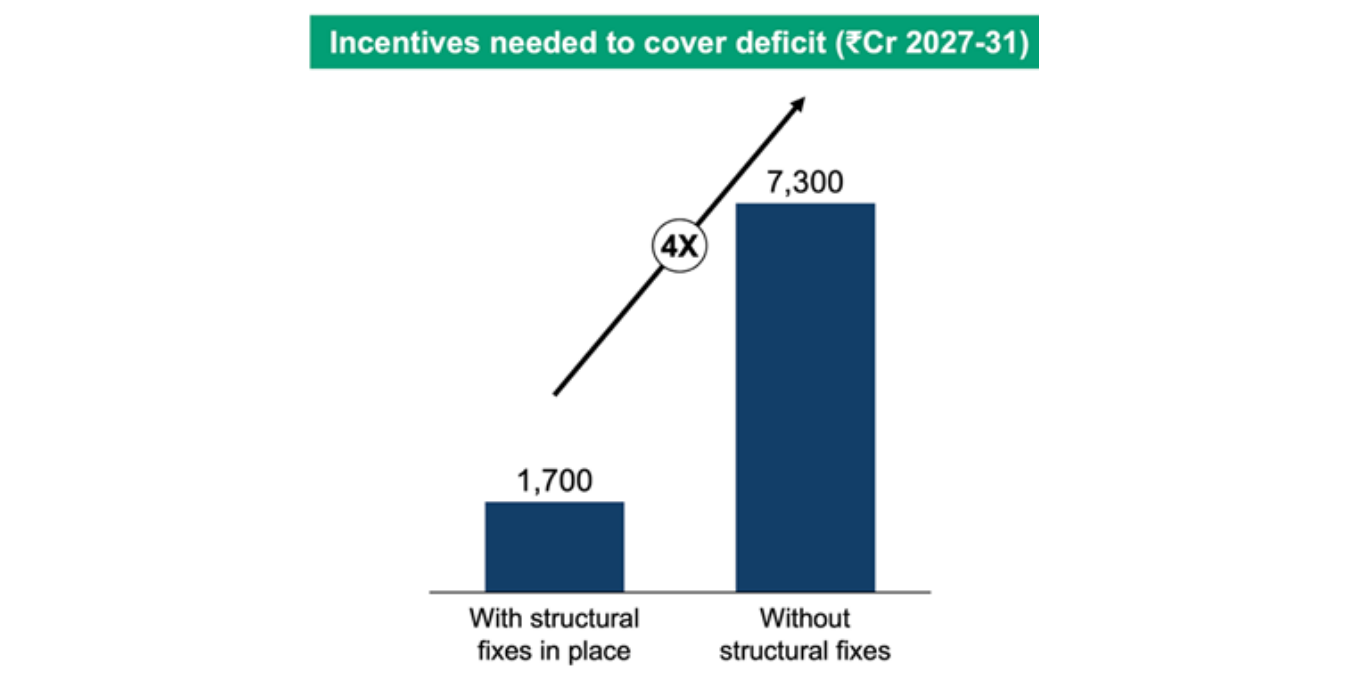


Figure 42: Incentive outlook

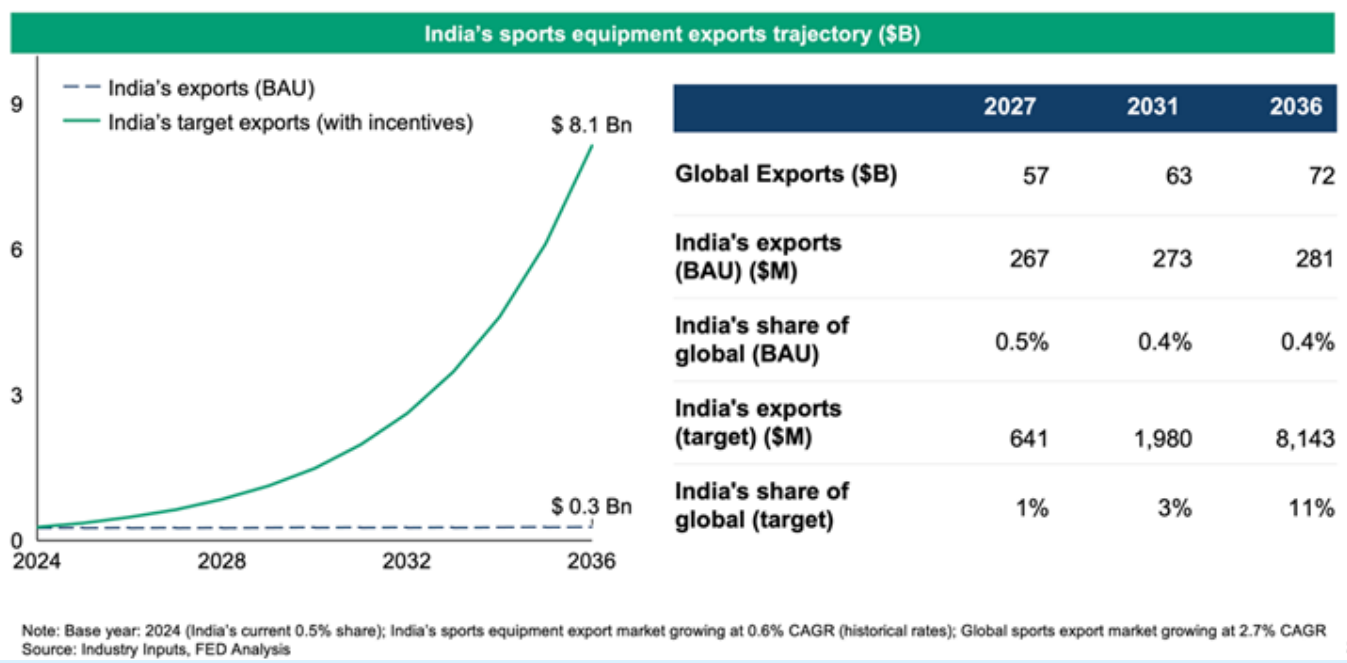
(i) **Proposed Scheme: Sports Goods Manufacturing Incentive (SGMI) Scheme (total ₹2,000 crore)**

We propose introducing a scheme to bridge the gap after fixing the structural issues via the SGMI scheme (2027-31) of ₹1,700 crore. In addition to this, there is an imperative to incentivise broader market access and support for global branding initiatives on the demand side. Therefore, it is proposed that the scheme comprise of three key pillars focused on uplifting both new and existing sports goods manufacturers.

- **Pillar One – Fiscal support for scale-related benefits (bulk buying raw material, tech upgradation, innovation) (₹1,700 crore):** Offer fiscal support to MSMEs in better accesses qualified raw inputs through bulk-buy facilitation. In addition, capital subsidies offered for eligible specialized machinery and capital goods can help offset high initial cost of establishment and facilitate production of sports goods for export. There should be lower thresholds for eligibility for MSMEs on the same.
- **Pillar Two - Certification support (₹200 crore):** High certification costs and lack of globally accredited testing labs in India is cited as a key challenge for most sports' equipment manufacturers. It is therefore, proposed, that the government co-fund certifications for meeting global standards and sports-specific approvals, quality marks, etc. which is a key requirement in equipment procurement at global sporting events. This is a short-term measure until we develop an internationally accredited testing infrastructure in the country across sports.

- **Pillar Three - Global branding and market access support (₹100 crore):** Reimburse or cover costs for manufacturers to participate in priority international trade fairs, curated buyer-seller meets, and global brand-building exercises. This can help strengthen 'Brand India' brand and build credibility, trust and recognition among international sports federations

Building on the reforms and scheme interventions outlined above, we can illustrate the impact through a straightforward scenario analysis.



	2027	2031	2036
Global Exports ($B)	57	63	72
India's exports (BAU) ($M)	267	273	281
India's share of global (BAU)	0.5%	0.4%	0.4%
India's exports (target) ($M)	641	1,980	8,143
India's share of global (target)	1%	3%	11%

Note: Base year: 2024 (India's current 0.5% share); India's sports equipment export market growing at 0.6% CAGR (historical rates); Global sports export market growing at 2.7% CAGR
Source: Industry Inputs, FED Analysis

Figure 43: Scenario Analysis- BAU v/s with proposed incentives

- Under a business-as-usual (BAU) path, in which targeted assistance and structural fixes are not put in place, India's sports equipment exports would continue to stay relatively stagnant until 2036, with its global export share plateauing between 0.4-0.5%, even though the global market would be expanding.
- In contrast, India can change to significantly higher growth trajectory and achieve its $8.1 bn export target by 2036, provided proposed package of structural reforms as well as incentives to close the residual competitiveness gap are actioned and used effectively. This would translate to an estimated ~11% of global export share from the current 0.5% base. [base year: 2024]

Supply Side – Long Term Solves

The transition to an $8.1 bn export economy for sports equipment needs more than just monetary parity. It requires creation of integrated cluster-led manufacturing to achieve economies of scale, specialised labour pooling, and building deeper Global Value Chains (GVCs).

Adopt a Cluster-led Growth Model

Unlocking capacity in legacy hubs and developing new, export-oriented manufacturing ecosystems that are port-proximate and integrated with adjacent industries are necessary to achieve the larger export goal from the current base. These clusters can also include common facility centres (CFCs) to offer plug and play infrastructure (high cost machinery, access to specialised material) to MSMEs thus reducing their capital burden.

