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Leather Industry in Bangladesh

An Analysis of the Value Chain

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Highlights

- Institutional policies must be in place to impede illegal cross-border trade of raw hides and skins.
- Infrastructural development must maintain sustainable practices and environmental preservation in tanneries.
- The procurement of raw hides and skins needs to be systemised to mitigate the involvement of middlemen and avoid creating a shortage of raw materials in the local market.
- Animal slaughter should be regulated and institutionalised to uphold improved hygiene standards and enhance the quality of raw hides and skins.
- Government institutions must implement transparent criteria for selecting, grading, and pricing raw materials, which can help minimise statistical errors and standardise pricing mechanisms.
- The leather industry's workforce lacks sufficient skills and requires extensive training to enhance their ability to produce high-quality leather and leather products, meeting international standards.

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Introduction

The leather industry is an important contributor to Bangladesh's export revenue. As such, this industry is vital in emerging as a promising sector, especially in export diversification and creating a more integrated industrial value chain. The industry benefits significantly from backward linkages in the value chain, consequently increasing its external competitiveness. In addition, there is substantial potential for producing higher value-added goods within the sector, which can be pivotal in attracting premium export prices. The leather industry provides Bangladesh with an optimistic avenue for greater participation within the global value chain (GVC), owing to its labour-intensive nature and horizontal linkages with the RMG industry (Razzaque, Uddin, & Rahman, 2018).

Input-output structure

The input and output structure of the value chain delineates the interconnections between the inception of a product or service and its final consumption or end use. The main branches of the input-output structure include research and development (R&D), design, production, distribution, marketing, and sales. However, these fragments may differ owing to the type of industry. Nevertheless, to comprehend the complexity of the value chain, it is first imperative to observe and underscore the fundamental operations of the industry as part of the GVC and highlight the ever-changing structure of the firms representing each fragment of the value chain (Fernandez-Stark & Gereffi, 2019).

The components of the GVC for the leather industry in Bangladesh involve domestic suppliers of raw materials, tanneries, local manufacturers, and foreign buyers in the international market. In the leather sector of Bangladesh, the raw materials used involve raw hides and skins (RHS). RHS is mainly acquired from the country's livestock population, and Bangladesh's leather industry relies less on the international market for raw materials. Farmers trade large cattle, buffaloes and other small ruminants, such as goats and sheep, with merchants in local markets, and from these markets, butchers acquire meat for production purposes (Strasser, 2015). Afterwards, the RHS is obtained by collectors on a small scale. These collectors buy RHS in small amounts, mostly from makeshift slaughter facilities, and deliver them directly to wholesalers or suppliers, who distribute the RHS in large quantities to wholesale markets. The RHS is preserved with salt until tanneries and

commercial leather exporters purchase them later from these wholesale markets. A direct chain between wholesalers and tanneries lies where the RHS is traded between the two cohorts. However, the wholesalers may also act as middlemen between suppliers and tanneries to earn a certain amount as a commission. As per the Bangladesh Hide and Skin Merchants Association (BHSMA), the wholesalers retain a dominant position in the domestic market in delivering RHS to tanneries and commercial exporters. It is important to highlight that all middlemen, including collectors, suppliers, and wholesalers, only cause increments in cost but do not participate in value-added activities (Strasser, 2015).

On the other hand, tanneries process leather in three different stages, which involve tanning, re-tanning or drying or pre-finishing, and finishing (Strasser, 2015). These stages produce three intermediate products: wet blue, crust leather and finished leather. Wet blue is essentially leather tanned with chromium, giving the leather a shade of blue. It is often used to produce clothes, light bags, and shoes owing to its soft texture and flexibility. Further value is added to wet blue to produce crust leather. Crust leather is a semi-finished intermediary product processed according to customers' needs. Finally, finished leather is made from a particular treatment process requiring adequate technology and high-skilled labour. Finished leather is used as a raw material to produce finished leather products (Strasser, 2015).

After the additional value is added through the tanning process, the supply chain branches into two other stages (Figure 1). The crust and the finished leather are exported to foreign buyers in the first stage. These products are also often exported to international buyers through buying houses. Consequentially, the foreign buyers process the leather in the later stage of the value chain by manufacturing leather goods such as belts, purses, and handbags. In the second stage, the tanneries deliver finished leather to the domestic market, where local goods and footwear producers manufacture the final leather products (Strasser, 2015). These goods are later distributed and sold in the domestic market or exported to the international market. This suggests that the leather sector in Bangladesh holds strong backward participation or foreign value added in exports (FVA) in the value chain through its exports of intermediary products, which are later manufactured into finished goods by the importing country. At the same time, the leather industry also has a foothold in the forward linkage or domestic value added in exports (DVX) in the value chain by retaining domestic value added to the export products of other leather-importing countries.

