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Transforming India's Sports Goods Industry: An Analysis of Management Practices, Policy Frameworks, Industrial Competitiveness, Developmental Challenges and Emerging Priorities

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Abstract

The sports goods business in India is an important part of the manufacturing sector contributing toward industrial growth, employment generation, entrepreneurship and export promotion. Major manufacturing clusters, particularly Meerut and Jalandhar, have developed major capacities for production of sports equipment and accessories. However, the industry is challenged by old management techniques, technological limits, poor infrastructure, budgetary constraints, quality standardisation and increasing worldwide rivalry. The article attempts to look at the changing scene of India's sports goods industry by focusing on managerial practices, governmental frameworks, institutional support, industrial competitiveness and developmental concerns. The paper is descriptive and analytical, and it relies on secondary data from government reports, industry publications, policy documents and relevant research literature. It critically analyses the ramifications of Make in India, Atmanirbhar Bharat, MSME development initiatives, industrial cluster programs and export promotion policies for the strengthening of industry. Special emphasis is given to production efficiency, supply chain management, technological innovation, skill development, marketing strategies and worldwide competitiveness. The study emphasises growing priorities such as digital transformation, sustainable manufacturing, product diversification, quality enhancement and integration with global markets. It highlights the need for comprehensive policy interventions, institutional improvements and modern management methods to convert the sports goods industry into a globally competitive manufacturing sector.

Keywords: *Sports Goods Industry, Industrial Management, MSMEs Policy Frameworks, Industrial Competitiveness, Sustainable Development, Viksit Bharat @2047*

Introduction

The sports goods business is a significant part of the Indian manufacturing economy contributing to industrial production, employment generation, entrepreneurship, international trade and regional economic growth. The industry includes cricket equipment, footballs, hockey sticks, badminton racquets, athletic equipment, boxing accessories, fitness equipment and other sporting products. Its development is intimately connected with the traditional manufacturing skills, micro, small and medium companies (MSMEs), industrial clusters and export-oriented production. Historically the Indian sports goods sector grew around Jalandhar in Punjab and Meerut in Uttar Pradesh which were key manufacturing centers. After independence the industry grew substantially, mainly via the creation of small industrial units, family firms and specialised production networks. The clustering of industrial operations within these clusters helped to create entrepreneurial capacities, skilled employment and export markets (Jain, 2021). The worldwide sports goods market encompassing apparel, footwear, equipment and accessories was estimated to be around US$700 billion in 2024 and is projected to cross US$1 trillion by 2036 (NITI Aayog, 2026). In this larger market, sporting equipment provides a great opportunity for manufacturers. But India's contribution in global sports equipment exports is around 0.5 per cent, a pointer to the problems in technological modernisation, industrial competitiveness, production efficiency and global market integration. Sports manufacturing is gradually being identified by the Government of India as a potential engine for economic growth and employment. Make in India, Atmanirbhar Bharat, MSME development and the National Sports Policy 2025 initiatives have

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created an ideal environment for improving the sports ecosystem. Furthermore, the Union Budget 2026–27 established a ₹500 crore scheme for encouraging sports goods manufacturing, underlining the growing policy importance of the industry (Government of India, 2026). In this context, the present paper investigates the changing structure of India's sports goods industry, management practices, policy framework, institutional support, industrial competitiveness, technological innovation and sustainable development. Special emphasis has been laid on identification of developmental issues and new priorities for the transformation of the industry into a globally competitive manufacturing sector in consonance with the vision of Viksit Bharat @2047.