Key Advantages of the Cluster Model

- **Decreased turnaround time:** Lead times are shortened by 15-20 days due to logistics infrastructure availability, closeness to raw material suppliers, etc.
- **Skill concentration:** By creating a "localised labour market", clusters enable the self-sufficiency of specialised skills like hand stitching, precision moulding, and composite layering.
- **Usage of plug-and-play facilities:** MSMEs can lower the barrier to technological entry by using expensive equipment such as carbon-fibre kilns, 3D printers and CNC machines, on a pay-per-use basis. Also, shared infrastructure including shared testing labs and R&D hubs, reduce burden of certification and innovation for individual firms, speeding up iterations essential for federation-linked standards and buyer approvals.
- **Economies of scale:** Sports equipment manufacturers can benefit from the shared upstream inputs, stitching/finishing skills, and other extended benefits achieving production at scale, enabling greater operational efficiency.
- **Cost competitiveness at ecosystem level:** Clusters help reduce friction costs that MSMEs might not be able to address on their own. This is enabled by shared logistics nodes, common utilities, and a 'single-window' customs clearance procedure.

Strengthen Legacy Clusters

Strengthening existing manufacturing clusters in Meerut and Jalandhar is critical to scaling India's sports goods ecosystem, as these clusters represent the country's deepest concentration of skills, supplier networks, and MSME manufacturing capacity for sports equipment. Decades of accumulated artisanal expertise in equipment manufacturing provide a strong foundation for upgrading towards modern, technology-enabled production. Targeted cluster-level interventions can unlock economies of scale, improve quality and compliance with international standards, and accelerate integration into global value chains.

However, there are a few limitations of existing clusters. These are:

- **Land and expansion restrictions:** Current clusters are set up in smaller Indian cities where it is challenging to expand industrial areas because of a lack of supply of land. Infrastructure is still under-developed in comparison to the demands of export-scale manufacturing, despite improvement in core industrial infrastructure.
- **High logistics burden:** As a result of being far from key international seaports and airports, increased lead times and delays lead to a rise in logistics costs as a significant portion of delivered costs.

Hence, it is essential to also build clusters outside of the legacy clusters that address these challenges.

Add New Clusters

To identify where the new clusters can be introduced, the study evaluates Indian states based on a rigorous scorecard assessment across five pillars: *Land & cluster readiness, Logistics infrastructure, Policy support, Sports ecosystem & event-driven tailwinds, and Skilled labour availability (from adjacent industries).*

We have evaluated **nine Indian states** across **five key parameters** that help showcase their readiness in establishing clusters suitable for achieving growth in sports goods manufacturing in India

Parameter	Weightage	GJ	AP	TN	MH	UP	OD	PB	KN	HR
Land & cluster readiness	30%	8	9	9	9	7	7	7	7	7
Logistics infrastructure	25%	10	9	8	8	8	7	8	8	4
Skilled labour & allied industry base	20%	8	8	9	7	7	7	5	6	8
State policy favourability	15%	9	8	6	7	8	8	7	5	5
Sports ecosystem & event-driven tailwinds	10%	8	8	7	8	9	9	9	6	5
Total weighted score	100%	8.65	8.55	8.10	7.95	7.80	7.35	7.20	6.65	5.95
Rank		1	2	3	4	5	6	7	8	9

Note: States selected basis strong export readiness for sports goods, equipment
Source: Secondary research, FED analysis

Figure 44: State readiness index

Top Three States

- **Gujarat** emerges as a strong candidate for the development of a new sports goods manufacturing cluster, supported by a robust logistics backbone with access to multiple major ports, including Mundra, Pipavav, Dahej, and Hazira. The state offers cluster-ready land availability and a high degree of policy favourability, with the Gujarat Sports Policy 2022–27 explicitly identifying sports goods manufacturing as a priority area and signalling intent to develop a dedicated cluster. These supply-side advantages are reinforced by ecosystem tailwinds such as large-scale sporting initiatives like Khel Mahakumbh, ongoing investments in stadium and sports infrastructure, and the presence of strong allied industries, including foundry, plastics, and engineering, which can support component manufacturing and input adjacencies.
- **Andhra Pradesh** ranks among the leading prospects for the development of an export-oriented sports goods manufacturing cluster, driven by strong corridor connectivity and a plug-and-play manufacturing model aligned with global value chains. The Andhra Pradesh Sports Policy 2024–29 explicitly proposes the creation of Sports Economic Zones to support domestic manufacturing of sports equipment and apparel. The state's logistics backbone is a key strength, with access to five ports and seven airports, alongside integration with the Visakhapatnam–Chennai Industrial Corridor (VCIC), enabling efficient inbound raw material movement and outbound exports. These structural advantages are complemented by ecosystem tailwinds, including proposals for an Olympic-standard Sports City in Amaravati and a stated ambition to host the National Games by 2030, as well as the presence of transferable skills and supplier networks from auto-component, leather, and textile MSMEs.
- **Tamil Nadu** presents a strong case for scalable sports goods manufacturing zones, underpinned by a diversified industrial base and expanding port infrastructure. While the state currently lacks a dedicated sports goods manufacturing policy, it benefits from extensive industrial estate infrastructure developed through SIDCO and SIPCOT, providing readily available land and utilities for cluster development. Connectivity through three major ports, Chennai, Kamarajar, and Tuticorin (with additional capacity expansion underway) supports export-oriented manufacturing. The state's deep expertise in automotive, electronics, and textiles further strengthens its attractiveness by enabling supplier development, technology transfer, and access to a large, skilled workforce.

These three states as the first cohort for cluster deployment, while structuring competitive selection of specific sites within each state based on land parcel readiness, port distance, utility adequacy, and ability to host shared testing/ CFC infrastructure.

Details of other states are available in the appendix. (Please refer to A5 in the Appendix)

Fiscal Requirement Breakdown for a Cluster-led Establishment

To upgrade the existing clusters and to establish new ones, fiscal support is needed. The following calculation assumed a phased rollout over 5 years, where central support can be partially leveraged with state contributions, improving the feasibility while aligning execution ownership with state industrial development agencies.

Upgrading Existing Clusters (₹1,000 Crore Outlay)

For such legacy clusters, infrastructure remains outdated. Common facilities and quality certification centres are non-existent, or inadequate. Further, logistics connectivity, as shown earlier in the report, has not kept pace with export requirements.

For this, a ₹1,000 crore fiscal support should be proposed to upgrade legacy clusters as a parallel 'quick win'. Specifically, funds should target infrastructure upgrades (e.g. modern shared facilities, testing and certification centres, design tools), and better road and port connectivity, warehousing facilities, and customs facilitation. Existing bases, if supported with the above funding, can help scale for Horizon 1 categories, while new clusters are being developed, and generate early export wins.

The cost structure for one new cluster is estimated at ₹1,000 crore split across four components.

Establishing Four New Clusters

The cost structure for one new cluster is estimated at ₹1,000 crore split across four components:

Component	Details	Cost (₹ crore)
Land cost (500 acres)	Land aggregation for a cluster-scale manufacturing zone	500
Core infrastructure	Manufacturing zone utilities + plug-and-play facilities	100
Support infrastructure	Certification & testing facilities, R&D/innovation centres, worker housing, canteen, logistics support	250
Commercial development	Basic commercial ecosystem (e.g., offices, small hotel)	150
Total per new Cluster		1,000

Note: The cost structure is aligned to schemes for other integrated parks and their components, adjusted for sports-specific needs (e.g. testing, infra, R&D, etc.).

The aggregate requirement for four new clusters: ₹1,000 crore X 4 = ₹4,000 crore.

The design deliberately allocates significant funding to support infrastructure (₹250 crore/ cluster) because cluster competitiveness in sports goods is heavily constrained by compliance readiness in certification, testing as well as R&D/prototyping, along with workforce/logistics reliability.

In summary:

- **₹1,000** crore is proposed for upgrading existing legacy clusters
- **₹4,000** crore is proposed for establishing four new integrated clusters for sports equipment (₹1,000 crore per cluster)
- Total fiscal support requirement amounts to ₹5,000 crore over 5 years, with potential to include state co-funding

Testing Infrastructure Development

Stakeholder consultations have shown that a lack of testing infrastructure in the country is a key challenge for the following reasons:

- Currently, manufacturers send their products abroad for pre-testing and testing. Each product SKU and design require different tests and certifications. This significantly drives up the lead time to launch and adds up costs.
- This further decreases the lack of innovation velocity and overall competitiveness, compared to other peers like China that have domestic globally accredited lab ecosystems.

Co-funding local establishment of globally accredited testing and certification labs in or near sports manufacturing clusters should be treated as a core competitiveness intervention, since testing directly shapes time-to-market, cost-to-comply, and product iteration speed.

Such labs must be embedded within cluster ecosystems (as part of CFCs or cluster SPVs), to enable MSMEs that cannot afford private lab relationships, to reduce lead times for sampling, validation and re-testing. This model should be designed as a shared, pay-per-use facility with government funding for capex and bundled certification packages.

In parallel, India must also pursue formal partnerships with global sporting bodies (e.g. ICC, FIFA, FIBA, and other relevant federations) to position the country as a credible testing and certification partner, not merely a low-cost manufacturing base. These partnerships can help meet two key objectives – one, ensuring India-based labs are recognised and trusted in global procurement deals, and two, to enable India to build and stay updated with evolving equipment standards, improving design capability and innovation outcomes. This could be operationalised through MoUs, and technical working groups evaluating, creating a tight performance framework, and tracking metrics like certification turnaround time, number of accredited test methods, number of firms onboarded, etc.

If done well, embedded testing infrastructure can help serve as a system-level enabler, decreasing compliance burden, increasing buyer trust, and accelerating product cycles, as well as the overall global credibility of ‘Brand India’ sports equipment.

Building a Domestic Raw Material Ecosystem

Developing a strong domestic raw material ecosystem is essential for strengthening India’s sports goods manufacturing sector and reducing dependence on imports. Several key inputs used across sports equipment categories, such as advanced polymers, technical textiles, performance rubbers, composites, carbon fibre, specialised foams, and high-grade alloys, are currently partially or fully import-dependent. This increases costs, lengthens lead times, and exposes manufacturers to global supply disruptions.