Extending more value-added products in the leather industry is significant for long-term development. Creating an enabling environment requires more research, technology, and vertical and horizontal linkages. At the same time, it is important to have adequate government agencies to provide technical assistance to enhance competitiveness, especially for small manufacturing firms. Additionally, skills development is necessary to create a highly skilled labour force, improve effective productivity, and manufacture better quality products that cater to international standards. Firms also require substantial financial assistance to purchase machinery and market information to produce high-value-added leather goods (Strasser, 2015).

Government Structure

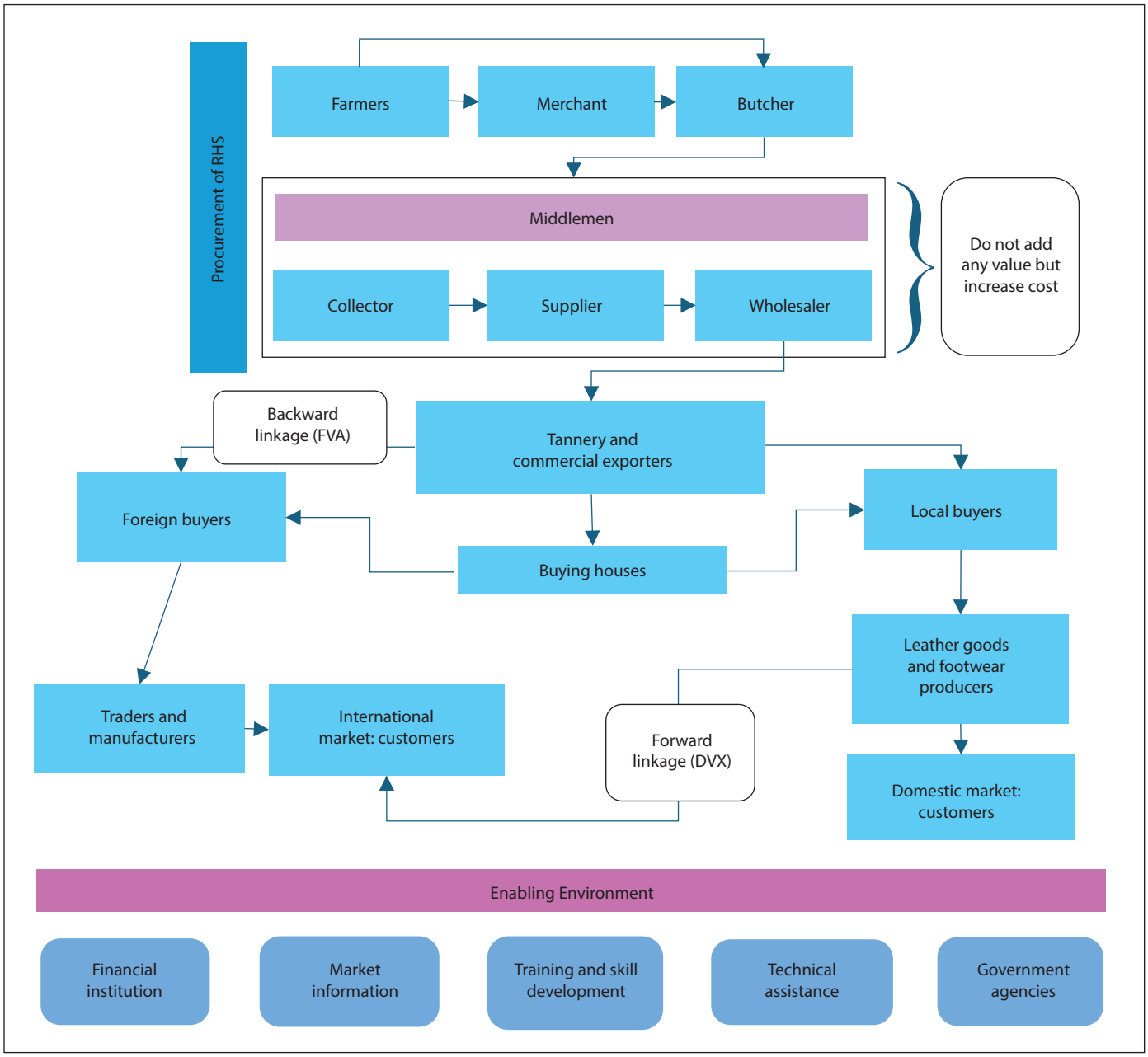
The governance structure of the value chain facilitates the analysis of the power dynamics involved within a chain. In other words, governance defines the authority responsible for coordinating and controlling the entire value chain. Fundamentally, the governance structure can be disaggregated as either being 'producer-driven' or 'buyer-driven.' Producer-driven chains concern industrial enterprises with a cardinal role in overseeing the production system, including forward and backward linkages. Such characteristics are common in capital- and technology-intensive industries such as automobiles, computers, aircraft, and electronic machinery (Gereffi, 1994).