2. Brief Review of Literature

The existing literature on India's sports goods industry has concentrated on the issues of industrial growth, manufacturing clusters, entrepreneurial capacities, technological limits, employment generation and international competitiveness. Jain (2021) focused on the manufacturing of sporting equipment in India, particularly in the industrial clusters of Jalandhar and Meerut. The study covered company level growth, employment condition, production organization, export related problems and institutional restraints. It underscored the need to study the structural and operational issues faced by small manufacturing businesses. Kumar, Suhaib and Asjad (2021) in their paper A Framework for Transforming Indian Sports Goods Manufacturing Industry studied the technological and management problems faced by the Meerut sports goods manufacturing cluster. Researchers used the Decision-Making Trial and Evaluation Laboratory (DEMATEL) approach to investigate the relationships among significant transformational problems and highlighted the significance of technological modernisation, intelligent manufacturing and enhanced productivity. Kalia (2022) has studied the Jalandhar sports goods cluster as an example of adaptive growth of MSMEs. The study highlighted the significance of traditional skills, small-scale entrepreneurship and export-oriented production, but also identified insufficient branding, inadequate industrial collaboration and weak institutional backing as key developmental limitations. A further research, Innovation Systems, Value Chains and Industrial Clusters in Developing Economies: Case of Jalandhar's Sports Goods Industry (2024), explored the interlinkages between industrial clusters, innovation systems and value chains. A study of 45 enterprises highlighted shortcomings in institutional links, technological capabilities and coordination with financing and training institutions which hindered industrial upgrading and global competitiveness. NITI Aayog (2026) in its paper Realising the Export Potential of India's Sports Equipment Manufacturing Sector gave a complete review of India's manufacturing capabilities, foreign market prospects, export restrictions and policy priorities. The report underlined the need to upgrade industrial clusters, improve competitiveness of raw materials, get quality certification, upgrade technology and integrate with the global market to increase India's standing in the international arena. The literature as a whole point out to the strong entrepreneurial and manufacturing potential of India's sports goods industry, but calls for comprehensive management reforms, technological modernisation, institutional coordination and export-oriented policy interventions.

3. Research Gaps

There has been an increase in study on the sports goods business, but numerous major gaps remain. First, in the literature, there is a tendency to focus on local manufacturing clusters, particularly in the case of Meerut and Jalandhar, rather than to establish an integrated national view on industrial management, regulatory frameworks and competitiveness. Second, the joint effect of production management, financial practices, supply-chain organization, technological innovation and institutional support on industrial success receives less consideration. Third, there is a need for more examination of the interaction between government policies and the implementation of policies at the corporate level. Fourth, a need for more focus on digital transformation, artificial intelligence, product diversity, sustainable production and new global value chains.

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Last but not the least, there is a need for rigorous appraisal of long-term contribution of the sector in employment generation, inclusive industrialisation, export expansion and *Viksit Bharat* @2047. The present research tries to solve these deficiencies by an integrated study of industrial management, MSME growth, technical innovation, policy assistance and sustained industrial competitiveness.

4. Objectives of the Study

The major objective of the paper is to examine the transformation of India's sports goods industry in the context of industrial management, policy frameworks, competitiveness and sustainable economic development. The specific objectives are:

1. To examine the growth, structure and development of India's sports goods industry, with particular reference to major manufacturing clusters.
2. To assess industrial management practices, MSME development, production efficiency, supply chains and marketing strategies.
3. To analyse government policies, institutional support mechanisms and their implications for industrial development.
4. To evaluate industrial competitiveness, technological innovation, export performance and integration into global value chains.
5. To identify developmental challenges and emerging priorities for strengthening the sports goods industry towards Viksit Bharat @2047.

5. Research Methodology

The research is descriptive, analytical and exploratory and is based mainly on secondary data. The information used comes from published research papers, government policy documents, NITI Ayog reports, Ministry of MSME publications, Sports Goods Export Promotion Council reports, Ministry of Commerce and Industry data, and other related industry studies. The study covers the historical evolution, industrial structure, managerial practices, policy environment, technological capabilities, competitiveness and sustainability of the sports products industry in India. Special emphasis is made to manufacturing clusters of Jalandhar and Meerut. The paper proposes comparative analysis, trend assessment, policy review and thematic analysis to study industry performance and identify important development concerns. Descriptive statistics, percentage changes and compound annual growth rates may be used where consistent time series data are available. The study also adapts a SWOT framework to analyse industry strengths, weaknesses, opportunities and threats. Since this is a secondary-data study, the paper does not claim to directly quantify enterprise-level managerial performance. Its results are based on documented evidence, comparative interpretation and policy analysis.

