

KEY POINTS

- The leather industry has considerable potential for development using Bangladesh's large supply of low-cost labor and raw material.
- The industry can contribute significantly to diversifying export and boosting export earnings.
- The key priority is to develop an efficient and environment- and labor-compliant domestic tannery industry.
- To realize the leather industry's full potential, well-coordinated policy actions are required.
- With proper investment and policy reforms, the leather industry can attract significant investments in the sector, diversify and substantially boost its exports, and achieve its target of \$5 billion in export earnings.

Developing the Leather Industry in Bangladesh

Soon Chan Hong
Senior Economist
South Asia Department
Asian Development Bank

WHY IS DEVELOPING THE LEATHER INDUSTRY IMPORTANT?

The economy of Bangladesh grew at an average rate of 6.5% annually in the fiscal years (FY) from 2009 to 2018.¹ In FY2016, the growth rate crossed the 7.0% mark, and the following 2 years saw even higher growth rates of 7.3% and 7.9%. Historically, exports and remittances have been the two key growth drivers for Bangladesh. However, one industry dominates exports, i.e., ready-made garments (RMG), accounting for over 80% of the annual export receipts. RMG also accounts for over 45% of gross value added in manufacturing.

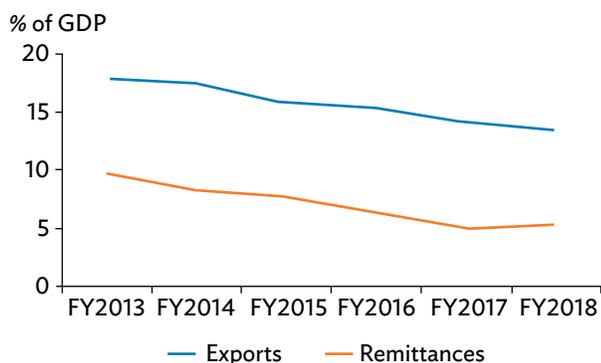
The overwhelming dependence on RMG as a source of export earnings leaves Bangladesh vulnerable to external shocks.² The growth in RMG exports has been slowing over time, and since FY2013, the shares in the gross domestic product of both exports and remittances have been steadily declining (Figure 1).

To shift the country's economy to a higher growth trajectory and sustain high economic growth, the manufacturing and export bases need to be diversified. Leather is one of the industries with considerable potential for development, using Bangladesh's large supply of low-cost labor and raw material. The industry has the potential to participate in global value chains, enter a new market, and serve the growing domestic demand.

The leather industry has many similarities with RMG in strengths and weaknesses. With its abundance of labor and natural resources and successful development experiences in the RMG industry, Bangladesh is ideally suited for the production of leather such as high-value leather goods and footwear.

¹ The FY of the Government of Bangladesh ends on 30 June. "FY" before a calendar year denotes the year in which the fiscal year ends, e.g., FY2018 ends on 30 June 2018.

² Emerging Credit Rating Limited. 2016. *Leather Industry of Bangladesh: A New Hope for Export Diversification*. Dhaka. <http://emergingrating.com/wp-content/uploads/2016/09/Leathe-Industry-in-Bangladesh.pdf>.

Figure 1: Trends in Exports and Remittances

FY = fiscal year, GDP = gross domestic product.

Sources: Bangladesh Bank and Export Promotion Bureau of Bangladesh.

LEATHER INDUSTRY IN BANGLADESH

In FY2017, the leather industry accounted for 3.5% of Bangladesh's annual exports of \$1.2 billion, or about 0.6% of the global export market, and less than 1.0% of gross value added in domestic manufacturing. By volume, Bangladesh occupies about 3.0% of the world's leather and leather products market, from 1.8% of the world's cattle stock and 3.7% of goat stock.³ The industry directly and indirectly employs 850,000 workers.⁴ About 70% of employees in the footwear firms are female.