Concurrently, buyer-driven chains are associated with industries where the central role is dominated by colossal retailers, globally recognised merchandisers and trading corporations who regionalise the production linkage in various export-oriented developing countries. Such industries are generally labour-intensive, producing consumer goods, including garments, footwear, toys, consumer electronics, home products, and various hand-crafted items. Additionally, industries that manufacture finished products under the original equipment manufacturers (OEM) arrangement are also dominated by buyers as the design and specifications are provided by the dominant buyers and internationally recognised firms (Gereffi, 1994).

However, the governance structure can be disaggregated further into five categories. These include market, modular, relational, captive, and hierarchy (Fernandez-Stark & Gereffi, 2019; Gereff, Humphrey, & Sturgeon, 2005). These five categories are based on three fundamental principles concerning the complexity of transactions, the ability to codify transactions, and the capabilities of the supply base (Gereff, Humphrey, & Sturgeon, 2005).

The governance structure of the value chain of Bangladesh's leather industry is hierarchical due to the complex nature of transactions, the difficulty in standardising transactions, and the limited capabilities of the supply base (Gereff, Humphrey, & Sturgeon, 2005). In Bangladesh's leather industry, there is a lack of co-ordination and a need for lead firms to manage resources effectively. Tanneries are fragmented, and the domestic market faces price distortions due to multiple middlemen. Therefore,

Figure 1: Value chain mapping of the leather industry in Bangladesh



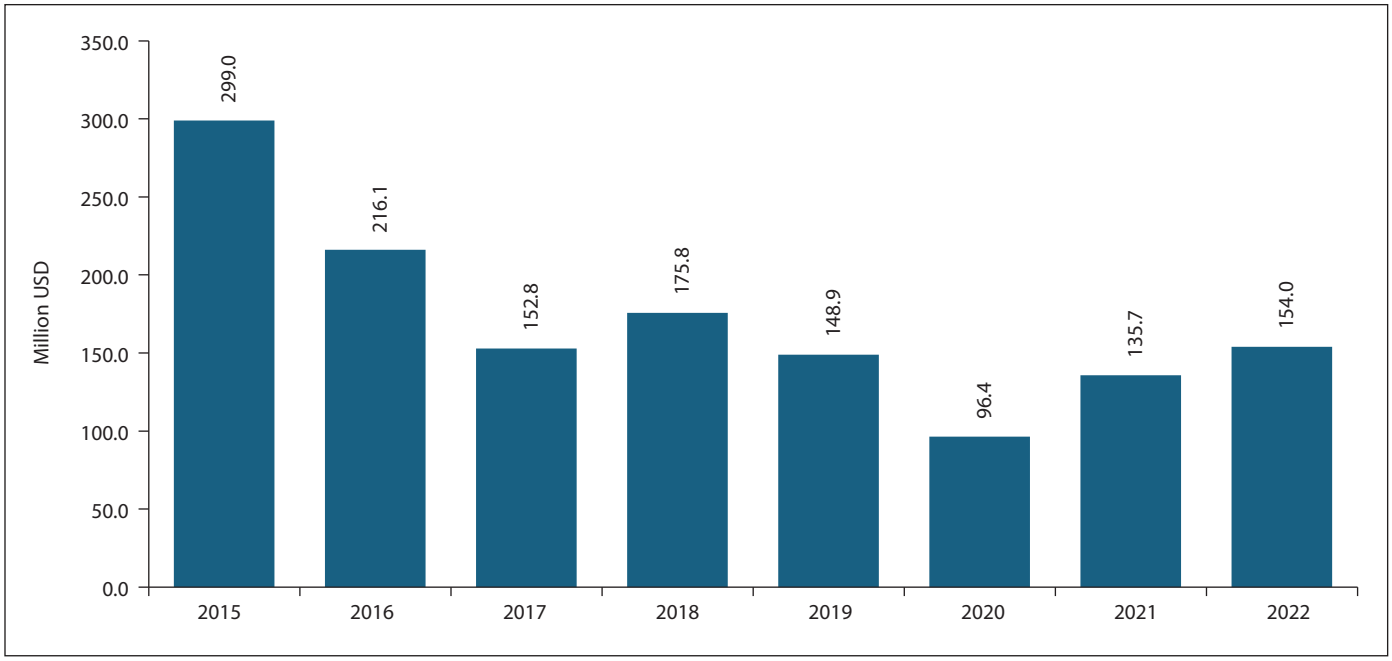
Source: Authors' illustration based on a review of the literature (Strasser, 2015; and Frederick, 2019).

