

India Footwear Industry: A Global Manufacturing Powerhouse Rooted in Sustainability and 'BHA' Fit.

A Science-First Transformation of Indian Footwear

As the global footwear industry undergoes one of its most significant transformations in decades, India is emerging as the epicenter of a new science-first manufacturing era. No longer defined merely by scale or cost competitiveness, the Indian footwear ecosystem is being reshaped by advanced materials, biomechanics-led design, sustainability imperatives, and an indigenous national sizing standard known as 'Bha' (Bharat). By 2030, non-leather footwear encompassing sneakers, athleisure, sports, and performance categories is projected to account for 70-75 percent of total market volume, up from nearly 25 percent a decade ago. This transition reflects a fundamental rethinking of how footwear is designed, manufactured, fitted, and consumed.

From Leather Legacy to Performance and Lifestyle Footwear

The rapid expansion of non-leather footwear is driven by rising health and fitness awareness, growing demand for lightweight and

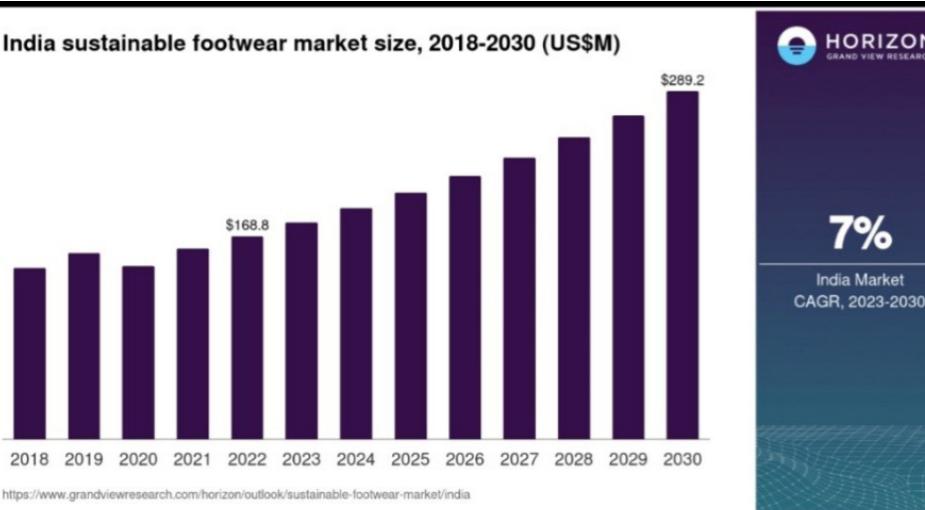
versatile products, the expansion of sports and everyday comfort categories, and continuous innovation in polymers, foams, and engineered textiles. India's ability to scale these technologies at competitive costs positions it as a strategic hub for both domestic consumption and global supply chains. What was once a predominantly export-oriented leather industry is now evolving into a technology-driven, consumer-centric footwear ecosystem aligned with contemporary lifestyle expectations.



Sustainability as a Design and Manufacturing Imperative

Sustainability has shifted from a consumer preference to a non-negotiable design and manufacturing mandate. The industry is increasingly adopting chrome-free tanning processes, plant-based bio-PU materials, sugarcane-based EVA foams, and uppers produced from recycled PET yarns. Alongside material innovation, consumers are demanding ethical sourcing, traceability, and lower carbon footprints without compromising comfort or durability.

India sustainable footwear market size, 2018-2030 (US\$M)



India's agri-based resources, cost-efficient manufacturing infrastructure, and strengthening research and development capabilities enable sustainable footwear production at scale.

Biomechanics, Health & Anatomy Redefining Footwear Purpose

The future success of footwear is no longer dictated by fashion cycles alone but by health, comfort, and long-duration wear performance. By embracing Biomechanics, Health and Anatomy (BHA) as a core design philosophy, the Indian footwear industry

is shifting from corrective footwear to preventive everyday wellness solutions and from style-first approaches to science-led comfort and performance. Biomechanical alignment, improved shock absorption, effective load distribution, gait-responsive constructions, and enhanced stability are now integral to footwear design, addressing lifestyle challenges such as fatigue, joint stress, and lower-back discomfort.

Bridging the Fit Gap Through the 'BHA' Sizing Standard

For decades, Indian consumers have relied on UK, EU, and US sizing systems that often fail to accommodate Indian foot morphology, which typically includes wider forefoot dimensions, higher insteps, and different heel-to-ball proportions.

To resolve this long-standing issue, the Government of India, through the CSIR-Central Leather Research Institute, developed the 'Bha' (Bharat) Sizing System.

Built on a nationwide 3D foot-scanning survey, the system consolidates fourteen global sizing variations into eight India-specific size codes and offers region- and gender-specific fit intelligence. This initiative enhances comfort, reduces e-commerce return rates, and strengthens consumer trust and brand loyalty.

Manufacturing-Led Growth and Employment Expansion

The footwear sector is positioned to become one of India's most significant engines of manufacturing-led economic growth. The market is projected to reach USD 90 billion by 2030, representing nearly an eightfold expansion. This growth is expected to generate millions of jobs across manufacturing, components, logistics, research, and retail, with strong expansion in Tier-2 and Tier-3 cities supporting inclusive development. Global brands such as Nike, Adidas, and Crocs are expanding production in India, with Tamil Nadu alone expected to generate approximately 135,000 jobs during 2025-26.



Through leadership in materials research, biomechanics, sustainability, and the Bha sizing system, along with the integration of artificial intelligence for trend forecasting, rapid prototyping, and mass customization, FDDI is supporting industry competitiveness. Its industry-academia collaborations are also contributing to policy formulation, standardization, and long-term sectoral growth.

Conclusion: Born in India, Built for the World

By 2030, India will no longer be perceived merely as a global manufacturing base but as a global footwear innovation and brand leader. Through the convergence of sustainability, biomechanics, artificial intelligence, and indigenous fit intelligence, India is shaping a new footwear identity that is rooted in science, designed for health, and engineered for the world.



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