6. Sports Goods Industry in India: Structure, Growth and Development

India’s sports goods business is a unique segment of the manufacturing industry based on traditional craftsmanship, labour intensive production, small scale industrial units and export orientation. The sector involves manufacturing of cricket bats and balls, footballs, hockey sticks, badminton equipment, boxing accessories, protective equipment, athletic products and fitness-related goods. Historically Jalandhar and Meerut have been the centers of the country’s sports goods manufacturing activity. Jalandhar has built substantial skills in the manufacture of inflatable balls, cricket equipment and protective accessories, whereas Meerut has developed production capabilities in cricket equipment, boxing items, sports goods and other sporting accessories. The geographical concentration of manufacturing units facilitates industrial specialisation, subcontracting agreements, shared labour markets and entrepreneurial development. However, productivity and industrial competitiveness are often constrained by fragmentation of production, poor

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technological infrastructure and limited financial resources (Jain, 2021; Kumar et al., 2021). Small and medium firms account for approximately 90% of India's sports equipment output (NITI Aayog, 2026). The paper also highlights enormous prospects for export-led industrial growth, in particular through cluster development, technology upgrading and integration into global manufacturing networks.

Table 1. Selected Indicators of India's Sports Equipment Manufacturing Industry

Indicator	Status / Estimate
Major manufacturing clusters	Jalandhar and Meerut
Global sports goods market, 2024	Approximately US$700 billion
Global sports equipment exports, 2024	Approximately US$52 billion
India's sports equipment exports, 2024	Approximately US$275 million
India's share of global equipment exports	Approximately 0.5%
Share of production undertaken by small and micro enterprises	Nearly 90%
Potential sports equipment exports by 2036	Approximately US$8.1 billion
Targeted global equipment export share by 2036	Approximately 11%
Potential additional employment by 2036	Approximately 54 lakh jobs
Sports goods manufacturing initiative, Union Budget 2026–27	₹500 crore

Source: NITI Aayog (2026), *Realising the Export Potential of India's Sports Equipment Manufacturing Sector*; Government of India (2026), Union Budget 2026–27 announcements.

7. Industrial Management Practices and Organisational Development

Industrial management is very important in determining productivity, production quality, cost efficiency, work-force performance and industrial competitiveness. The management techniques in the sports goods manufacturing sector in India are diverse ranging from traditional household enterprises to small production units and somewhat organised export-oriented firms. Traditional firms are often family owned and operated, use manual production methods, depend on informal employment arrangements and established commercial networks. These techniques help to promote flexibility in entrepreneurship and specific handicraft, but may also inhibit technological adoption, quality assurance, financial planning and organisational growth. Kumar et al. (2021) stressed the need for integrated transformational solutions for boosting productivity and changing the old manufacturing processes in the Meerut sports goods cluster. Likewise, Jain (2021) identified a linkage between firm-level operational structures, industrial growth and employment conditions. The modern industrial management in this sector should be based on the production planning, inventory control, financial management, quality assurance, skill development and professional marketing methods. Standardised production processes, computerised inventory systems, demand forecasting, enhanced procurement methods and structured distribution networks could increase operational efficiency and lower manufacturing costs. Human resource management also needs attention, especially in terms of skills development, occupational safety, adequate working conditions and productivity of the employees. Technical training, entrepreneurship development programs and institutional partnerships for strengthening management competencies might help in transition from conventional production systems to contemporary industrial companies (Kumar et al., 2021; NITI Aayog, 2026).

8. MSMEs and Entrepreneurship Development

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The micro, small and medium enterprises form the organisational backbone of India's sports goods industry. These firms contribute to local employment, entrepreneurship, industrialisation of the region, specialisation of products, export production. MSMEs have some advantages including more flexible production arrangements, specialised workmanship and adaptability to client requirements and minimal beginning capital requirements. However, these firms often have challenges in accessing institutional capital, sophisticated machinery, new technologies, international marketing network and quality certification facilities. The Micro and Small Enterprises–Cluster Development Program (MSE-CDP) of the Ministry of MSME is a policy tool for boosting competitiveness through common facility centers, industrial infrastructure, technological development, testing facilities and institutional cooperation. Such facilities are especially important for sporting goods makers, as individual businesses may not have the resources to build sophisticated testing labs, product design facilities and current production equipment. Strengthening MSMEs through cluster-based growth can promote productivity and industrial competitiveness through enhanced loan availability, talent upgrading, technology collaboration and market access (Ministry of MSME, n.d.; NITI Aayog, 2026).

