

Sustainable Growth Strategies for Bangladesh's Leather Industry: Policy Recommendations and Future Perspectives

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Abstract

This study offers an in-depth analysis of the challenges and opportunities confronting the leather industry in Bangladesh, a sector poised for significant growth. Through extensive literature review and qualitative research, the paper identifies key areas such as policy framework strengthening, enhancing financial accessibility for SMEs, promoting technological innovation, and ensuring environmental compliance as instrumental for the industry's sustainable development. Furthermore, the study underscores the need for human capital development, infrastructure enhancement, and strengthened industry associations to bolster the sector's competitiveness on the global stage. Recognizing the industry's potential contribution to Bangladesh's economic development, this research proposes comprehensive policy recommendations to aid stakeholders in realizing this potential. Limitations of the study and avenues for future research are also discussed, inviting further academic and practical engagement in this vital sector.

Keywords: Bangladesh leather industry, Environmental compliance, Human capital development, Sustainable development, Technological innovation

1. Introduction

Bangladesh's leather industry, with its immense promise in growth, employment prospects, and fiscal contribution, has steadily risen to prominence. Recognized as a potent conduit for the nation's economic propulsion, the leather sector remains an invaluable foreign exchange asset (Hossain et al., 2016; Moktadir, Rahman, et al., 2018). Yet, its journey is riddled with obstacles—environmental conundrums, technological bottlenecks, and the absence of cohesive policies remain persistent barriers (M. H. Islam et al., 2020).

Recent literature has delved into the sector's strengths and frailties (Moktadir, Rahman, et al., 2018), scrutinized policy impacts (Dhar et al., 2022), and underscored the imperativeness of environmental stewardship (Islam et al., 2023). Nevertheless, a holistic examination, encompassing the interplay of challenges, latent opportunities, and transformative strategies, remains conspicuously absent. Further complicating this tapestry is the upheaval caused by the COVID-19 pandemic, which has ushered in unforeseen disruptions and demands an imperative reconfiguration of industry dynamics (M. R. Islam et al., 2020).

Addressing this discernible lacuna in research, our paper embarks on a holistic assessment of Bangladesh's leather sector. The central research questions this study aim to answer is: how can the leather industry of Bangladesh navigate its inherent challenges and harness emerging opportunities to propel its growth? The objectives of this study are manifold:

To analyze the industry's strengths, pitfalls, and prospective growth trajectories.

To comprehend the industry's significance within the macroeconomic canvas of Bangladesh.

To delineate actionable measures poised to elevate its global standing and competitiveness.

Our investigation initiates with a panorama of the Bangladeshi leather industry (Section 2), followed by a detailed account of the research methodology employed (Section 3). Subsequent sections delve into the industry's multifaceted challenges (Section 4) and the spectrum of growth avenues (Section 5). Strategic recommendations, entailing sustainable modalities, technology infusion, and human capital enrichment, unfold

in Section 6. Concluding reflections, encompassing pivotal takeaways, prescriptive advisories, and policy ramifications, are encapsulated in Section 7. The study culminates with a contemplation on its limitations, paving the way for prospective research trajectories in Section 8 and 9.

2. Overview of the Leather Industry in Bangladesh

2.1 History and Evolution

Bangladesh's leather industry, with roots entrenched in the pre-independence era, has evolved as a testament to the nation's resilience and entrepreneurial spirit (Moktadir, Rahman, et al., 2018). The post-independence phase, post-1971, saw the industry metamorphose from a primarily raw-hide and skin exporter to a formidable contender in the global leather goods market (Shahriar et al., 2021). Today, it stands as an economic linchpin, creating myriad employment avenues and bolstering the nation's foreign exchange reserves (M. H. Islam et al., 2020; Khan, 2014).

2.2 Dynamics of the Value Chain

Spanning a vast spectrum, Bangladesh's leather sector is orchestrated by a symphony of diverse stakeholders. Tanneries, manufacturers, and exporters form the core, complemented by ancillary support from chemical suppliers to logistics enablers (Moktadir, Rahman, et al., 2018). At the heart of the value chain lies the raw hide and skin procurement, which undergoes transformation in tanneries into myriad leather variants. This leather then becomes the canvas for manufacturers, birthing an array of products—from chic footwear to premium garments and accessories. While a significant share finds its way to global storefronts, a considerable portion satiates domestic demand (Shahriar et al., 2021).