these characteristics indicate a hierarchical governance structure in the value chain.

The leather industry encompasses items that entail the production of leather from raw hides and skins (HS41), products made from leather (HS42), and leather goods and leather footwear (HS6403 and HS6404). HS41 comprises raw hides, skins, and wet and crust leather. However, this excludes products like fur skins, artificial fur, and other fur-based products (Razzaque, Uddin, & Rahman, 2018).

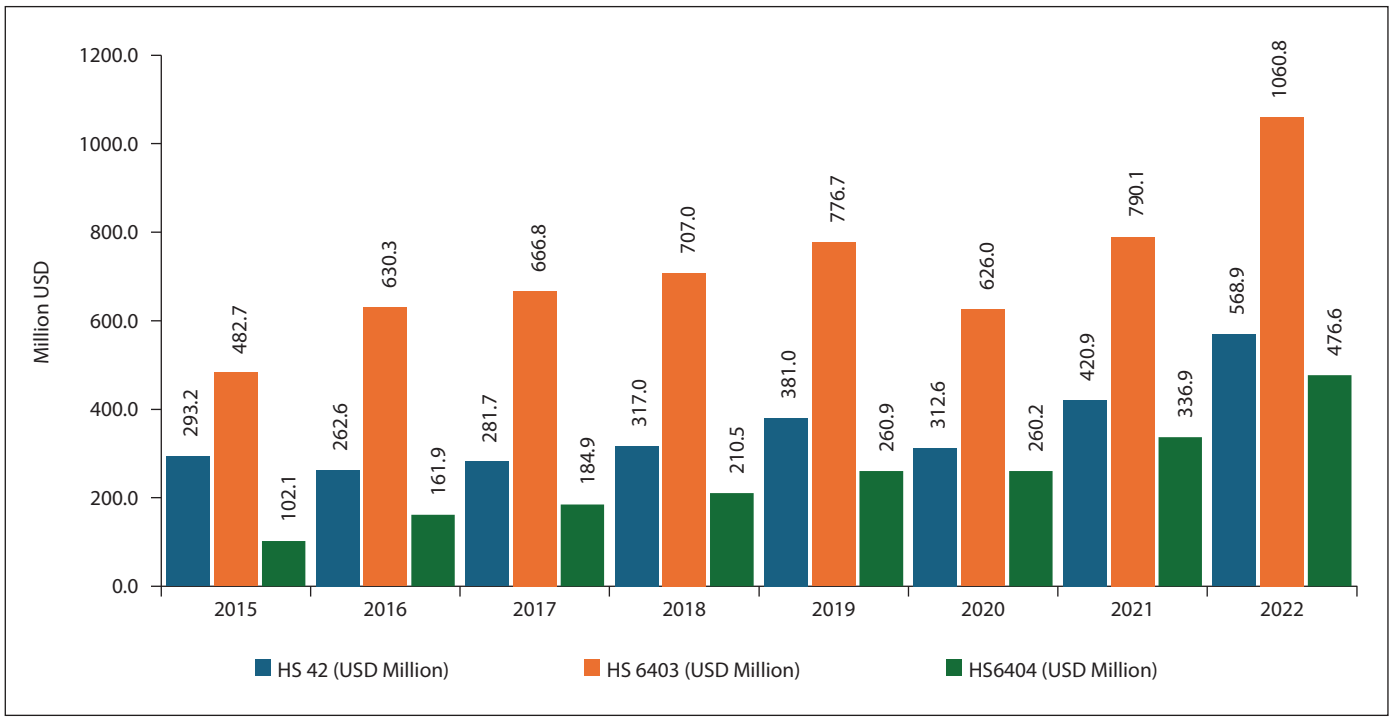
Bangladesh's total export of raw hides, skins, and leather shows a downward trend over the years (Figure 2). The total export of raw hides, skins and leather decreased from USD 299 million in 2015 to USD 154 million in 2022. However, the total export of merchandise made of leather is observed to have an increasing trend (Figure 3). HS42 includes articles made of leather, such as saddles, handbags, etc., while HS64, in particular, HS6403, essentially entails footwear made of leather (ITC Trade Map, 2022). To be precise, the HS6403 entails footwear with the sole made of either plastic, rubber or leather, with the upper part made of leather (ITC Trade Map, 2022).