Exports from the leather industry have gained momentum since FY2012 (Figure 2), marked by a compositional shift that has been taking place from processed leather to leather-based products and leather footwear.⁵

Notably, Bangladesh's exports of leather and leather products are highly concentrated in a few markets. In FY2015, Bangladesh exported 44 leather products to 84 destinations. In comparison, Viet Nam exported 59 leather products to 122 destinations; India, 63 items to

196 destinations; and the People's Republic of China (PRC), the global leader in leather exports, 65 leather items to 209 destinations.⁶

In the case of leather footwear, the United States (US) is the top destination for exports, importing 24.7% of total global leather footwear, sourcing 53.7% of its imports from the PRC (Table). The shares in the US market are about 3.4% for Viet Nam and 15.2% for India. Bangladesh's US market share is meager, at only 0.8%. Apart from the US, the other major importers of finished leather goods are Germany; the United Kingdom; France; Italy; and Hong Kong, China. It is in the Japanese market, however, that Bangladesh has a strong presence, capturing 7.3% of its total leather footwear imports. Bangladesh also has a marked presence in the Netherlands with a 2.5% share of the total leather footwear imports and Germany with 2.4%.

Given the large scope for broadening its markets and increasing export volume, the Seventh Five-Year Plan of the Government of Bangladesh forecasts at least \$5 billion exports revenues from leather, leather goods, and leather footwear by FY2021.⁷ The annual export growth rate should increase to 16% from 9% (during FY2013–2017) to attain this target. This goal is workable, as Bangladesh has significant potential to occupy a larger market share.

LEATHER INDUSTRY'S PROSPECTS

The leather industry has been identified as a priority sector based on its considerable growth and investment potential.⁸ The government is providing the sector with numerous incentives such as tax incentives, and duty-free import of raw materials and machinery for 100% export-oriented factories. Bangladesh also enjoys a duty-free quota-free facility in major export markets.

Bangladesh has major advantages in developing its leather industry. Leather from Bangladesh is highly reputed for its good quality, and leather goods and footwear factories are increasingly able to meet the high demands of foreign buyers.⁹ The leather industry has the potential to develop the entire supply chain—starting from raw leather to leather processing, to production of footwear and leather products, domestically. There are possible strong backward linkages with mostly locally sourced raw materials—allowing high (over 80%) domestic value addition, an abundant supply of low cost, trainable labor, and its advantageous location. Bangladesh can also use its experience in

³ Z. Rahman. 2017. *Comprehensive Report 2017 on Bangladesh Leathergoods and Footwear Industry*. Dhaka: LFMEAB / Confederation of International Footwear Association. <http://www.hkfootwear.org/content/upload/1511230567.pdf>.

⁴ Leathergoods and Footwear Manufacturers and Exporters Association of Bangladesh (LMFEAB). *Investment Prospects in Bangladesh Leather Sector*. http://lfmeab.org/images/report/LEATHER_SECTOR_INVESTMENT_BROCHURE_LFMEAB.pdf.

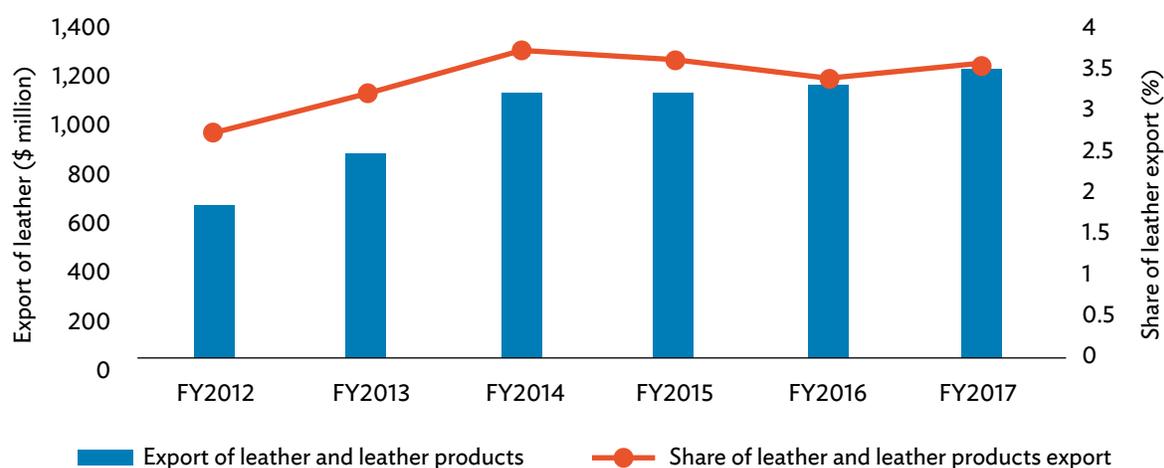
⁵ M. A. Nikhat. 2017. *Leather Industry – Bangladesh's 3rd Engine for Growth*. *LightCastle Partners*. 17 April. <http://www.lightcastlebd.com/insights/2017/04/17/leather-industry-bangladeshs-third-engine-of-growth>.