2.3 Governmental and Associative Pillars

Guiding the industry's trajectory are the combined efforts of the Bangladeshi government and pivotal industry associations like the Bangladesh Tanners Association (BTA) and the Leather goods and Footwear Manufacturers and Exporters Association of Bangladesh (LFMEAB). Beyond mere policymaking, their roles extend to infrastructural fortification, export facilitation, and cultivating symbiotic relationships across the industry's echelons. Additionally, their stewardship ensures the industry's alignment with international benchmarks, while also championing financial accessibility for the burgeoning SME segment (Moktadir, Rahman, et al., 2018; Mollik, 2022).

3. Methodology

3.1 Introduction

The intricate dynamics of the leather industry in Bangladesh necessitate a comprehensive qualitative approach to uncover the nuances, challenges, and opportunities inherent to the sector. Qualitative research is instrumental in understanding underlying reasons, opinions, and motivations, providing insights into the problem (Creswell & Poth, 2016).

3.2 Research Design

This study is predicated on a twofold research design encompassing a literature review and an analysis of secondary data. Literature reviews furnish a synthesis of existing knowledge and can identify gaps or inconsistencies in a body of knowledge (Webster & Watson, 2002). Consequently, a thorough review was undertaken spanning academic articles, governmental documentation, industry reports, and international publications. The secondary data, providing quantitative underpinnings, was analyzed to contextualize and corroborate findings from the literature review.

3.3 Data Collection

To ensure the breadth and depth of sources, a rigorous data collection strategy was implemented. Databases such as Google Scholar, Scopus, and Web of Science were mined for pertinent literature (Papaioannou et al., 2016). Beyond academia, the ambit extended to industry fraternities, governmental portals, and international bodies like the World Bank, the United Nations, and the International Labour Organization. While the temporal scope remained broad, an emphasis was laid on contemporaneity and relevance.

3.4 Data Analysis

Embracing thematic analysis provided a structured means to distill salient themes from the amassed literature and data (Braun & Clarke, 2006). This technique unearthed prevailing patterns, challenges, opportunities, and industry trajectories. In navigating this analytical journey, it was paramount to remain attuned to Bangladesh's unique industry milieu and the myriad stakeholder viewpoints—spanning governmental agencies, industry

bodies, and labor unions. Such a holistic perspective aimed to enrich the comprehension of Bangladesh's leather sector dynamics, setting the stage for pragmatic and informed recommendations

4. Challenges Faced by the Leather Industry in Bangladesh

4.1 Environmental Issues

The leather industry in Bangladesh grapples with profound environmental issues, notably pollution and waste mismanagement. The tanning process, reliant on harmful chemicals, and the absence of adequate waste disposal facilities have exacerbated environmental concerns and posed tangible public health risks (Chowdhury et al., 2015; Islam et al., 2017; Moktadir, Ali, et al., 2018; Moktadir, Rahman, et al., 2018). While initiatives like the Savar Tannery Estate relocation project signify governmental intervention, they've been encumbered by infrastructural lags and rogue non-compliant tanneries (Gulfam-E-Jannat et al., 2023; Jiang et al., 2016).

4.2 Technological and Skill Gaps

Although Bangladesh's leather industry has seen expansion, it grapples with issues relating to modern technology adoption and a qualified workforce (Moktadir, Ali, et al., 2018). Numerous tanneries and producers in this sector still depend on archaic equipment and methodologies, resulting in compromised efficiency and product quality (Dixit et al., 2015; Shahriar et al., 2021). Such technological stagnation curtails the industry's potential to stand out in the international arena (Moktadir, Ali, et al., 2018).

In addition, there's a palpable deficit of adept labor and managerial insight within the Bangladeshi leather industry (Moktadir, Ali, et al., 2018). This dearth in expertise and management prowess further diminishes its competitive edge (Tumpa et al., 2019). While efforts like the Centre of Excellence for Leather Skill Bangladesh Limited (COEL) aim to bridge these expertise gaps, their influence remains minimal (Moktadir, Ali, et al., 2018).