Figure 2: Bangladesh's total export of raw hides, skins and leather



Source: Authors' illustration based on data from ITC Trade Map (ITC Trade Map, 2022).

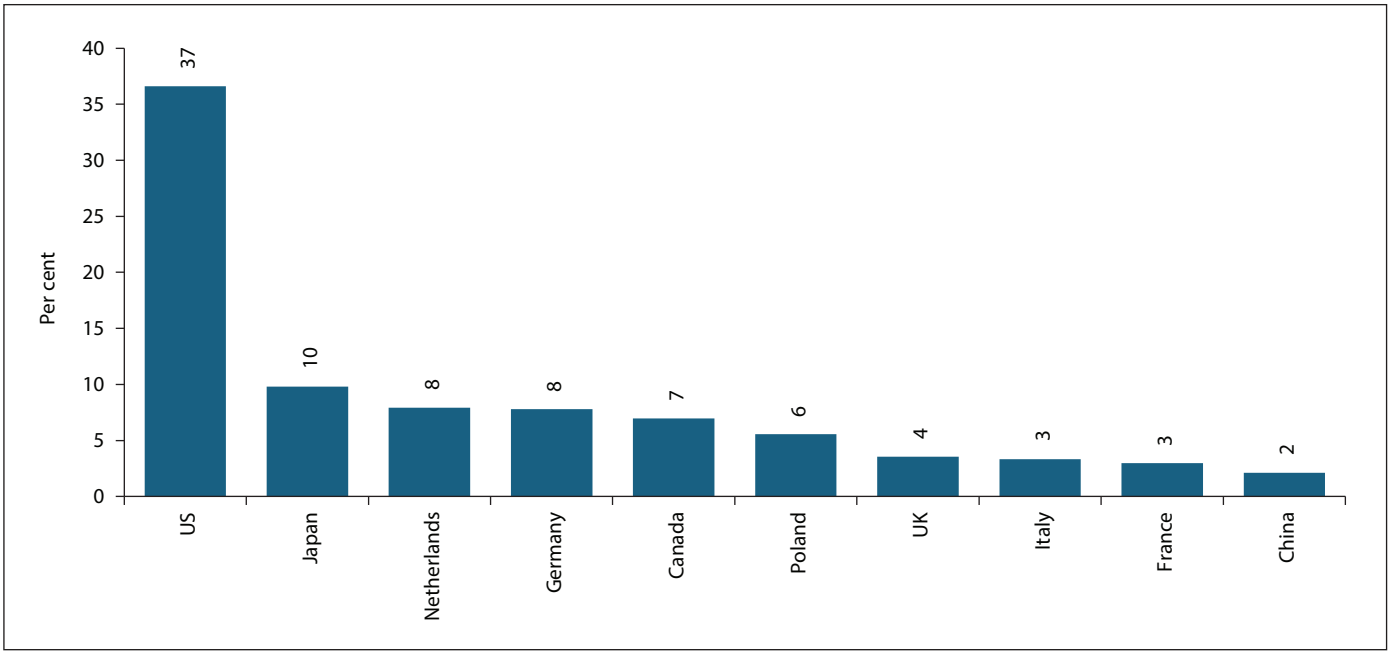
Figure 3: Bangladesh's total export of merchandise made of leather



Source: Authors' illustration based on data from ITC Trade Map (ITC Trade Map, 2022).