9. Policy Frameworks and Institutional Governance

Government policies and institutional support mechanisms are key to encouraging industrial modernisation, entrepreneurship, export diversification and sustainable manufacturing. The Make in India project provides a broad policy framework to promote domestic manufacturing, investment and industrial development. Similarly, Atmanirbhar Bharat focuses on indigenous production capacities and technological self-reliance and increased competitiveness. The MSME development framework offers access to finance, entrepreneurial encouragement, cluster growth, technology modernisation and market opportunities. The National Sports Policy 2025 aims at strengthening India's sporting ecosystem through increased participation, sporting excellence, institutional development and economic prospects. Although not a manufacturing policy per se, its implementation can stimulate demand in athletic goods through the increase of sporting activities and infrastructure. It replaced the National Sports Policy 2001 and presented a wider framework for the growth of the sports sector in India (Ministry of Youth Affairs and Sports, 2025). Recently, a major development has been announcing ₹ 500 crore for promoting sports goods industry in the Union Budget 2026-27. The effort is a reflection of the rising acknowledgement of sports manufacturing as an instrument of employment generation, technological innovation and industrial development. The Sports Goods Export Promotion Council (SGEPC), created in 1958, also performs an institutional role in promoting exports of sports goods, enabling participation in foreign markets and supporting the interests of the industry. However, better institutional governance will require better co-ordination among the central and state governments, industry organisations, financial institutions, technical bodies and manufacturing businesses. NITI Aayog (2026) suggests modernisation of current clusters, development of new manufacturing clusters, strengthening of certification facilities and enhancement of links with global markets. These strategies are particularly useful to deal with institutional fragmentation and enhance policy implementation.

ODOP Programme and Its Impact on the Sports Goods Industry

The Government of Uttar Pradesh launched One District One Product (ODOP) Program in January 2018 as an important policy initiative to promote district specific traditional industries, strengthen Micro, Small and Medium Enterprises (MSMEs), generate employment, promote entrepreneurship and enhance industrial competitiveness. The concept is based on a cluster approach to development that identifies items connected with the traditional skills, local resources and industrial capacities of distinct districts. Its main aims include improvement in production efficiency, technological modernisation, skill development, access to institutional

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funding, infrastructure development, product diversification, branding, marketing and export promotion. The program also aims to encourage balanced regional development by bolstering local enterprises and generating sustainable livelihood possibilities (Government of Uttar Pradesh, 2024; Invest UP, 2026). Considering its historical importance as one of the major centers in India for manufacturing of sports equipment and accessories, Meerut district has been identified under the ODOP framework for manufacturing of sports products. Meerut has built a diverse manufacturing base of sports goods, including cricket bats, cricket balls, protective gear, hockey sticks, badminton rackets, shuttlecocks, boxing equipment, athletic products, fitness accessories and other indoor and outdoor sports goods. The industry is distinguished by a blend of traditional handicraft, specific manufacturing abilities, small scale production units, supplementary enterprises and established distribution networks. Moreover, its geographical proximity to Delhi and the National Capital Region (Government of Uttar Pradesh, ODOP Portal, 2026) also brings additional advantages of transportation, logistics, marketing and access to domestic and international markets.

The ODOP program provides an institutional framework for promotion of sports goods manufacturing through financial aid, technological upgradation, skill development, common infrastructure facilities and market development efforts. The ODOP Margin Money Scheme is designed to provide institutional finance to eligible firms and the Skill Development and Toolkit Distribution Scheme is for improving the technical skills and productivity of craftsmen and workers. The Common Facility Center (CFC) Scheme also envisages provisions for common infrastructure such testing laboratories, design development centers, technical research facilities, common production units, raw material banks, packaging facilities and marketing centers. These kinds of facilities are especially vital for small makers of sports goods who may not have the financial capacity to set up contemporary production and quality-testing infrastructure on their own (Government of Uttar Pradesh, 2026). MSME Technology Development Center (Process and Product Development Centre), Meerut also serves an essential complementary role in enhancing the technological skills of sports goods industry. The center provides support for product creation, quality improvement, standardisation, technical training, research and development and diversification of sports equipment. Its institutional actions help to the improvement of industrial processes and to the compliance with national and international quality norms. The synergistic combination of ODOP assistance with such technological institutions can help in enhancing the competitiveness of local enterprises and motivate them to gradually shift from traditional manufacturing practices to modern industrial management (MSME Technology Development Center, Meerut, 2021–22).