4.3 Market Access and Competitiveness

International rivals, including nations like India, China, and Vietnam, intensify the competitive landscape (Rahman & Ogunleye, 2019). Ensuring product quality, aligning with global standards, and crafting potent marketing strategies become pivotal. Diversification, both in terms of export geographies and product spectrum, is essential to diminish dependence on conventional markets and low-profit commodities (Akter et al., 2018).

4.4 Regulatory and Policy Challenges

The Bangladesh leather industry, a significant contributor to the country's export earnings, often grapples with regulatory and policy challenges that have, at times, hampered its potential for growth. These challenges arise from inconsistency in policies and regulations (Khan, 2014). On one hand, there are policies meticulously designed to boost local production in the hopes of fortifying the domestic industry, creating jobs, and stimulating the local economy. Such initiatives encompass incentives like tax breaks or grants to domestic producers (Khan, 2014; Moktadir, Ali, et al., 2018). Conversely, there are other regulations which, although unintended, end up favouring imports. Such policies might involve reduced tariffs on imported goods or bureaucratic red tape that inadvertently makes importing easier than local production (Shahriar et al., 2021). This dichotomy creates a complex and often ambiguous business environment for industry players. Navigating this labyrinth of rules and regulations can deter potential investors and impact the industry's overall trajectory.

4.5 Supply Chain Inefficiencies

Supply chain disruptions, influenced by factors like raw material shortages and transportation bottlenecks, adversely impact production timelines and delivery commitments.

5. Opportunities and Strategies for the Leather Industry in Bangladesh

5.1 Infrastructure Development and Environmental Compliance

Modernizing infrastructure remains paramount, particularly the expeditious completion of the Central Effluent Treatment Plant (CETP) at the Savar Tannery Estate, ensuring sustainable strides in the leather industry of Bangladesh (M. H. Islam et al., 2020; Moktadir, Rahman, et al., 2018; Rouf et al., 2013). Beyond heightened competitiveness, such infrastructure enhancements will align the industry with global environmental benchmarks, magnetizing discerning buyers and conscious investors.

5.2 Human Capital Development and Skill Enhancement

Tackling the expertise deficiencies in the leather sector is vital for its sustained prosperity (Singh & Gundimeda, 2021). This can be realized through focused training initiatives and capability-enhancement programs (Jiang et al., 2016). Partnership among industry representatives, educational entities, and research bodies is equally pivotal (Moktadir, Rahman, et al., 2018; Wohlin et al., 2011). By bolstering the administrative capabilities of

industry staff and promoting an innovative ethos, the leather sector can position itself more robustly in the international arena (Pati et al., 2014).

5.3 Market Diversification and Value Addition

The leather sector in Bangladesh stands poised to capitalize on the escalating global appetite for leather goods by broadening its export horizons and honing in on products with a higher value-add (Leonidou, 2004). To realize this, the sector must channel investments into research, embrace cutting-edge technologies, and cultivate robust ties with international clientele (Moktadir, Ahmadi, et al., 2020). Furthermore, venturing into up-and-coming markets, such as those in Africa and Latin America, and deepening its footprint in unconventional areas like the automotive and aviation sectors can amplify its growth trajectory (Chokera & Mutambara, 2023).

5.4 Sustainable Practices and Green Initiatives

With sustainability at the forefront of global consumer demands, adopting eco-friendly practices can position the Bangladeshi leather industry as a progressive sector. Leveraging vegetable tanning, reducing water consumption, and recycling waste can not only minimize environmental footprints but can also attract a niche of eco-conscious buyers (Moktadir, Ali, et al., 2018).

5.5 Digital Transformation and E-commerce Penetration

The digitization wave offers a golden opportunity. By integrating digital tools, e-commerce platforms, and leveraging online marketing, the industry can tap into a global audience, enhancing its reach and visibility. Embracing e-commerce can also expedite direct-to-consumer strategies, fostering brand loyalty and enhancing profit margins.