In recent years, leather footwear has demonstrated significant success compared to other goods crafted from leather. Between 2015 and 2022, Bangladesh's total export earnings from leather footwear surged from USD 482.7 million to USD 1060.8 million. Additionally, as Figure 4 shows, in the fiscal year 2023, the United States emerged as the primary destination for leather footwear exported from Bangladesh, comprising approximately 37 per cent of the total leather footwear exports (EPB, 2024). Following

Figure 4: Top ten major export destinations for leather footwear from Bangladesh in FY23 (as a share of total leather footwear export)



Source: Authors' illustration based on data from the Export Promotion Bureau (EPB, 2024).

closely behind was Japan, representing approximately 10 per cent of the total leather footwear exports (EPB, 2024). While the export figures for other manufactured articles (classified under HS41) were not as substantial as those for leather footwear, they still exhibited noteworthy growth, particularly when compared to HS6404. This specific HS code pertains to footwear featuring plastic, rubber, or leather soles, the upper part of which is made of textile materials (ITC Trade Map, 2022).

Upgrading

Economic upgrading within global value chains has become increasingly crucial for Bangladesh, particularly as it approaches graduation from the status of an LDC. After LDC graduation, Bangladesh will no longer benefit from international support mechanisms, potentially diminishing the competitiveness of its exports in the global market. Considering the nation's heavy reliance on apparel exports, Bangladesh must undertake significant transformations to enhance its position within the global value chain. In alignment with the GVC framework, four types of economic upgradation have been identified: process upgrading, product upgrading, functional upgrading, and chain or intersectoral upgrading (Islam & Polonsky, 2020).

Process upgrading is characterised as converting inputs into outputs more efficiently by restructuring the production process or injecting advanced forms of technology (Schmitz, 2006). Reorganising the production processes enables firms to adapt to market changes and buyers' specifications and make alterations immediately. This may include automation that improves the productive capacity of a firm or quality management and efficient business organisation, thereby reducing the lead time (Humphrey & Schmitz, 2002). On the other hand, product upgrading refers to switching to more complicated and advanced product lines (Morris & Staritz, 2014). It is essentially specified as a firm's competency to improve product quality and integrate complicated production designs. In addition, functional upgrading involves learning new skills and abilities to participate in higher value-added activities, entailing the delivery of manufactured products and providing services to the end consumers. Lastly, chain upgrading is defined as firms transitioning to a new but comparable industry (Humphrey & Schmitz, 2002).

In Bangladesh, there are 220 tanneries (BIDA, 2023) , most of which were historically located in Hazaribagh (Hong, 2018). Insignificant sustainability measures and a lack of attention to environmental preservation led to severe pollution of the nearby Buriganga River, degrading the quality of leather produced. To prevent further pollution of the Buriganga River, tanneries were reassigned to Savar Tannery Estate, and a common effluent treatment plant (CETP) was constructed on the site. This facilitated clean leather treatment and progressive recycling through sophisticated technologies. However, the CETP is only partly operational and contributes to the pollution of the Dhaleshwari River while also creating a health hazard for the workers in the tannery.

Apart from environmental concerns the leather industry aslo has issues with the efficient procurement of raw materials. In addition, it is also characterised as being labour-intensive with an inefficient workforce lacking in technological adequacy (Hesselberg & Knutsen, 2002). As such, the industry requires an active effort to ensure an upgrade concerning the production process to ascertain the effective transformation of the procured inputs into standardised outputs while accounting for environmental preservation. At the same time, it is essential to strengthen the industry's backward linkage as otherwise, it causes tanneries to suffer from a shortage of RHS (Strasser, Dannenberg, & Kulke, 2013). Furthermore an inadequate backward linkage also creates difficulties for leather processors as it creates a greater reliance on imports of machinery and other expensive inputs such as chemicals (Strasser, 2015).

Therefore, it is important to increase capabilities in the supply of RHS to avoid creating a shortage of raw materials. This also ensures a reduced cost of production of manufactured leather products if the raw materials needed are locally available. It is important to underscore that most of the RHS is produced during the three days of Eid-ul-Azha (Strasser, 2015). Such an endeavour is striking, as three days of RHS production is insufficient to ensure an adequate supply of RHS. However, other institutional shortcomings exist that further facilitate the lack of raw materials in the leather industry. This includes mismanagement in animal care and husbandry and the production and processing of RHS (Strasser, 2015).

The livestock population in Bangladesh provides a significant source of RHS for value addition. Bangladesh's quality of bovine and ovine hides has also received national and international acclamations. However, the current farm structure impedes the reliable collection of the RHS. As per the Department of Livestock Services (DLS), 97 per cent of the livestock is cultivated on a small scale. Small farmers are limited by small lands, lower productivity, and a lack of resources and market access, restraining them from only self-sufficient agriculture. Additionally, livestock in Bangladesh is predominantly spread across the country on small farms that are typically 5 hectares or smaller (Todaro & Smith, 2021).