Special focus should be given to building domestic capabilities in carbon fibre and high-performance polymers such as PU and TPU, which are increasingly used in modern sports equipment for their strength, durability, and performance characteristics. Targeted support for technology transfer, joint ventures, and scaling up domestic production can help make these materials more accessible and affordable for Indian manufacturers.

A focused raw material strategy can improve competitiveness by lowering input costs, ensuring consistent quality, and enabling faster product development. Stronger linkages between raw material producers and sports goods manufacturers, including co-location near manufacturing clusters, vendor development programmes, and access to shared testing and certification facilities, will be important to accelerate the use of domestically produced inputs.

Building a domestic raw material ecosystem for sports goods will also create wider benefits for other industries, including automotive, aerospace, defence, electronics, medical devices, and consumer

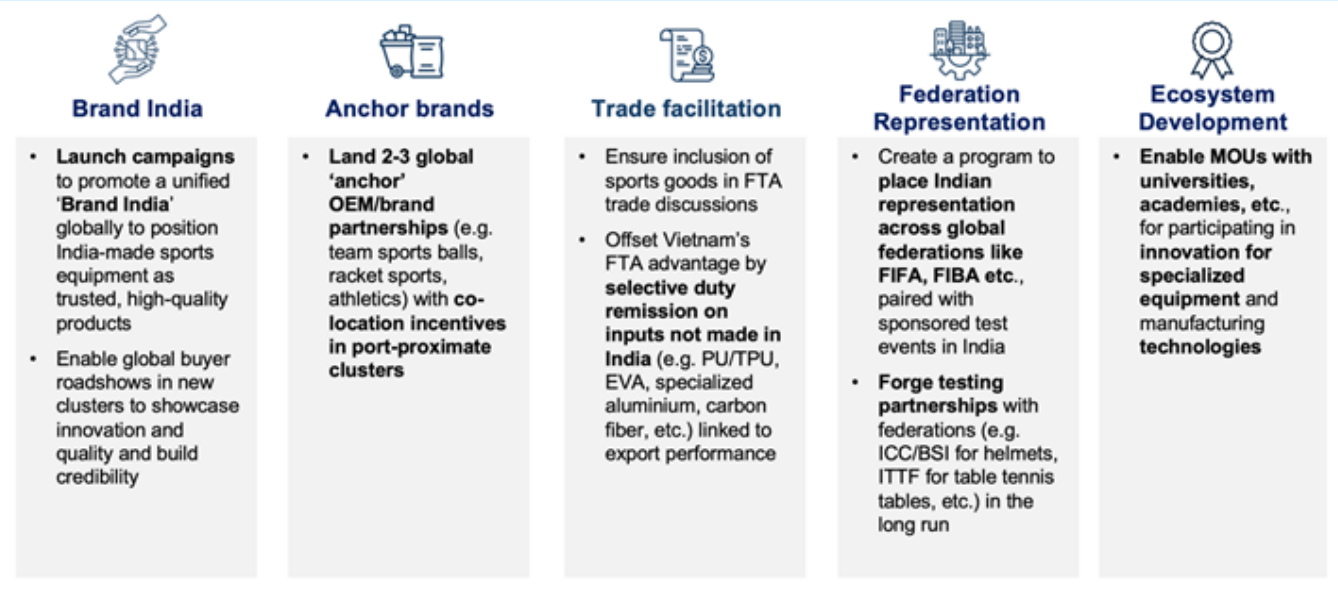
durables, where these materials are widely used. Over time, this will help improve supply chain resilience, reduce import dependence, and strengthen India's position across multiple manufacturing value chains.

Global benchmarks:

- Japan's Teijin Ltd. set up carbon fiber hub in Vietnam in 2019, which serves APAC's rising carbon fiber demand including for sports equipment
- China has dominated global market share in sports equipment mfg. by vertically integrating testing (localised CNAS labs), raw materials (Guangdong/Zheijang polymer clusters), and manufacturing

Demand-Side Solves

As mentioned in Chapter 7, India's sports equipment manufacturing industry faces binding demand-side challenges as well that has limited its ability to expand export scale. The core challenge remains weak forward linkages including limited integration with global anchor brands and weak global visibility with international sports bodies and procurement channels. These are compounded by trade policy asymmetries (e.g. Indian government tenders solely procuring sports flooring from global brands instead of allowing local players to participate) that disadvantage domestic sourcing in select categories.



(i) Unified 'Brand India' program (₹500 crore outlay)

There must be a unified, multi-stakeholder 'Brand India' branding and market access strategy, anchored by MYAS as the nodal ministry, so exports are driven by market credibility and not just by fiscal support

Comprehensive brand india strategy

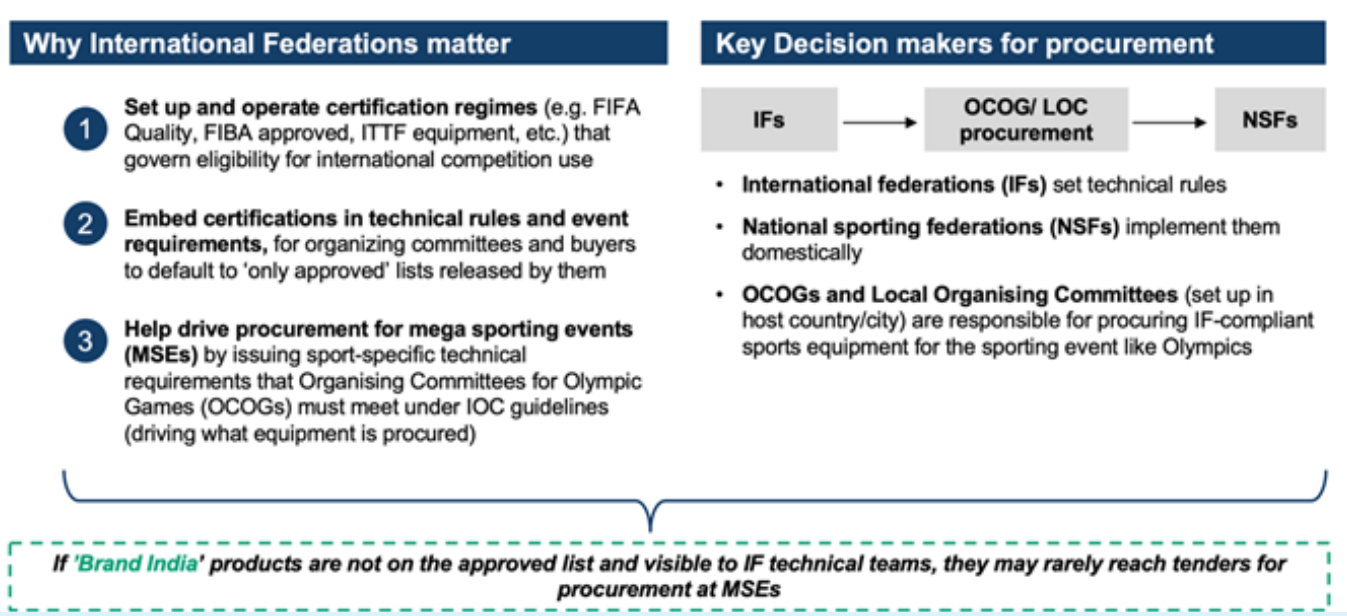
A dedicated unified 'Brand India' program like Make-in-India, addresses the gap of lack in coordinated brand-building efforts by consolidating marketing, credibility-building and market access initiatives under a single framework. The objective should be establishing India as a recognised, trusted source for quality sports equipment by improving visibility, quality standards, and brand recall of Indian-made products through consistent storytelling and athlete endorsements.

The program should enable funding for Indian brands at marquee international fairs and federation expos, as well as host global buyer roadshows in India's clusters, with Indian brands adopting a "Brand India" identity.

Role of Involved Stakeholders

(i) **National Sports Federations (NSFs):** NSFs should move beyond their traditional role as domestic administrators and become active builders of global credibility for Indian sports equipment. Key responsibilities that NSFs should meet:

- Create formal industry working groups for regular discussion on key pain points with industry players as well as athletes on issues like equipment needs, trial protocols, and certification pathways
- Nominate NSF representatives into International Federation technical committees where global standards are actually decided. This gives India a voice in rulemaking and opens doors to federation networks
- Promote use of 'Made in India' sport equipment provided they meet international technical and federation standards. This will help bring more brand visibility and boost to sports equipment manufacturing domestically



(ii) **Athletes:** Government should work with top athletes to act as ambassadors for 'Brand India', who will use Indian made equipment in international competitions, not just endorse it in advertisements. This can be paired with genuine storytelling about their experience with the products. Further, athletes should play a key role offering real feedback and only endorsing gear that meets federation standards. Their performance becomes evidence that Indian equipment works at the highest levels.

(iii) **Manufacturers:** Industry manufacturers should focus on delivering consistent quality at scale, by investing in processes, technology and quality compliance. They should work directly with athletes and federations to improve product designs, align with international trends and quality and innovation

(iv) **Corporates and Brands:** Corporate support can amplify visibility of Indian equipment through sponsorships at global events or by financially supporting smaller manufacturers to cover certification costs that they cannot afford. By investing in federation relationships, they can also help open doors for Indian suppliers, bringing in distribution networks, marketing expertise to speed up adoption.

(v) **Government (Ministry of Youth Affairs & Sports):** The role of government should shift from direct execution to that of an organiser and facilitator of the ecosystem. This includes providing catalytic funding for a shared Brand India platform, supporting the creation of common testing and certification infrastructure, co-funding compliance and quality

certifications, and acting as the anchor institution to coordinate private sector participation and align stakeholders across the value chain.

Corporate Social Responsibility (CSR) Funding Sports Ecosystems

CSR spending on sports continues to be severely underweighted. Based on publicly available information, sports receive ~1.8% of total CSR allocated budget, far behind education and healthcare. However, when corporates do invest in sports, the focus is usually indexed towards athlete sponsorships and training academies. CSR is also geographically-concentrated in India, with five states (Maharashtra, Karnataka, Odisha, Tamil Nadu, and Delhi) receiving 61% of all sports-related CSR funding.