6. Discussion

6.1 Realizing the Untapped Potential

The leather industry in Bangladesh stands at the precipice of monumental economic contributions, poised to be an engine of growth for the nation. Yet, the path to such fruition is laden with multifaceted challenges that need comprehensive interventions. The interplay between inherent potential and these hurdles necessitates a nuanced exploration to chart the industry's future trajectory.

6.2 Infrastructure: The Bedrock of Progress

Infrastructure development emerges as a cornerstone for the industry's resurgence. Vital projects, like the CETP and Savar Tannery Estate, transcend mere brick-and-mortar establishments; they epitomize the commitment to environmental standards and promise efficient production capabilities (Moktadir, Dwivedi, et al., 2020). The collaborative endeavors between governmental bodies and private stakeholders will be instrumental in ensuring the fruition of such initiatives, thereby setting the stage for global competitiveness.

6.3 Human Capital: The Catalyst for Change

An industry, regardless of its potential, is only as progressive as its human resources. Hence, the leather industry's global ambitions hinge upon its capacity to nurture and develop its workforce. Instituting comprehensive training programs, fostering industry-academia synergies, and embedding a culture of continuous learning can herald a renaissance in skills and innovation. Such human capital augmentation is not just about numbers but encompasses a paradigm shift in the quality and adaptability of the workforce. (Khan, 2014; Shahriar et al., 2021)

6.4 Market Dynamics: Diversification and Value Addition

In an ever-evolving global market, relying on traditional bastions of demand could be myopic. The leather industry's growth narrative, thus, must weave in diversification as its central theme. Venturing into untapped markets and innovating on product offerings can catalyze the transition from a volume-based model to a value-based paradigm (Hasan et al., 2021). Such a shift not only ensures robust revenue streams but also fortifies the industry against market volatilities.

In essence, the leather industry in Bangladesh stands at a crossroad. The direction it chooses will determine its stature on the global stage. With coordinated efforts across infrastructure, skills, and market strategies, the industry has the blueprint to craft a future replete with growth and accolades.

7. Conclusions and Recommendations

7.1 Conclusion

The leather industry in Bangladesh, despite its abundant potential, stands at a critical juncture. As our exploration

has unveiled, this industry's significance extends beyond its economic contributions, serving as a testament to the nation's capacity for innovation, adaptation, and global competitiveness. Yet, realizing this potential is not without its challenges.

From significant environmental issues borne from past practices to skill gaps that restrain the industry's quality and efficiency, Bangladesh's leather sector faces substantial hurdles. The dated technological infrastructure and the need for market diversification further underscore the challenges that need immediate attention. But these challenges, as daunting as they may seem, also offer pathways for growth and innovation. The relocation of tanneries, the emphasis on human capital development, and the potential for diversification into high-value products and new markets are transformative opportunities waiting to be harnessed.

Collaborative endeavours between governmental agencies, private stakeholders, academia, and international organizations can amplify the impact of these opportunities. By prioritizing infrastructure, continuously upskilling the workforce, and crafting strategic market interventions, Bangladesh's leather industry can not only navigate its current challenges but can also reshape its narrative — from an industry battling issues to one that is a beacon of sustainable growth and innovation.

In essence, while the road ahead is replete with challenges, the leather industry's resilience, combined with strategic interventions, can catalyse a bright and prosperous future for the sector, benefiting not just the industry stakeholders but also solidifying Bangladesh's position in the global leather market.

7.2 Recommendations

7.2.1 Strengthening Policy Framework and Implementation

A robust policy framework is essential for the growth of the leather industry. By focusing on infrastructure development, environmental compliance, and market diversification, the government can ensure sustainable progress. Integrating principles of the circular economy and sustainable manufacturing practices is paramount, as highlighted by Moktadir, Ahmadi, et al. (2020).

7.2.2 Enhancing Access to Finance for SMEs

Financial accessibility is crucial for SMEs to thrive. By collaborating with financial institutions, the government can develop tailored financial products and services. Credit guarantees, low-interest loans, and technical assistance are essential tools in this context. Furthermore, Ye and Kulathunga (2019) emphasize the significance of financial literacy in promoting sustainability among SMEs.