Such small farms hamper animal husbandry, which essentially encompasses care, management, and proper rearing of domestic animals for agriculture, affecting the quality of RHS produced. Furthermore, Bangladesh has a widespread practice of informal slaughtering in the open market, affecting the quality of the RHS produced. Therefore, it is important to involve the rural communities via local leaders and associations to educate them in proper animal husbandry practices, the significance of preserving RHS for the leather industry, and to account for quality issues (Strasser, 2015). Furthermore, due to illegal trade and cross-border smuggling of RHS, tanners have experienced a shortage of raw materials in the domestic market (Strasser, 2015). As such, it is important to reduce the propensity of illegal cross-border trade to ensure sufficient procurement of RHS and institutionalise the slaughtering of animals to retain the quality of RHS produced.

The limited availability of raw materials impedes the competitiveness of the leather industry in Bangladesh. The inefficiency in the procurement process is further exacerbated due to the lack of effective methods to determine the price of RHS precisely. Prices are arbitrarily determined based on manual and visual assessments of RHS size, thickness, and quality, leaving space for human errors (Strasser, 2015). Designing and implementing codification through transparent criteria for selecting, grading, and pricing raw materials may reduce the space for statistical errors and standardise the pricing mechanism, further reducing price distortion. Clear written instructions and practical training can assist traders and tanners in better comprehending the size and quality of RHS. This may further encourage technology investments for better size assessment precision. This adds to the complexity of transactions, and as such, non-professional middlemen searching for easy earnings may be discouraged from participating in the value chain (Strasser, 2015).

Improving the production process develops efficiencies and creates new avenues for establishing higher-value-added products in the value chain. This can be achieved through the use of advanced skills and improved technology. Increasing productivity and finishing competencies is essential to produce more complicated leather products. Educational institutions, research organisations, and development agencies must collaborate to provide tanneries with finishing expertise and foster innovation (Strasser, 2015).

Conclusions and recommendations

Bangladesh's leather industry operates within a GVC, sourcing raw materials domestically and engaging in tanning processes before exporting intermediary and finished leather products. However, middlemen involved in raw material procurement add costs without adding value. The industry requires support for expanding value-added products and an enabling business environment to foster long-term development. In light of the findings of this policy brief, the following recommendations are put forward for policymakers:

Institutional policy: The leather sector in Bangladesh exhibits fragmentation and necessitates institutional policy reforms to

streamline processes, ensure sufficient procurement of raw materials, lower production costs, and enhance export competitiveness on the global stage. Therefore, institutional policies must be imposed to mitigate productivity loss and ensure proper resource allocation. For instance, institutional policies need to be implemented to impede the illegal cross-border trade of RHS. Illegal cross-border trade adds to the supply shortage of raw materials in the domestic market, further disrupting the production process of manufactured leather products. In addition, the procurement of RHS needs to be systemised to reduce the involvement of middlemen and mitigate the supplementary cost. Furthermore, the process of animal slaughter should be conducted in a regulated and institutionalised manner to uphold improved standards of hygiene and enhance the quality of RHS. Moreover, the leather industry in Bangladesh is categorised as having dynamic price structures that create market distortions. Such price changes can slow the procurement of raw materials and the entire production process. Therefore, government institutions must implement transparent criteria for selecting, grading, and pricing raw materials, which can help minimise statistical errors and standardise pricing mechanisms. Moreover, providing clear written instructions and practical training sessions for traders and tanners can improve their understanding of the size and quality of RHS, potentially leading to increased investments in technology for more precise size assessment, further discouraging the involvement of middlemen.

Infrastructure: Policymakers need to ensure that the infrastructural development of CETP located in Savar Tanery Estate is complete and fully operational. This will ensure a sustainable practice of leather production and adequate environmental conservation by mitigating the extent of pollution caused in the nearby river. It will safeguard the production of quality leather and improve the competitiveness of leather and leather goods in the international market.

Capacity building: The leather industry's workforce lacks sufficient skills and requires extensive training to enhance its ability to produce high-quality leather and leather products that meet international standards. In addition, leather manufacturers require substantial finance and a suitable credit line to invest in adequate machinery and advanced technology. This will improve the competitiveness of leather products, facilitate the transition towards producing a higher value-added product, and promote greater integration into the global value chain. Therefore, workforce training should focus on developing technological proficiency to adopt advanced production processes.