As part of reforms, firstly, **corporates and regulators need to define clear standardised metrics** that go beyond medal counts and include manufacturing related metrics. Metrics can also cover athlete pipeline outcomes, participation rates at grassroots level, equipment adoption in academies and events, certification throughput for manufacturers, etc. Without such metrics, sports CSR toward sports equipment manufacturing sector remains hard to prioritise or scale since impact cannot be demonstrated to boards or shareholders.

Secondly, instead of offering fragmented small grants across multiple sports, corporates should champion a '**One Corporate, One Sport**' **partnership model** to sustain expertise and credibility over time. One way would be to map corporates to specific sports where their industrial footprint or brand positioning aligns (e.g. steel companies to hockey or archery, footwear brands to athletics) to create long-term commitments or integration.

A list (non-exhaustive) of potential corporate brands engaged in CSR for sports that could be considered to implement the above model -

Corporate	Revenue (FY 24-25)	Total CSR Spend (FY24-25)	Sports CSR Focus Areas	Sports CSR details
Reliance Industries Limited	10,71,174 Cr	2,156 Cr	• Grassroots access • Athlete support • State partnerships • Sports Academy/ High performance infra	• **Support** Olympic and Paralympic **athletes** • **Train players** at academies, organize **nationwide grassroots competition** • Enable elite athletics performance through **state partnerships,** backed by **world-class high-performance infrastructure (Odisha HPC)**
TATA STEEL	2,18,543 Cr	585 Cr	• Grassroots access • Sports Academies/High performance infra • Federation partnerships	• **Engage 29,000+** in rural sports • **Built academies for football, hockey, archery etc.**, sports complex & high-performance center • **Official partner of FIH** Hockey Men's **World Cup** 2023
JSW Steel	1,68,824 Cr	363 Cr	• Grassroots access • Athlete support • Sports Academy/ High performance infra	• **Complimentary football coaching** • **Grassroots training in schools** across various sports • **Inspire institute (HPC)** provides **fully-funded world class training** to up-to **300 athletes**

*Other notable initiatives include **Infosys' Gear for Gold** program that **supports academies & athletes through infra upgrades**, coaching support etc. & **HCL's Sports For Change** that **organizes tournaments** across all levels, trains coaches & leaders.*

Figure 45: Engagement in Sports CSR (select corporate brands)

Thirdly, corporates should be encouraged to **use Indian made equipment in their CSR funded events**, academies, and training centres. Private corporate funding can also enable state and federation partnerships, bringing forward India's global visibility through international forums.

Lastly, the **National Sports Development Fund (NSDF)** continues to offer a coordination mechanism as well. As a government-mandated fund supporting sports infra and athlete development, it can align CSR spending, ministry programs and other philanthropic capital to prioritise sports development and manufacturing credibility as complementary goals instead of separate agendas.

Case Study: Odisha's State and Corporate Partnership Model for Success

Odisha's emergence as a global hockey hub demonstrates what is possible with state and corporate dual commitment model around a single sport. It operates through clear role demarcation:

- **State is responsible for infrastructure and hosting capability:** Odisha has consistently hosted major International Hockey Federation (FIH) events since 2017, including World League Final and multiple World Cups. (2018, 2023). It has also built a 20,000-seat stadium in Rourkela and developed ~25 astro turf fields to international standards and specifications. The government has also committed ₹120 crore in long-term sponsorship for the Indian hockey team, starting from 2018, and now extended it through 2036 under Vision Odisha 2036 framework, positioning the state as a permanent global hockey destination.
- **Corporate partnerships handle operations and performance infrastructure:** Hero Group's sponsorship of FIH has amplified India's corporate voice in international decision-making bodies. Tata has led high performance centres (HPCs), notably the Odisha Naval Tata Hockey HPC in Kalinga, running residential programs across district and regional levels, charting a pathway from grassroots to elite excellence. The program formalised a talent pipeline in collaboration with Bovelander Hockey Academy (leveraging technical support from Floris Jan Bovelander of Netherlands). Corporates also underwrote capabilities rarely present at state level, including GPS analytics for performance tracking, rehabilitation facilities and sports science support.

As per the former Commissioner and Secretary for Sports and Tourism in the Odisha Government, 2019, *"Most facilities are funded by corporates. When we approached corporates or renowned sports personalities, we were clear that we would only be facilitators. We do not want to get into administration because facilities are known for being run inefficiently by governments due to lack of flexibility to respond to needs. We provide the land and help corporates tie up with a world class athlete or institution. This model is working fine for us."*

Beyond Tata and Hero, other corporates have also contributed to sports ecosystems in Odisha. For example, Dalmia Cement has supported badminton initiatives, Rungta Mines has funded Abhinav Bindra's Target Performance Centre for shooting, Aditya Birla Group has backed talent scouting programs, while Reliance Foundation and Tatas have remained involved across sports.

The opportunity present is to connect these corporate investments to manufacturing credibility enabling global market access as well as building local demand for Indian manufacturers.

- **Anchor brands:** India must secure 2-3 anchor OEMs or brand partnerships per sport to accelerate global buyer confidence, bring in technical discipline around quality assurance and compliance readiness, and create steady and predictable demand that give suppliers confidence to invest in better machinery, automation, and skill development. Government should help de-risk early commitments through co-location incentives highlighted previously (e.g. early bird incentives, tax holidays, etc.) while securing anchor deals around time-bound export commitments, tech transfer plans and integrations with CFCs for testing and workforce training.

  The long-term value can extend beyond individual contracts. For example, if India can showcase capability in one category like FIFA-quality balls or BWF-certified shuttlecocks, credibility might extend to other segments, shifting the country's manufacturing and quality reputation. Case studies on Vietnam and Bangladesh in footwear and garments respectively, show similar rapid scaling of the ecosystem after securing key anchor partnerships.

  A list of potential anchor brands is given below:

Brand	Product Mix (%of Rev)	Core Sourcing (% of total volume)	Global Footprint (factories/suppliers)	India Manufacturing Presence	Capex (FY24-25)	Global Revenue (FY24-25)
NIKE	Footwar-68% Apparel-28% Equipment-4%	**Vietnam-42%** **China-17%** Indonesia-12% Other-29%	**Vietnam: 134 factories** **China: 118 factories** Sourcing through contract manufacturing	**India:15 factories** None for equipment sourcing	$812 Mn	$51 Bn
adidas	Footwear-59% Apparel- 35% Accessories/ gear-6%	**Vietnam-27%** **Indonesia-19%** China-16% **India-3%** Other-35%	**Vietnam: 79** **Indonesia: 27** (Primary suppliers)	**India: 28** (Primary suppliers)	$583 Mn	$25-26 Bn
PUMA	Footwear-54% Apparel- 32% Accessories-14%	**China-32%** **Vietnam-30%** Cambodia-13% Bangladesh-12% India-3% Other-10%	**China: 146 factories** **Vietnam: 80 factories** (Sourcing)	**India: 24-25** factories Most sourcing for apparel & footwear	$284 Mn	$9-10 Bn
DECATHLON	Multi-sport equipment	Diversified (Asia, Africa, Europe)	Production teams in 24 countries including India, Pakistan, China, Taiwan etc.	**8% of global sourcing**: incl. bicycles, cricket bats, yoga mats etc.; **Target 15% by 2030**	$111 Mn investment in India over next 5 years	$17-18 Bn

Note: Limited data availability for Decathlon (not publicly listed)
Source: Secondary Search

Brand	Product Mix (%of Rev)	Core Sourcing (% of total volume)	Global Footprint (factories/suppliers)	India Manufacturing Presence	Capex (FY24-25)	Global Revenue (FY24-25)
Wilson	Apparel-42% Outdoor Performance-36%, Ball/Racket-22%	**3rd party-85% Asia-66%** (Greater China-30%)	**42 countries worldwide, Wilson** has manufacturing facilities in **Thailand**	**4 official finished goods suppliers** for Amer across India	$275 Mn	$5 Bn
YONEX	Core categories are badminton, tennis, golf	Factories in **Taiwan, Japan, Thailand** (tennis ball factory) & **India**	**Japan- 3 factories India- 2 factories** Thailand- 1 factory Taiwan- 1 factory	**Yonex manufactures rackets in Bangalore** since 2017	$40-45 Mn	$700-800 Mn
asics	Footwear-led (48% running)	Vietnam, Indonesia, China, Cambodia, Japan	**China-40 Vietnam-35** Indonesia-9 (Tier 1&2 suppliers)	**India- 6 suppliers** across North India producing apparel & footwear	$150-160 Mn	$4-4.5 Bn
UNDER ARMOUR	Apparel 66%, Footwear 24%	**3rd party->90% China, Vietnam etc.- >60%** of apparel/accessories	Footwear produced by **9 primary manufacturers**, primarily in **Vietnam, Indonesia, China**.	Distributor model now, used to have a fully owned subsidiary in India	$150 Mn	$5-6 Bn

Note: Data for Wilson is based on parent company data (Amer Sports)
Source: Secondary Search

Figure 46: Select list of potential anchor brands

- **Trade facilitation:** Strengthening demand for Indian sports goods will also require more effective use of trade policy, particularly through existing and future Free Trade Agreements (FTAs). Explicitly including sports goods and sports equipment within FTA coverage, with preferential tariff treatment and simplified rules of origin, can significantly improve market access for Indian manufacturers in key export destinations. Better-aligned FTAs can help reduce tariff and non-tariff barriers, improve price competitiveness, and enable Indian firms to integrate more deeply into global value chains. Over time, a targeted trade strategy for sports goods can act as a strong demand enabler by expanding export opportunities and providing manufacturers with greater certainty to invest in scale, quality, and branding.

Deep-Dive: EU-FTA

Two recently concluded FTAs: EU-FTA and the UK-FTA have the potential to expand India's share in labour intensive categories like sports equipment.