⁶ M. Razzaque. 2018. *Leather Goods: Bangladesh's Next Cash Cow*. *Dhaka Tribune*. 24 February. <http://www.dhakatribune.com/business/2018/02/24/leather-goods-bangladeshs-next-cash-cow>.

⁷ Bangladesh Foreign Trade Institute. 2016. *Sector-Based Need Assessment of Business Promotion Council Leather Sector*. http://www.bfti.org.bd/pdf/BPC_research-Leather.pdf.

⁸ B. K. Debnath. 2017. *Our Leather Industry*. *The Independent*. 7 September.

⁹ M. Ahamed. 2014. *A Report on Leather and Leather Goods Industry of Bangladesh*. JB Group Research Department, JBBC Corporation.

Figure 2: Growth in Exports of Leather and Leather Products


FY = fiscal year.

Source: Export Promotion Bureau of Bangladesh. Cited in M. Razzaque, M. Uddin, and J. Rahman. 2018. *Leather and Leather Goods Exports from Bangladesh: Performance, Prospects and Policy Priorities*. Dhaka: Bangladesh Enterprise Institute.

Top Importers of Leather Products, 2015

Country	% Share in the Global Imports	% Share of Bangladesh and Comparators in that Market			
		Bangladesh	PRC	India	Viet Nam
United States	24.7	0.8	53.7	3.4	15.2
Germany	8.2	2.4	14.0	7.2	13.1
United Kingdom	6.9	0.5	16.6	11.7	10.5
France	6.5	0.6	13.0	6.2	8.9
Italy	5.2	0.9	11.6	4.6	5.9
Hong Kong, China	5.0	0.3	64.0	3.5	5.5
Netherlands	3.9	2.5	9.6	2.3	7.0
Belgium	3.3	0.2	21.2	3.5	19.4
PRC	2.7	0.5	0.0	2.2	26.4
Japan	2.4	7.3	18.0	2.5	15.1
Canada	2.2	1.1	48.8	2.8	13.0
Russian Federation	2.1	0.7	35.5	2.6	8.7
Spain	2.1	0.3	17.3	8.4	11.0
Switzerland	1.8	0.9	10.4	3.4	7.7
Republic of Korea	1.7	0.6	29.9	2.0	20.0

PRC = People's Republic of China.

Source: M. Razzaque, M. Uddin, and J. Rahman. 2018. *Leather and Leather Goods Exports from Bangladesh: Performance, Prospects and Policy Priorities*. Dhaka: Bangladesh Enterprise Institute.

its RMG industry development, given the many similarities in the two sectors, especially in the know-how of supply management in the export industry.

The footwear and leather goods segments also hold considerable potential. Several modern footwear and leather-based products manufacturing units, some with world-class operations, have been set up in Bangladesh. Foreign companies are also showing interest in operating footwear factories in the country. A growing number of large footwear manufacturers are engaged in exporting, with several of them producing high-quality leather footwear and leather-based products. Furthermore, the domestic footwear market, now with an estimated demand of 30 million pairs per year, is rapidly expanding as the size of the middle class grows.¹⁰

Bangladesh has the potential also to become an investment hub for the global leather industry value chain. Many global brands are already sourcing from Bangladesh. Labor cost in the PRC, the largest exporter of leather products, has been rising, pushing up the cost of production and eroding competitiveness.¹¹ This creates opportunities for Bangladesh, including the relocation of factories from the PRC.

Production units for this growing sector can be hosted in the upcoming and planned economic zones and industrial parks. As part of its industrialization strategy, the Seventh Five-Year Plan lays down a holistic approach for the development of economic zones and industrial estates all over the country.

However, to become a major global player and to expand employment, Bangladesh's leather industry needs to tackle various problems occurring at different stages of the value chain. Aside from sector-specific constraints, key development challenges also need to be addressed.

CHALLENGES FACED BY THE INDUSTRY

The priority for tanneries is to develop an efficient and environment-compliant domestic tannery industry. Bangladesh's vast expanse of grazing fields can support a large livestock population, which in turn will support a large tannery industry. There are about 220 tanneries in Bangladesh, most of which were in Hazaribagh (footnote 10). Inefficient and environmentally unfriendly tannery operation in Hazaribagh caused severe pollution of the nearby Buriganga River, which lowered the value of the leather processed in Bangladesh.