REFERENCES

Bangladesh Investment Development Authority (BIDA). (2023). *Leather and Leather Goods*. Retrieved March 28, 2024, from https://bida.gov.bd/storage/app/uploads/public/650/adb/872/650adb872b637097610685.pdf

Export Promotion Bureau (EPB). (2024, March 24). *Export Data*. Retrieved March 25, 2024, from: https://epb.gov.bd/site/view/epb_export_data/-

Fernandez-Stark, K., & Gereffi, G. (2019). Global value chain analysis: a primer. In S. Ponte, G. Gereffi, & G. Raj-Reichert (Eds.), *Handbook on Global Value Chains*. Edward Elgar Publishing. https://doi.org/10.4337/9781788113779

Frederick, S. (2019). Global Value Chain Mapping . *In Handbook on Global Value Chains* (pp. 29-53). https://doi.org/10.4337/9781788113779.00007

Gereff, G., Humphrey, J., & Sturgeon, T. (2005). The governance of global value chain. *Review of International Political Economy*. https://doi.org/10.1080/09692290500049805

Gereffi, G. (1994). The Organization of Buyer-Driven Global Commodity Chains: How U.S. Retailers Shape Overseas Production Networks. In *Commodity Chains and Global Capitalism*. Retrieved March 20, 2024, from https://dukespace.lib.duke.edu/server/api/core/bitstreams/1e1347ab-4ad4-483d-957b-ecd79e455236/content

Hesselberg, J., & Knutsen, H. M. (2002). Leather tanning: Environmental regulations, competitiveness and locational shifts. In *Environmental regulation in the new global economy: The impact on* (pp. 155-219). Edward Elgar Publishing. https://doi.org/10.4337/9781781950418

Hong, S. C. (2018). *Developing the Leather Industry in Bangladesh*. Asian Development Bank (ADB). Retrieved March 28, 2024, from https://www.adb.org/sites/default/files/publication/467956/adb-brief-102-bangladesh-leather-industry.pdf

Humphrey, J., & Schmitz, H. (2002). How Does Insertion in Global Value Chains Affect Upgrading in Industrial Clusters? *Regional Studies, 36*(9), 1017-1027. https://doi.org/10.1080/0034340022000022198

Islam, M. T., & Polonsky, M. J. (2020). Validating scales for economic upgrading in global value chains and assessing the impact of upgrading on supplier firms' performance. *Journal of Business Research*, 144-159. https://doi.org/10.1016/j.jbusres.2020.01.010

ITC Trade Map. (2022). *Bilateral trade between Bangladesh and World*. Retrieved March 25, 2024, from International Trade Centre (ITC): https://intracen.org/

Morris, M., & Staritz, C. (2014). Industrialization Trajectories in Madagascar's Export Apparel Industry: Ownership, Embeddedness, Markets, and Upgrading. *World Development, 56*, 243-257. https://doi.org/10.1016/j.worlddev.2013.10.030

Razzaque, M. A., Uddin, M., & Rahman, J. (2018). *Leather and Leather Goods Exports from Bangladesh: Performance, Prospects and Policy Priorities*. Bangladesh Enterprise Institute (BEI). Retrieved March 25, 2024, from https://www.researchgate.net/profile/Mohammad-Razzaque/publication/324695323_Leather_and_leather_goods_exports_from_Bangladesh_Performance_Prospects_and_Policy_Priorities/links/5addc9a40f7e9b285941a6fa/Leather-and-leather-goods-exports-from-Bangladesh-Per

Schmitz, H. (2006). Learning and earning in global garment and footwear chains. *European Journal of Development Research, 18*(4), 546-571. https://doi.org/10.1080/09578810601070688

Strasser, J. (2015). The Leather Value Chain in Bangladesh—Results of a Qualitative Analysis. In *Bangladesh's Leather Industry* (pp. 49-259). https://doi.org/10.1007/978-3-319-22548-7_5

Strasser, J., Dannenberg, P., & Kulke, E. (2013). Temporary resource availability and quality constraints in the global leather value chain – The impact of the festival of sacrifice on the leather industry in Bangladesh. *Applied Geography, 45*, 410-419. https://doi.org/10.1016/j.apgeog.2013.02.008

Todaro, M. P., & Smith, S. D. (2021). *Economic Development* (12th Ed.). Pearson.

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