EU FTA includes sports goods within its scope of negotiations and once implemented, is expected to provide duty-free market access for Indian sports goods exports. This would substantially enhance India's access to the European Union's sports goods import market, valued at approximately USD 14 billion and accounting for nearly 27 percent of global trade in the segment. Currently, India's sports goods exports to the EU stand at around USD 60 million (2024), significantly lower than Pakistan's exports of over USD 100 million, which have benefitted from duty-free access under the GSP+ regime since 2014. Implementation of the EU FTA would place Indian manufacturers on an equal tariff footing, improving price competitiveness and enabling deeper market penetration and scale-up across a wider range of sports equipment categories.

Under the UK–India FTA, the UK has eliminated import duties on Indian sports goods, significantly improving the competitiveness of Indian manufacturers in the British market. The UK accounts for nearly $2 billion in sports goods imports (approximately 4% of global trade in this segment) and is already India's largest export destination for sports equipment, with exports reaching $50 million in 2024. With the agreement set to take effect in April 2026, exports of products such as footballs, rugby equipment, and cricket gear are expected to rise. The removal of tariffs will enhance price competitiveness relative to suppliers from countries such as China and Vietnam, supporting deeper market penetration and strengthening trade ties with a key partner.

- **Federation representation:** International sports federations (ISFs) control technical standards and approved equipment list that moves into procurement specifications used by local organizing committees (LOCs) and large institutional buyers. If Indian buyers are absent from these lists, they remain invisible in major tender participation, regardless of manufacturing capability. To solve for this, Indian technical exports should be nominated for representation in ISF technical committees over time, ensuring Indian manufacturers receive advance visibility into evolving standards for future procurement cycles.
- Additionally, India-based test events and product demonstrations should be hosted in partnership with federations like BWF-sanctioned badminton tournaments promoting India-manufactured sports equipment. Lastly, long-term testing partnerships should be forged linking Indian labs with federation certification pathways (e.g. ICC/BSI for helmets, ITTF for table tennis tables, etc.)
- **Ecosystem development:** Establish formal partnerships with universities, sports academies, and high-performance centres to function as applied R&D and testing hubs for sports equipment. These institutions can provide structured athlete feedback, performance data, and real-world usage insights, enabling manufacturers to refine product design, improve performance, and accelerate innovation cycles.

Consolidated Fiscal Requirement (2027-31)

Building India's competitiveness in sports equipment manufacturing requires coordinated investment action across multiple fronts. No single initiative is sufficient, as each component reinforces the others to create a functional ecosystem capable of building a globally-trusted export competitive sports equipment manufacturing destination.

The total government fiscal requirement over the five-year period (2027-31), amounts to approximately ₹7,500 crore, across initiatives outlined in this report.

The components are summarised below as follows:

S. No.	Initiatives (2027-31)	Amount (₹ crore)
1	Building Cluster infrastructure (4 major, 2 legacy)	5,000
2a	SGMI scheme (bridging competitiveness gap via certification support, market access initiatives, fiscal support, and raw material enablement)	1,700
2b	Certifications	200
2c	Market access	100
3	Brand India branding programs	500
	Total	**7,500**

This investment sets the foundation for India's path to reach $8.1 bn exports by 2036 and capturing ~12% of global market share in sports equipment exports. The benefits extend beyond exports alone. It helps generate employment, build technical capabilities that benefit adjacent industries and vice versa, and establishes India as a key quality manufacturing destination in a sector where India's perception has historically been a barrier.

Other Recommendations

(i) Expand the definition of sports goods beyond core equipment to include sports footwear, apparel, and performance accessories, ensuring a holistic approach to sector development. All sports goods-related policymaking should be anchored under the Ministry of Youth Affairs and Sports to enable faster decision-making, unified vision-setting, coordinated stakeholder engagement, and comprehensive industry development across the value chain. Detailed list of relevant HS codes is available in appendix 3.

(ii) Given the highly technical nature of the sports goods industry and the diversity of over 50 sports categories, a dedicated Sports Manufacturing and Export Promotion Cell should be established within the Ministry of Youth Affairs and Sports. This specialised unit should be staffed with professionals possessing expertise in manufacturing, trade policy, materials science, standards, branding, and international market development. The Cell should function as the central nodal body for sector development, ensuring structured coordination between central and state governments, industry associations, National Sports Federations (NSFs), manufacturers, exporters, athletes, and corporate partners. Its mandate should include:

- Development, harmonisation, and enforcement of technical and quality standards aligned with global benchmarks (FIFA, ITTF, World Athletics, etc.)
- Identification of priority export markets and global procurement opportunities, including anchor brand partnerships and institutional buyers
- Coordination of trade strategy inputs for FTAs and addressing non-tariff barriers affecting sports goods
- Oversight of common facility centres (CFCs), testing labs, and certification support infrastructure across clusters
- Facilitation of R&D collaboration with universities, sports academies, and high-performance centres
- Design and implementation of a unified “Brand India Sports” promotion strategy, including athlete endorsement frameworks
- Monitoring of cluster performance, investment flows, and export targets against defined KPIs

Chapter 10: Conclusion

India's sporting story has long been defined by passion, perseverance, and potential. This report demonstrates that these same qualities are embedded within India's sports goods manufacturing ecosystem. While the sector today accounts for approximately 0.5 percent of global sports equipment exports, it rests on solid foundations: established clusters, skilled labour, entrepreneurial MSMEs, and a growing domestic and global appetite for sports and fitness. International experience makes clear that success in sports manufacturing is not incidental. It is built through deliberate ecosystem development, where policy, technology, capital, and markets operate in alignment.

The analysis shows that India's current scale reflects demand- and supply-side constraints rather than a lack of capability. On the supply side, targeted investments in technology adoption, quality and testing infrastructure, raw material ecosystems including advanced materials, and cluster modernisation can significantly enhance competitiveness. On the demand side, stronger anchor brand partnerships, improved market access through trade policy, coordinated branding efforts, and institutional linkages with federations and performance centres can unlock global visibility and export scale. Complementing these, institutional and administrative reforms, including dedicated governance structures within the Ministry and clearer stakeholder coordination, can ensure sustained and mission-driven implementation.

Together, these supply, demand, and governance interventions form a coherent strategy for transformation. The Union Budget 2026's dedicated support for sports goods manufacturing, combined with improved market access through recent trade agreements such as the EU FTA, provides a timely platform to accelerate progress. If supported by coordinated action across central and state governments, industry, financial institutions, and sports bodies, the sector can transition from a fragmented cluster-based industry into a globally competitive manufacturing ecosystem.

The opportunity extends beyond export growth. The sports goods sector offers a rare combination of export orientation, employment intensity, MSME participation, and relatively short investment cycles. Strengthening this industry can generate jobs, deepen regional manufacturing hubs, reduce import dependence, and position India more firmly within global value chains.

India's sporting journey is shaped by passion, legacy and ambition. The next chapter is to ensure that this cultural strength is matched by manufacturing capability. By aligning policy ambition with industrial strategy, India can move from being a nation that celebrates sport to one that designs, manufactures, and exports the equipment that powers sporting excellence worldwide. This report lays out a pragmatic and evidence-based pathway to realise that ambition.

Appendix

A1. Our Approach

Our Approach: Spanning across manufacturers, government bodies, taskforce and industry associations

Sports Goods Export Promotion Council

- Conducted **20+ in-depth, one-on-one stakeholder interviews** with manufacturers to understand **category specific manufacturing processes and challenges**
- **6 Round-table consultations, workshops** to understand **industry-wide concerns and suggestions**

- **10 On-ground factory visits across the value chain**—covering fabrication, metalworking, plastics, and carbon-fibre processes
- Visits spanned **both MSMEs and large-scale units,** to **validate real-world capabilities, constraints, and scalability potential**

SPORTSCOMM
Building Brands and Fans

Consultations with 50+ manufacturers, 9-10 factory visits, Several roundtables, conclaves and workshops

A2. List of HSN codes included as sports equipment in this study:

HSN Code	Category	World Exports, 2024 ($ bn)
950691	Fitness & athletics equipment	$14.1 bn
871200	Bicycles (non-motorised)	$8.8 bn
950699	Sports & outdoor equipment (NES)	$7.4 bn
950639	Golf equipment (excl. balls/clubs)	$2.7 bn
950629	Water sports equipment	$2.0 bn
950631	Golf clubs	$2.0 bn
950662	Inflatable balls	$1.8 bn
930400	Air guns & non-firearms	$1.6 bn
950790	Fishing tackle & nets	$1.5 bn
950710	Fishing rods	$1.1 bn
950730	Fishing reels	$1.0 bn
950611	Skis (winter sports)	$1.0 bn
950632	Golf balls	$0.9 bn
950659	Badminton & similar rackets	$0.85 bn
930330	Sporting shotguns (rifled)	$0.84 bn
950670	Ice & roller skates	$0.71 bn
930320	Sporting shotguns	$0.70 bn
950669	Hard balls (non-inflatable)	$0.66 bn
950420	Billiards & accessories	$0.47 bn
950612	Ski bindings	$0.42 bn
950619	Other ski equipment	$0.38 bn
950640	Table-tennis equipment	$0.36 bn
950661	Tennis balls	$0.33 bn
950720	Fish-hooks	$0.32 bn
950651	Tennis rackets	$0.22 bn
950810	Circuses & travelling shows	$0.11 bn
950621	Sailboards	$0.07
950890	Fairground Amusements	$0.001
Total		**$52 bn**

A3. List of HSN Codes included in the sports universe, must be considered as sports goods

Category	HSN Code	Particulars
Sports Equipment considered for this study	9506, 871200, 950420, 950720/90/30/10, 950810/90, 930320/30, 930400	Includes inflatable balls, rackets, bats, bicycles, fishing equipment, shotguns, casino & billiard equipment etc.
Other sports (Motorboats)	8903	Yachts for pleasure/sports, rowing boats, canoes etc.
Sports Apparel		
Garments	6114	Special sporting garments
Tracksuits	611211/12/19, 621132/33/39/42/43/49	Tracksuits for men/women of cotton, synthetic fibres, textile materials (includes knitted/crocheted & non-knitted/ crocheted)
Ski-suits	611220, 621120	Ski suits (includes knitted/crocheted & otherwise)
Swimwear	611231/39/41/49, 621111/12	Swimwear for men/women of synthetic fibre/textile materials (incl. knitted/ crocheted & otherwise)
Sports Footwear		
Footwear	640212/19, 640312/19, 640411	Ski footwear, sports footwear of rubber, plastic, leather etc.
Sports Accessories		
Gloves	420321	Specially designed gloves for use in sports
Others		
Turfs	570321/31	Turfs of man-made textile materials, nylon, polyamides etc.