The relocation of tanneries from Hazaribagh to Savar Tannery Estate intended to avoid further pollution of the Buriganga River and eventually raise the value of Bangladesh leather. For this, a common effluent treatment plant (CETP) was built on the site to facilitate the

use of better technologies for clean leather treatment and effluent recycling. However, the CETP is only partially operational and polluting the nearby Dhaleshwari River. It also exposes workers in tanneries to serious health hazards.

Other major challenges of tanneries include access to finance, lack of skilled workforce and training facilities, access to the latest technology, and dependence on expensive imported chemicals.¹² This problem is especially true for the small and medium-sized tanneries. In the absence of adequate access to finance, the tanneries are unable to invest in upgrading technology and machinery, and developing skills for reducing cost and improving leather quality, and thus lose competitiveness. Much financing will be needed for investing in expanding tannery capacity in response to expected growth in demand for processed leather from the downstream footwear and leather-based products industry. Tanneries also need to have better access to market information, business promotion opportunities, and marketing knowledge.

Inefficiency in raw material procurement is another challenge. About 40% of the rawhides and skins are made available during the Eid al-Adha festival, requiring quick measures to finance rawhides procurement, facilitate their transfers for processing, and preserve quality. Inefficient procurement system results in weak leather traceability (a concern of the buyers), and sometimes processing becomes a challenge due to the lack of adequate processing facility.¹³ Other critical factors that constrain the industry's competitiveness include inefficient production technology, poor solid waste management, and lack of research and development.

Leather goods producers face similar constraints. For small and medium-sized footwear enterprises, credit access is also a major issue, as they need to borrow to invest in machinery and modern technology. Lack of capital, expensive imported machinery, and a dearth of skilled workforce and managers are barriers to moving into higher value-added products. Moreover, training facilities are inadequate and need to be expanded. Design capability and product innovation of these firms are low, and quality control is ineffective. The linkages and coordination between the small and medium-sized firms and the lead firms for which they subcontract are often weak, and support services are insufficiently developed.

Losing preferential market access can also be a problem affecting the leather sector. Being one of the least developed countries, Bangladesh has preferential market access to major exports destinations like the European Union (EU).¹⁴ However, the country's impending graduation from least developed countries status implies the lifting of preferential treatment of Bangladesh's exports, and further increases the pressure of competitiveness on leather exporters. It is also worth noting that in

¹⁰ H. Paul, et al. 2013. Bangladeshi Leather Industry: An Overview of Recent Sustainable Developments. *Society of Leather Technologists and Chemists*. 97 (1). pp. 25–32. https://www.researchgate.net/publication/235609270_Bangladeshi_Leather_Industry_An_Overview_of_Recent_Sustainable_Developments.

¹¹ C. Coonan. 2013. Rising Labour Costs Erode China's Competitiveness. *The National*. 15 July. <https://www.thenational.ae/business/rising-labour-costs-erode-china-s-competitiveness-1.646456>.

¹² Asian Development Bank. 2017. *Southwest Bangladesh Economic Corridor Comprehensive Development Report*. Unpublished.

¹³ J. Strasser. 2015. *Bangladesh's Leather Industry—Local Production Networks in the Global Economy*. Springer Geography.

¹⁴ R. I. Khan. 2014. Leather Footwear Industry in Bangladesh: A Sector Awaiting Boom. *IDLC Monthly Business Review*. 10 (5). Dhaka: Industrial Development Leasing Company of Bangladesh. <http://idlc.com/public/documents/mbr/14/Monthly%20Business%20Review%20-%20May%202014.pdf>.

the US, the largest importer of leather and leather goods, Bangladesh's exports face steep tariffs.

Moreover, in the Doing Business surveys, Bangladesh typically is outperformed by most of its regional neighbors. Costs of getting the requisite permits and approvals for business remain high, including those that impact the leather and leather products sector. These permits include numerous procedures and formalities involving trading across borders, which continue to amplify the sector's weaknesses and hinder investments.

LEARNING FROM PIONEERS' DEVELOPMENT EXPERIENCES

The development of the leather industry in other countries such as Viet Nam, the PRC, and Malaysia provides key lessons for Bangladesh.