The ODOP initiative has contributed to building a more enabling policy environment for sports goods production in Uttar Pradesh, especially in the industrial cluster of Meerut. The programme's recognition of sports goods as a key industry for the district has led to greater institutional focus on firm development, market access, infrastructure, technological upgradation and employment generation. The industry provides livelihood prospects for skilled craftsmen and workers, women, micro and small businesses, traders and ancillary service providers. The sports goods industry in Meerut provides about ₹1,500 crore to the state economy yearly and accounts for over 40 percent of the country's total sports goods exports (Ministry of Skill Development and Entrepreneurship, 2025). The government further said that the cluster in all supports over three lakh artisans, women workers and small entrepreneurs. These numbers reflect the economic significance of the manufacturing cluster but should not be read as the employment or output created primarily by the ODOP program. The initiative has also provided chances for MSMEs to enhance and build their ability through financial support, capacity building and market development. Small manufacturers will have access to better modern technologies, production procedures, product standards and business development help. The ODOP framework also supports the involvement of traditional craftspeople and local entrepreneurs in

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organised manufacturing and marketing processes that can lessen reliance on middlemen and increase earning possibilities. Its cluster-based model also encourages collaboration between producers, suppliers, technical institutes and government bodies. One of the key achievements of the ODOP program is its focus on promotion of locally created products in national and international markets. The sports goods business of Meerut can be made more visible by marketing support, trade fairs, buyer-seller meetings, exhibitions, product promotion and digital marketing. Such measures are particularly important for small firms with the capacity to produce, but which cannot create their own brands and reach international consumers. The Uttar Pradesh Government claims that the exports in the state have climbed from about ₹88,967 crore in 2017-18 to ₹1.71 lakh crore in 2023-24, with ODOP items contributing significantly. But this is the overall export performance of the state, and cannot be attributed just to ODOP interventions or sports goods manufacture (Government of Uttar Pradesh, ODOP Achievements). Under the Uttar Pradesh Export Promotion Policy 2025-30, there are more prospects for ODOP firms with support for export promotion, international exhibits, digital marketing, product certification and logistics. Such legislative actions can help the sports goods makers to expand their access to markets, diversify export destinations and strengthen their competitiveness. However, in an effort to sustain export growth, there is a need to pay more attention to product innovation, international certification, branding, quality assurance and efficient supply-chain management (Invest UP, 2026).

Despite these institutional measures, there are a number of structural and management problems that the sports goods business in Uttar Pradesh still faces. These are some of the reasons that include fragmented production systems, poor access to affordable finance, technological obsolescence of smaller units, poor investment in research and development, high fluctuation in raw material costs, weak independent branding and competition from more technologically advanced international manufacturers. Many small firms find it difficult to acquire contemporary machinery, improve product design, fulfil international quality requirements and access to worldwide distribution network. Technological modernisation, more industry-institution collaboration, enhanced skill development, sustainable manufacturing practices, product diversification, digital marketing and international brand development are the key requirements to be combined for the future development of the sector. It is necessary to pay more attention to the development of high-performance sports equipment, to increase sports research and testing facilities, to improve the productivity of the workforce and to encourage women-led firms. Another policy trend for modernising district-specific industrial clusters is the launch of ODOP 2.0 in December 2025 with focus on technology integration, better packaging, quality compliance and expanded market access. Similarly, the Sport Edge Meerut program announced in November 2025 is aimed at strengthening skills, entrepreneurship, product creation and industrial competitiveness within the sports manufacturing ecosystem. These activities can complement ODOP and enable Meerut to become a globally competitive manufacturing hub for sports goods (Invest UP, 2026; Ministry of Skill Development and Entrepreneurship, 2025). The One District One Product Program is a major institutional intervention for improving the sports goods industry in Uttar Pradesh, particularly in Meerut. The initiative has generated chances for enhancement of industrial productivity, entrepreneurship, employment and competitiveness through financial aid, technological support, skill development, infrastructure improvement, market promotion and export facilitation. However, the direct causal effect of ODOP itself is less apparent from the available information than the economic importance of the sports products cluster. Further examination with enterprise-level data on production, employment, investment, productivity and exports is needed to establish the measurable consequences of the program. Strengthening technological innovation, quality certification, sustainable production and global branding will be key to make sports goods industry in UP a competitive manufacturing hub, contributing to Atmanirbhar Bharat, Make in India and the larger vision of *Viksit Bharat* @2047."