7.2.3 Promoting Innovation and Technology Adoption

With the global market constantly evolving, staying ahead requires embracing technological advancements and rigorous research and development (Moktadir, Rahman, et al., 2018). Efforts should focus on sustainable manufacturing practices, sustainable supply chain management, and fostering academia-industry collaborations as recognized by Barbolla and Corredera (2009).

7.2.4 Ensuring and Enhancing Environmental Compliance

The industry's sustainability is tightly linked with environmental stewardship. Adopting cleaner production technologies and minimizing environmental footprints is non-negotiable (Syed et al., 2010). Moreover, addressing occupational hazards and managing toxic threats are vital in this industry (Dixit et al., 2015; Rastogi et al., 2008). Collaborative efforts should also focus on valorizing waste, as suggested by (Solé et al., 2021).

7.2.5 Developing and Enhancing Human Capital

A skilled workforce is the backbone of the leather industry. Targeted training programs, and the establishment of centres of excellence are vital. Collaborative efforts between public and private sectors can ensure the workforce is adequately trained to meet industry demands (Moktadir, Dwivedi, et al., 2020; Moktadir, Rahman, et al., 2018)

7.2.6 Supporting Infrastructure Development

Infrastructure underpins industry growth. Investments in the Central Effluent Treatment Plant (CETP) and improved transportation networks are vital for enhancing industry efficiency and garnering international trust (Moktadir, Dwivedi, et al., 2020; Moktadir, Rahman, et al., 2018).

7.2.7 Fostering Industry Collaborations

The consolidation of industry associations and labor unions can provide a unified voice for the industry. By representing collective interests, protecting rights, and mitigating political interference, these bodies play a pivotal role in industry resilience.

8. Recommendations for Sustainability and Growth

Merging the above recommendations, the future of the leather industry can be envisioned with sustainability and growth at its core. A multi-faceted approach, incorporating the diverse inputs from stakeholders, including government bodies, private sector players, academia, and labor unions, can steer the industry towards a promising future.

9. Limitations of the Research

9.1 Scope and Focus

The primary focus of this research was the leather industry in Bangladesh. Consequently, the findings may not be directly applicable to leather industries in different socio-economic or geographical contexts.

9.2 Data Collection

Our research predominantly relied on secondary data and previous literature. While this provides a robust foundation, it does not necessarily capture the most recent developments or the nuances of first-hand experiences in the industry.

9.3 Subjectivity

Although efforts were made to ensure objective analysis, interpretations based on literature review inherently carry some degree of subjectivity, which might influence the research outcomes.

9.4 Sample Limitations

If primary data were involved, the sample might not have been exhaustive or entirely representative of the diverse stakeholders in the industry, potentially limiting the generalizability of the findings.

9.5 Temporal Constraints

The leather industry is continuously evolving. Hence, findings from this research might become less relevant as new technologies, regulations, and market dynamics emerge.

10. Further Research Areas

10.1 Comparative Analysis

Future research can involve a comparative study of the leather industries across various countries, shedding light on best practices and lessons to be learned.

10.2 Technological Advancements

With the rapid pace of technological evolution, there's a need for continuous research on the adoption and impact of new technologies in the leather industry.

10.3 Environmental Impact

Given the environmental concerns associated with the leather industry, in-depth studies on its ecological footprint, cleaner production methods, and sustainable waste management can provide actionable insights.

10.4 Workers' Well-being

While some studies have touched upon occupational hazards in the leather industry, there's a need for more comprehensive research focusing on the long-term health and well-being of the workers.

10.5 Supply Chain Dynamics

With global supply chains becoming more intricate, research focusing on the leather industry's supply chain can yield insights for efficiency, resilience, and sustainability.

10.6 Market Trends

As consumer behaviour changes, understanding market trends and preferences can guide the leather industry to better cater to future demands.

10.7 Regulatory Compliance

With international standards and regulations constantly evolving, research dedicated to understanding and assisting the industry in compliance can prove beneficial.

Informed consent

Obtained.

Ethics approval

The Publication Ethics Committee of the Canadian Center of Science and Education.

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Provenance and peer review

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Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Data sharing statement

No additional data are available.

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