Although certain products like sports t-shirts, jerseys etc. are missing (as they are part of broader categories that contain products whose primary use may be beyond sporting), this is a definitive list that must be brought under the ambit of sporting goods to facilitate holistic ecosystem development and present a larger opportunity.

A4. Exports for expanded ambit of sporting goods

Category	World Exports 2024 (in $ bn)	India Exports 2024 (in $ bn)
Sports Equipment considered for this study	52	0.27(0.5%)
Other sports (Motorboats)	22	0 (0%)
Sports Apparel	29	1.3 (4.5%)
Sports Footwear	26.5	0.4 (1.6%)
Sports Accessories	0.6	0.002 (0.4%)
Other (Turfs)	1.3	0.001 (0.1%)
Total	**132**	**2 (1.5%)**

If all the above categories are covered to expand the ambit of sporting goods, the sports goods exports globally are $132 bn with India's share as $2 bn (1.5%)

A5. List of raw materials that are challenges for the industry

HS Code	Raw Material	India Domestic Production	Duty
Inflatable Balls/Boxing			
59032090	PU/TPU Coated Fabrics & Microfibre	• Quality not on par with China, limited domestic capabilities • No Indian vendor on intl. approved supplier lists	20% ($0.46 per metre ADD)
39211900	EVA Foam (used for inflatable balls)	• Quality not on par with China, limited domestic capabilities	20%
59031090	Polyester	• Available domestically, but with high prices, limited suppliers	20%
4107	Leather	• Disorganised domestic supply chain v/s Pakistan	10%
Rackets, Hockey sticks, Protective gear			
6815/8108	Carbon fibre/Titanium	• No domestic manufacturing capabilities	5-10%
Athletic & Training Equipment/Table Tennis			
72201190	Stainless Steel	• Available domestically, but prices in India are higher v/s China • This due to QCO restrictions, better scale in China	15%
7209	Cold rolled Steel		15%
76042100	Aluminum		7.5%
39039090	Plastic		7.5%

A6. List of raw materials covered under DFIS (Duty Free Import Scheme)

S. No.	Goods
i	Nylon gut
ii	PU or nylon grip sheets for hockey sticks
iii	Butyl bladders for inflatable balls
iv	Willow clefts, ash wood, or beechwood
v	Cork bottoms
vi	PVC/synthetic rubber bladder for inflatable balls
vii	Manau cane
viii	Table tennis rubber
ix	Table tennis bat handles
x	Table tennis blade
xi	TPU/PU leather cloth or TPU/PU laminated with cotton (for inflatable balls)
xii	Extra Tec (cricket bat facing tape)
xiii	Resin hardener TTP-33S and release paper (for composite hockey sticks)
xiv	Table tennis glue
xv	Evazote foam (for protective equipment e.g., leg guards, thigh guards)
xvi	Plywood for carom board
xvii	PVC leather cloth (for inflatable balls or sports gloves)
xviii	Latex foam (for shin guards or goalkeeper gloves or other sports gloves)
xix	PEVA/EVA foil (for shin guards or sports gloves)
xx	Stitching thread (for inflatable balls or sports gloves)
xxi	Printing ink (for inflatable balls or sports gloves)
xxii	Pine wood
xxiii	Foam/EVA foam

A7. Details of tenders mandating foreign products for turfs & floorings

Snippets from Tenders released by the Indian Govt – 2022-2026

as a Joint Venture. The country of origin of should be Amercia/Europe/ Australia origins only. Documentation proving

3.2.3. The offered product/ brand should be of American/ European/ Australian origin.

86	Turf flooring	Deco Turf USA (ITF Approved)/Conica(ITF Approved)/ PFS Poland(ITF Approved)// Plexipave(ITF Approved)/ California USA(ITF Approved)

IAAF) approved Synthetic Athletics Track FULL PUR system with full EPDM (without re-cycled rubber) original equipment manufacturer from European/ American/ Australian region only

38. The proposed product/brand should be of American/Australian/European/Turkey/Germany Origin only. Authorised OEM Certificate to be submitted from the original company. The same will be checked by this unit during TEC.

A8. Assessment of capabilities (by state)

Note: The state-wide analysis has been presented across multiple tables solely for formatting and readability purposes in the report appendix. Together, these tables form one integrated state-level assessment of capabilities. While the analysis identifies states that may be particularly well suited for cluster development based on current capabilities, this should not be interpreted as excluding other states. Any state may be considered, especially where there is a policy objective to promote local sports manufacturing.

Table 1: Gujarat, Andhra Pradesh, Tamil Nadu

Parameter	Gujarat	Andhra Pradesh	Tamil Nadu
State policy favourability	**Gujarat Sports Policy 2022-27 -** sports goods mfg. as key priority Commitment to set up dedicated mfg. cluster	**AP Sports Policy 2024-29 -** mentions Sports Economic Zones for local sports equipment & apparel production	**TN Sports Policy 2024-25 –** no explicit mention for sports goods mfg. but provision to facilities and differently-abled athletes
Land & cluster readiness	**Vibrant Gujarat** cluster proposed for sports goods/ apparel	**9 CFCs, 211 parks** with ready land (Industrial Development Policy 2024-29)	Extensive **industrial estates (SIDCO/SIPCOT)** statewide
Logistics infrastructure	4 major ports (**Mundra, Pipavav, Dahej, Hazira)** Topped LEADS* Index 2022	3 industrial corridors 5 ports, 7 airports Vishakhapatnam-Chennai Industrial Corridor (VCIC)	**3 major ports** (Chennai, Kamarajar, and Tuticorin) INR 1.2L Crore expansion underway
Sports ecosystem & event-driven tailwinds	**CWG 2030** (Ahmedabad) Khel Mahakumbh New NM Stadium (infrastructure)	**Olympic-level Sports City** (Amaravati) planned National Games 2030 target	INR 545 crore sports infra spending (last 3-4 years) **₹261 Cr Sports City** (Chennai); WTA/ITF tennis tournaments
Skilled labour & allied industry base	Allied clusters (foundry, plastic mfg., bearing)	Key similar clusters available (auto, electronics, textiles)	Auto-component, leather and textile MSMEs

**LEADS - Logistics Ease Across Different States ranking is a GoI assessment done by DPIIT that compares states and UTs on logistics performance and business environment on logistics.*

Table 2: Maharashtra, Odisha, Haryana, Karnataka

Parameter	Maharashtra	Odisha	Haryana	Karnataka
State policy favourability	Industrial policy favours mfg. projects/ cluster development Sports Policy targets infra and athlete development	₹2,500+ crore invested in sports projects in 2020-23	Athletes' promotion focus Make in Haryana draft 2025: 31 model townships/ clusters	Limited sports mfg. policy Garment and technology hub focus
Land & cluster readiness	Multiple MIDC estates: Mumbai, Pune, Nagpur Mega Leather & Footwear cluster	Port-based industrial regions (Dhamra, Gopalpur, etc.) with textile parks	143 mini-industrial parks under PADMA scheme	Textiles & apparel clusters (Mysuru, Hubballi, Ballari)
Logistics infrastructure	JNPT/ Nava Sheva (Mumbai) - principal gateway	Paradip Port + 14 non-major ports notified	Land-locked; roads to western ports	New Mangalore Port (NMP) + 10 non-major ports
Sports ecosystem & event-driven tailwinds	Strong sporting culture (IPL, ISL, Pro Kabaddi) Khelo India facilities	Hosted major events (FIH Men World Cups 2018, 2023; FIFA U17 Women's 2022) Birsa Munda Hockey Stadium (world's largest seated arena)	Sports Mahakumbh Mission Olympics 2036 - expanding high-performance infra	New infra - India's 2nd largest cricket stadium (Anekal) 60-acre sports city (Devanahalli)
Skilled labour & allied industry base	Textiles, apparel, leather, footwear mega clusters	Mfg. ~40% of state GSVA Textile & apparel priority sector	Approved clusters: textile, apparel, foundry, plastics	Ready-made garments hub (>5L workers); strong base in leather, footwear

Table 3: Punjab and UP (existing clusters)

Parameter	Punjab	Uttar Pradesh
State policy favourability	Punjab Industrial and Business Development policy 2022 (IBDP-2022) aims at **15 industrial parks,** rural clusters, MSME support **Sports Policy 2023** although doesn't mention sports equipment procurement/manufacturing, it pushes for **infra and athlete pathways and CSR funds** to promote sports	**Industrial Policy 2022** offers capital subsidy/SGST reimbursement and explicitly corridor-linked facilitation **UP Sports Policy 2023** promotes sports infra and athlete pathways **Footwear, Leather and Non-leather Policy 2025** focuses on cluster-based development and CoEs