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10. Industrial Competitiveness and Export Performance

Industrial competitiveness is the competitive prices, quality efficiency, continual innovation and active participation in domestic and international markets of manufacturing firms. India has strong manufacturing strengths in cricket equipment, inflatable balls, boxing accessories and some sporting products. However, its participation is limited in the worldwide sports equipment industry. As per NITI Aayog (2026), Indian sports equipment producers are at a cost disadvantage of 15–20 per cent compared to some of the main foreign players. The main factors include relatively high input prices, customs fees on specialised products, shipping costs, certification costs, and limited technological capabilities. The survey also highlighted the weak interaction with global sports brands and international procurement networks as the main barriers influencing the increase of exports. Hence, concerted measures on technological upgrading, raw-material supply chains, quality certification, product diversification, export marketing and worldwide branding are needed to enhance industrial competitiveness. "Development of globally recognised Indian sports equipment brands can enhance value addition domestically and cut down excessive dependence on contract manufacturing. Besides, Indian producers might explore new potential through integration with international value chains, sports federations, professional sporting organisations and worldwide distribution networks. NITI Aayog (2026) forecasts that India's sports equipment exports might be increased to over US$8.1 billion by 2036 with suitable industry and regulatory reforms. But this objective will be realised only with significant improvements in manufacturing capacity, institutional coordination, quality standards, and international competitiveness.

11. Technological Innovation and Digital Transformation

Technological innovation is an important factor of the productivity of the manufacturing sector, quality of products, industrial competitiveness and sustainable development. There are a number of classic sports goods manufacturing units, which still depend primarily on manual production method, old equipment and labour demanding technology. Craftsmanship has its value but technological upgrading is becoming increasingly vital for meeting international quality standards, reducing production costs and creating creative products. Technological solutions may include computer assisted design and manufacture, sophisticated material processing, automated cutting systems, digital production planning, precision testing equipment and improved quality-control systems. New technologies such as artificial intelligence, robots, additive manufacturing and digital supply-chain management may offer further options, especially for larger firms and shared cluster facilities. But high-end technology must be applied in accordance with the scale of the firm, its financial resources, the skills of the personnel and the product requirements. Kumar et al. (2021) proposed an integrated framework for the transformation of traditional sports goods manufacturing to intelligent manufacturing system. The findings imply that technological change necessitates a coordinated upgrading of management techniques, institutional capacities, and industrial infrastructure. Smaller enterprises might benefit from technological diffusion through shared testing facilities, product development centers, design laboratories and industry-academic cooperation. Such efforts may improve product quality, increase productivity, decrease material wastage and expand India's participation in higher-value manufacturing operations (Kumar et al., 2021; NITI Aayog, 2026).

12. Sustainable Development and Environmental Management

The goal of sustainable industrial development is to reconcile economic expansion with environmental protection, efficient use of resources and social well-being. The sports goods manufacturing business uses a variety of materials, including wood, leather, rubber, plastics, synthetic fibres, metals and chemical based components. Depending on the manufacturing process and material choice, production operations may generate solid waste, chemical residues, pollutants and other environmental problems. Sustainable

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manufacturing strategies can help conserve resources, decrease waste from production, enhance energy efficiency, and meet environmental regulations. Key targets include the use of energy-efficient machinery, the reduction of material losses, the improvement of waste segregation, the promotion of recycling and the sourcing of ecologically preferable raw materials, if technically viable. Cleaner production practices and better occupational safety also matter for the wellbeing of industrial workers. The MSE-CDP framework acknowledges the significance of developing green and sustainable manufacturing technologies through common industrial infrastructure and enterprise assistance. From a more general development viewpoint, sustainable sports goods production can contribute to the goals of SDG 8 (Decent Work and Economic Growth), SDG 9 (Industry, Innovation and Infrastructure) and SDG 12 (Responsible Consumption and Production). Environmental management, responsible labour practices and technical modernisation can increase long-term competitiveness and entry into environmentally aware international markets (Ministry of MSME, n.d.; United Nations, 2015).

13. Developmental Challenges

The potential of the sports products business in India is high yet there are also structural, managerial and institutional constraints.

- Many manufacturing companies are still using old production technologies that impede productivity and the creation of innovative products.
- Lack of cheap finance and investment capital limits chances for industrial growth and technology updating.
- The prevalence of small and family-run manufacturing companies could limit economies of scale and the capacity to fulfil big orders.
- Inadequate testing facilities, transport arrangements and specialised industrial infrastructure add to the cost of production.
- Many manufacturers have limited direct connection to international buyers and established international sports brands.
- Rapid technological growth demands continual training, specialist technical education and increased managerial competencies.
- The absence of coordination among firms, industry associations, research institutes and government agencies may limit industrial upgrading.
- The resource-intensive production processes, waste management and the transition toward cleaner technologies entail additional needs for investment and institutional assistance.

These problems are congruent with the results of Jain (2021), Kumar et al. (2021), Kalia (2022) and NITI Aayog (2026) which jointly underline the need for technical modernisation, cluster strengthening and institutional coordination.

14. Emerging Priorities towards Viksit Bharat @2047

Vision of Viksit Bharat @2047, gives a long-term development perspective for transforming sports goods industry of India into a technologically advanced, globally competitive and sustainable manufacturing sector. The key developing priorities include industrial modernisation, strengthening of MSME skills, technological innovation, export diversification, better institutional governance and sustainable manufacturing.

- Modernisation of conventional manufacturing clusters by introducing new machinery, shared infrastructure, efficient production methods and improvement of quality assurance.
- Access to institutional funding, enterprise development, technology training and organised marketing networks.

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- The technological development: promoting R&D, product innovation, digital manufacturing, use of artificial intelligence and advanced testing facilities.
- Expanding export markets, building internationally renowned Indian brands, upgrading certification processes and strengthening involvement in global value chains.
- Promotion of renewable energy, resource-efficient manufacturing, recycling, occupational safety and ecologically responsible industrial practices.
- Enhance cooperation among government agencies, industry associations, universities, technical institutions and international manufacturing groups.
- Developing more opportunities for skilled workers, women entrepreneurs, young professionals and traditional manufacturing towns.
- Development of sophisticated sports goods manufacturing clusters beyond existing industrial centers for balanced regional development.

NITI Aayog (2026) has identified the sports equipment business as a key prospect for export-led industrialisation and employment growth. The strategy of cluster development, technology up-gradation and integration with global markets outlined by it lays forth a framework to integrate immediate industrial changes with the larger developmental goals of *Viksit Bharat* @2047.

15. Policy Recommendations

India's sports products industry needs integrated development plan. First, government agencies should focus on the technological upgradation of current manufacturing clusters, particularly Meerut and Jalandhar, and then assist in establishing new industrial centers. The setting up of joint testing laboratories, design centers, skill-development institutions and shared manufacturing facilities might decrease the operating difficulties of MSMEs. Strengthening institutional finance, technical subsidies, entrepreneurial programs and export facilitation can boost industry productivity and market competitiveness. Greater focus should be focused on research and development, quality certification, product innovation and internationally known branding. Academic institutions, government agencies and industry associations should work together to provide specialist training programs and technical solutions. Industrial development strategies should also incorporate sustainable manufacturing practices, resource efficiency and responsible labour management. The major policy aim should be to transition from fragmented, largely traditional manufacturing to an integrated, innovation-driven and globally competitive sports goods manufacturing ecosystem.

16. Conclusion

The sports goods sector of India has a huge potential to contribute to industrial growth, entrepreneurship development, employment generation, export promotion and regional economic transformation. Meerut and Jalandhar are old manufacturing clusters with a solid base of specialised skills, entrepreneurial capabilities and established production networks. But technological limitations, budgetary constraints, fragmented production structures, weak institutional coordination and international rivalry continue to hamper industrial progress. The report emphasises the necessity of contemporary industrial management, MSME strengthening, technical innovation, institutional support and sustainable manufacturing for enhancing industrial competitiveness. Recent legislative efforts like the National Sports legislative 2025, industrial cluster development programs and the sports goods manufacturing plan outlined in Union Budget 2026–27 provide prospects for accelerated industrial transformation. Digitalisation, product diversification, increased quality standards, worldwide branding, green production and integration into the global market are rising priorities. These aims would also require better coordination between government institutions, manufacturers, industrial associations, financial organisations and research institutions. An integrated development strategy combining

the traditional manufacturing strengths with new technology, professional management, institutional changes and sustainable production techniques is needed for the transformation of India's sports goods industry. Such a strategy can help to India's long-term goals of industrial self-reliance, inclusive economic growth, employment generation and international competitiveness under the vision of *Viksit Bharat* @2047.

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