Parameter	Punjab	Uttar Pradesh
Land & cluster readiness	**Legacy cluster already present,** offers large sports goods hubs, however, **expansion land is tight due to land unavailability challenges**	**Existing sports cluster in Meerut** but large and saturated. Expansion is tight However, **Industrial Investment & Employment Promotion Policy 2022** commits land-bank creation, private industrial parks, and corridor-linked clusters
Logistics infrastructure	**Lack of seaports,** but several ICDs exist (e.g. CONCOR, Ludhiana-Sahnewal); covers road and rail links to Mundra/JNPT ports	**Multi-modal logistics hub under NICDIT** is progressing in Greater Noida to act as a dry-port and upcoming **Jewar airport** to offer air logistics
Sports ecosystem & event-driven tailwinds	**Strong hockey, cricket culture** (Mohali, Patiala) and ongoing state government plans to promote other sports including water sports	Hosted Khelo India University Games (2022 edition); Hosted several IPL matches
Skilled labour & allied industry base	**Deep MSME skill pool** for balls, protective gear, and strong adjacencies with textiles, bicycles, composites, stitching etc.	**Leather/Footwear allied clusters** in-state (Agra/Kanpur/Unnao), and Noida for apparel Meerut's depth in inflatable balls, boxing gear, and cricket equipment offers transferable skills for other segments

A9. Methodology to estimate cumulative competitiveness gap and bridge fiscal requirement (2027-31)

We have outlined the following estimates for 2027-31:

- Projected export trajectory (USD million) from base year (2024) to 2036 for sport equipment and horizon
- Cumulative competitiveness gap (₹ crore) defined as the cost disability vs. peers applied on projected exports net of any offsets (existing schemes like RoDTEP and DD)
- Residual gap (₹ crore) which is the remaining cumulative gap once structural reforms and existing schemes are implemented, and which must be bridged through the proposed reforms and the proposed SGMI scheme

Step 1: Deriving sports equipment export projections (2027-31) and key targets (2031, 2036)

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	CAGR
Global Exports (USD billion)	51	52	54	55	57	58	60	61	63	65	67	68	70	72	
India															
Sports equipment ($M)		275	365	483	641	850	1126	1493	1980	2624	3479	4613	6115	8143	33%
Apparel ($M)		1324	1589	1907	2288	2745	3295	3953	4744	5693	6832	8198	9837	11805	20%
Footwear ($M)		425	510	612	734	881	1058	1269	1523	1827	2193	2632	3158	3789	20%
Others ($M)		2	3	4	4	5	6	7	9	10	12	15	18	21	20%
Total export opportunity ($M)		**2,026**	**2,466**	**3,005**	**3,667**	**4,481**	**5,484**	**6,723**	**8,255**	**10,155**	**12,516**	**15,457**	**19,128**	**23,759**	23%
India share of global exports		**0.5%**	**0.7%**	**0.9%**	**1.1%**	**1.5%**	**1.9%**	**2.4%**	**3.1%**	**4.0%**	**5.2%**	**6.7%**	**8.7%**	**11.3%**	

Fig: India sports equipment and other categories' export projections (2024-2036)

- Take a base year (2024) export value for each sports segments captured in horizons 1, 2, and 3 based on the capabilities vs. export potential matrix assessment (see 'Where to Play' chapter), and assign growth rates to each individual sport segment captured within these horizons
- This compounded annual growth rate is assigned based on stakeholder consultations, global growth rate projections from market studies and taking India's current capabilities
- The projected sports equipment exports in 2031 are estimated at $ 2,000 Mn (₹16,431 crore, using INR 83 = USD 1 assumed exchange rate, as of August 2024, rounded for calculation simplicity)
- The same approach was applied to each year from 2027 to 2031 to obtain a time series of projected exports in ₹ crore

Step 2: Cost disability structure

Particulars	India	China	Pakistan	Delta v/s China	Remarks
Raw materials	**67**	**54.5**	**57**	**12**	
PU/TPU	34	24.5	25.5	10	• PU/TPU: ~30% disability, driven by 20% customs duty + $0.46/m anti-dumping duty; Pakistan largely imports raw materials duty free
Rubber /Bladder	15	15	15.5	0	• Rubber/Bladders sourced domestically at competitive prices in India. Pakistan imports the same from China, Thailand etc.
Other (Foam, Polyester etc.)	18	15	16	3	• High import duties of 20% on polyester, limited domestic suppliers. Foam must be imported due to lack of quality domestic availability
Labour	**23**	**29**	**23**	**(6)**	• China's wages 2-2.25x higher than India's; productivity is 80-85% higher
Logistics	**3**	**1.5**	**2**	**1.5**	• India's inland logistics costs are 2-2.5x China's due to distance from ports. Pakistan's dry port in Sialkot helps reduce costs
Power	**1**	**1**	**1.5**	**0**	• Similar power costs to China, but Pakistan's costs are higher
Taxes	**1.25**	**1**	**1.5**	**0.25**	• India & Pakistan's tax structure higher than China's
Financing Cost	**1.5**	**0.88**	**2.2**	**0.7**	• China lends at 3-4%, India's rate higher at 6% (after 3% subvention), Pakistan's averages at 9% (after 3% export subvention)
Machinery Cost	**2**	**1.8**	**2**	**0.2**	• Surcharges, freight and insurance costs increase landed price
Other	**1**	**0.7**	**1**	**0.3**	• Includes royalties, administration costs etc.
Overall cost	**100**	**90**	**90**	10%	
Scale disability				4-6%	
Total disability				14-16%	

- At sport segment-level, the cost disability vs. Asian peers (e.g. China, Pakistan) was estimated and validated on the basis of stakeholder consultations and secondary research, wherever available (see example table below for inflatable balls segment)
- This was obtained for key categories like inflatables, athletics, and boxing, and then aggregated using simple average, due to lack of clean HS-based weights (at a 6-digit level HS Codes for specific sports segments are not available)
- This yielded an **overall baseline cost disability of ~15%** (avg. of 14-16% from the above table) for India vs. peers

Step 3: Calculating cumulative competitiveness gap (2027-31)

- Within the overall 15% cost disability, existing schemes (Duty Drawback and RoDTEP) were estimated to offset 4% of this structural disability
- Therefore, the net competitiveness gap to be bridged = 15% - 4% = 11%
- This delta was found annually and aggregated over 2027-31 to give us the cumulative competitiveness gap, estimated at ~₹ 7,300 crore (see table below for calculation)

Disability bridge calculation			2025	2026	2027	2028	2029	2030	2031	4% Rotdep+DD 15% Cost Disability
Annual Indian exports ₹ crore			3026	4012	5319	7051	9348	12393	16431	
% covered through cost disability			454	602	798	1058	1402	1859	2465	
% covered by Rotdep + Duty Drawback			18	24	32	42	56	74	99	
Delta			436	578	766	1015	1346	1785	2366	
Total bridge required									**7,278.03**	~7,300

Step 4: Calculating the residual gap needing fiscal support

- In Step 2, we were able to find from stakeholder consultations the % contribution of RM and Machinery-related cost disabilities to the overall disability

	RM	MC
Inflatables	80%	1%
Boxing	70%	0%
Athletics	78%	3%
Avg.	**76%**	**1%**

When average across key sports categories (as mentioned in step 2), analysis indicates ~77% of this ₹7,300 crore competitiveness is attributable to raw materials and machinery (see table below)

RM = Raw material-related cost disabilities, MC = Machinery-related cost disabilities

***Table:** % contribution of factor costs on overall cost disability, by sport-segment*

- These are components that we expect to largely be addressed throughs structural reforms (duty rationalisation, relieving machinery import duties and bulk-buy facilitation etc.)
- The remaining **23% of the gap** serves as residual gap i.e. ₹1,700 crore, which cannot be eliminated fully through policy alone, and therefore, needs to be bridged through government fiscal support

	% share	₹ crore
Total competitiveness gap		7,300
% covered by eliminating QCOs, duty rationalization of RMs	76%	5,548
% through machinery easing	1%	73
Total covered by above actions	**77%**	**5,621**
Residual gap requiring fiscal support	**23%**	**1,679**
		~1700

A10. Relative impact of reforms by manufacturing sub-group

The impact on sub-groups based on the above recommendations is as follows:

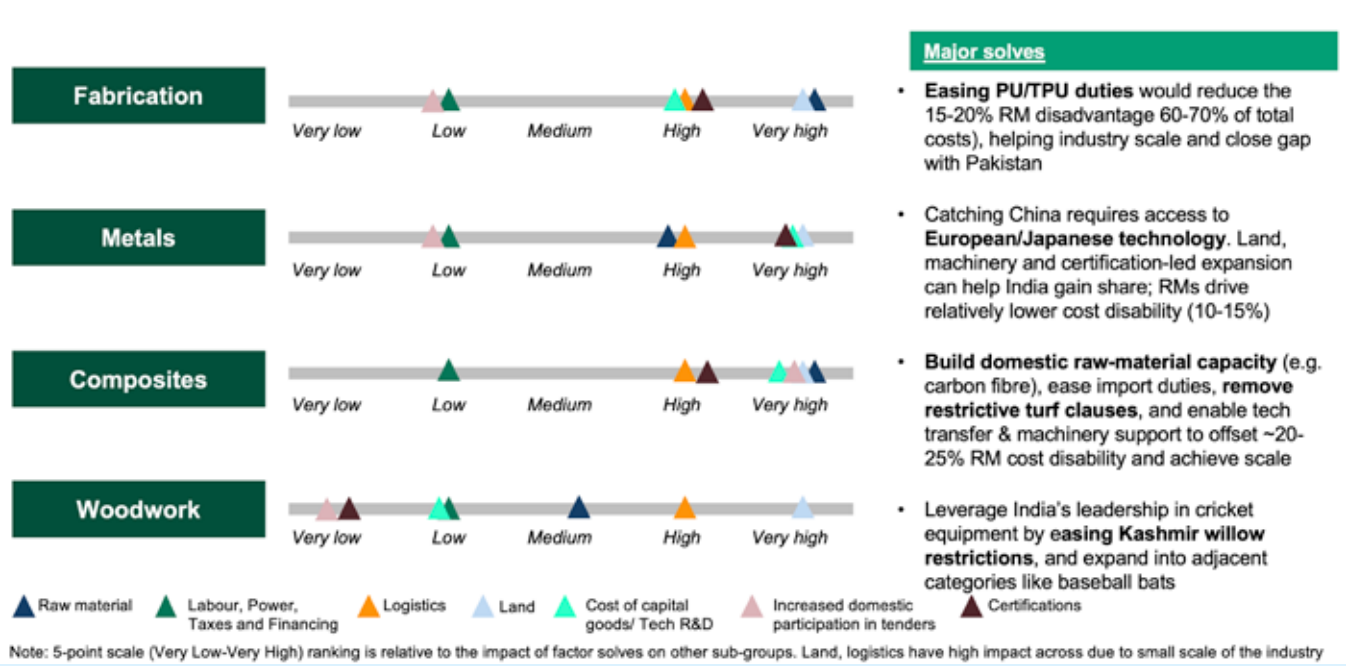


Figure 47: Impact of supply-side reforms on sub-groups

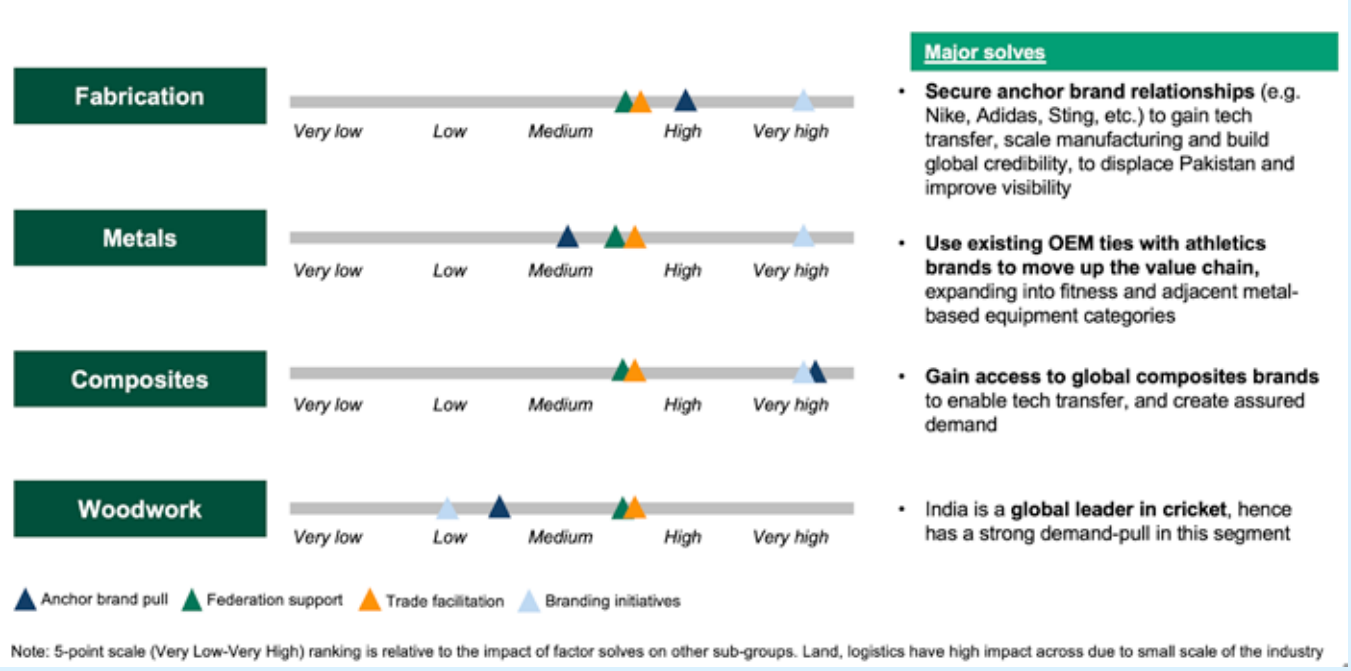


Figure 48: Impact of demand-side reforms on sub-groups

Group 1: Fabrication (Lamination, bonding and sewing)

This group is most sensitive to raw material costs and access, since polymers and synthetics form a key share of the cost stack. Duty and process reforms to reduce RM cost burden can materially improve export pricing and help MSMEs invest in better tooling and compliance systems. On the demand front, long-term OEM partnerships create more predictable demand, helping India compete at global stage. Branding initiatives and visibility at buyer events also have high impact in this group, given existing legacy of reputed but small manufacturers.

Group 2: Metals (Metal fabrication, CNC Machining and forging)

The competitiveness challenge for group 2 is less about raw material costs (which drive a relatively lower 10-15% disadvantage) and more about access to advanced machinery, technical expertise, and quality certification systems. Catching up with China requires access to European and Japanese technology, which means easing restrictions on machinery imports, enabling faster technology transfer pathways, and supporting capital expenditure for precision equipment. Certification-led expansion is essential, as buyers in this category demand strict adherence to dimensional tolerances, material specifications, and safety standards. On the demand side, the impact is more moderate compared to fabrication. Anchor brand pull and federation support matter, but this group benefits more from leveraging existing OEM relationships with athletics brands to move up the value chain into higher margin products.

Group 3: Composites (Polymers & Rubber Compounding)

This group faces the steepest competitiveness challenge because it requires access to advanced materials like carbon fiber, fiberglass, epoxy resins, and specialised polymers, most of which India currently does not manufacture and imports at high cost. Ensuring no duties on imports of these raw materials in the short term, and building domestic capacity in the long term, particularly for carbon fiber and composites nodes, are the highest impact supply-side intervention. This would offset 20 to 25% of the raw material cost disability and enable Indian manufacturers to compete in premium product segments where performance characteristics are non-negotiable.

Eliminating restrictive turf clauses that hinder domestic production are also high-impact reforms. Technology transfer support is also important because composites manufacturing requires specialised process know-how in resin formulation, curing cycles, and structural integrity testing that is often lacking. On the demand side, building access to global composites brands through joint ventures or licensing agreements ensures guaranteed demand and technical expertise. Anchor brands pull and federation support have medium to high impact, as federation-approved equipment lists facilitate entry into professional markets and procurement at global sporting events. Trade facilitation aids by facilitating sample approvals and reducing lead times for prototyping cycles, often important significant in this category like in protective equipment, where product development is iterative and performance driven. While brand India initiatives are important, composites buyers prioritise technical capability and certification compliance.

Group 4: Woodwork

Compared to other segments, India already has a stronger demand pull in cricket linked categories, which reduces the relative importance of demand-side solves. The priority is to make scaling easier and more efficient. Input related interventions should be focused and targeted, such as easing access to Kashmir willow wood streams where relevant and enabling diversification into adjacent wooden sports categories like baseball bats to broaden the export base.

A11. List of Industries Consulted

S. No.	Company Name	Location (City, State)
1	Alfa Hockey	Jalandhar, Punjab
2	AR Sports Equipment	Ahmedabad, Gujarat
3	Belco Sports	Jalandhar, Punjab
4	Bhalla International (Vinex)	Meerut, Uttar Pradesh
5	Cosco (India) Limited	Delhi, Delhi
6	Desan International (Rido Sports)	Noida, Uttar Pradesh
7	K.L. Mahajan and Sons	Meerut, Uttar Pradesh
8	Krishna Sports Industries	Jalandhar, Punjab
9	Natspo (National Sports / Cougar)	Meerut, Uttar Pradesh
10	Nelco Sport	Meerut, Uttar Pradesh
11	Nivia (Freewill Sports)	Jalandhar, Punjab
12	Rattan Brothers	Jalandhar, Punjab
13	Reds Impex	Jalandhar, Punjab
14	Sanspareils Greenlands (SG)	Meerut, Uttar Pradesh
15	Savi International	Jalandhar, Punjab
16	Shrey Sports	Jalandhar, Punjab
17	Soccer International Pvt Ltd	Jalandhar, Punjab
18	Stag International	Meerut, Uttar Pradesh
19	Tee Ventures (Plus91)	Ahmedabad, Gujarat
20	Universal Sports Industries	Jalandhar, Punjab

References

1. ITC Trade Map
2. Exim Bank Reports
3. Publications from bodies including Federation of the European Sporting Goods Industry, World Footwear
4. Sports Goods Manufacturers and Exporters Association
5. Other press publications and websites including Times of India, Tofler, local Punjab news coverage
6. Ministry of Youth Affairs and Sports
7. International Olympic Committee, Commonwealth Sport, CDES (Centre de Droit et d'Economie du Sport)
8. Annual Survey of Industries 2022-23
9. Websites like Wage Indicator, Simpliance
10. Indian Trade Portal
11. International Labour Organisation
12. Publications including newspapers like The Dawn, Tribune (Pakistan Editions), Vietnam/India/China Briefing, local Pakistani coverage
13. PwC Tax Summaries
14. Punjab State Power Corporation Limited, UP Power Corporation Limited
15. World Bank
16. CNBC, local Indian and Pakistani publications on interest rates
17. Asian Development Bank
18. KPMG 'Pedaling India's Growth – Cycling into the future' report, UNIDO – Technical report: The Indian bicycle sector' reports
19. Invest Punjab
20. UK Government website, UK Global Database
21. British Business Bank
22. International federation websites including International Boxing Association, World Athletics, Union Cycliste Internationale, Badminton World Federation, International Hockey Federation, World Baseball Softball Confederation
23. Press releases and articles from Times of India, PIB, Vice
24. State Industrial Policy reports, state government websites and reports, Deccan Chronicle, Times of India
25. Teijin Corporate press release, NIH reports
26. Olympics website, ASOIF paper, The Hindu, Times of India
27. Case study Odisha – Times of India, HT, Outlook India, Tata Naval Hockey HPC website
28. Pacta report, Corporate Annual Reports, Sports and Society Accelerator
29. Invest India

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