After more than 20 years of exporting, Viet Nam's footwear industry has become one of the significant sources of export earnings. Viet Nam ranks fourth largest footwear exporter globally, selling its products to about 50 countries and territories, with the EU, the US, and Japan as the main buyers. The industry exports up to 90% of its output at an increasing rate of localization.¹⁵

The presence of established relationships among local and international footwear manufacturers has been an important aspect of the sector in Viet Nam. Its emergence as a major shoe exporter to the EU and the US was possible because manufacturers from Taipei, China and the Republic of Korea became new intermediaries, helping establish production capabilities and organize the supply of all required inputs. As a consequence, foreign direct investments in footwear manufacture increased, mostly from the EU and the US.

A similar development pattern is observed in the PRC's footwear industry. Manufacturers from Hong Kong, China; Taipei, China; and the Republic of Korea transplanted the shoe industry to the PRC, bringing in large lumps of well-established production using fully developed technology and with readily available markets.¹⁶ Aside from low wages, the PRC's coastal areas were also a boon to foreign investors with their convenient location, excellent logistics, and sound infrastructure. Local authorities in remote areas were keen to assist the development of shoe industry clusters through the establishment of industrial estates. Likewise, there was considerable knowledge transfer both from foreign buyers and buying agents, which aided factories to quickly develop new models.

Malaysia, meanwhile, remains one of Asia's largest exporters of footwear (including leather footwear). A large portion of the industry's revenue is derived from the original equipment manufacturing business, with several Malaysian firms producing for international brand names.¹⁷ Although the majority of the exports are for Southeast Asia and the Middle East, Malaysia's footwear exports to European markets have also been on an upward trend. In 2013, significant increases were recorded in exports of Malaysian footwear to Norway, Belgium, Ireland, and the United Kingdom.¹⁸

The Malaysian footwear industry is well supported by an experienced and skilled workforce with both technical and practical skills. The support is further complemented by powerful export promotion initiatives by the government. For the industry to move up the value chain, the Government of Malaysia has also been pushing for greater innovation and brand creation among the local players.

PRIORITY MEASURES AND RECOMMENDATIONS

A strengths, weaknesses, opportunities, and threats (SWOT) analysis below shows the potential of the sector and find strategic direction to capture rapid and sustainable growth based on the above discussion on internal and external environmental factors affecting Bangladesh's leather and leather goods industry (Figure 3).

The findings and observations discussed above lead to a series of recommendations for strengthening the opportunities and negating the threats highlighted in the SWOT analysis. To take full advantage of the leather industry's potential for growth and contribute to the export earnings through expansion and moving up the value chain, Bangladesh should act on several fronts:

- Consideration may be given to setting up a leather zone cluster—i.e., developing an integrated production chain from raw materials to finished products, including common facilities and supply and support services.
- To provide easier access to finance, Bangladesh may create a fund for a credit line, especially for the small and medium-sized tanneries and footwear manufacturers. Tanneries need to invest heavily in introducing advanced leather processing technologies for more environment-compliant and efficient production and solid and liquid waste management, and to enhance their operational management capabilities.
- Processes for starting and operating a business, as well as

¹⁵ X. T. T. Phan, C. H. Pham, and L. Pham. 2016. The Competitive Advantages of Vietnam Footwear Industry: An Analysis. *International Journal of Financial Research*. 7 (3). Special issue. <http://www.sciedu.ca/journal/index.php/ijfr/article/viewFile/9550/5788>.

¹⁶ A. Clothier. 2005. *The Chinese Footwear Industry and Its Influence on the World Trade*. Paper prepared for the Fifteenth Session of the Leather and Leather Products Industry Panel of the United Nations Industrial Development Organization. León, Mexico. 10–14 September.

¹⁷ S. A. Shah. 2018. Time for Local Shoemakers to Innovate. *The Malaysian Reserve*. <http://themalaysianreserve.com/2018/06/11/time-for-local-shoemakers-to-innovate/>.

¹⁸ *Malaysia Insights*. 2014. Malaysia's Shoe Industry Steps Up. 28 August. <http://www.malaysia-insights.com/malaysias-shoe-industry-steps-up/>.

Figure 3: Strengths, Weaknesses, Opportunities, and Threats Analysis



R&D = research and development, RMG = ready-made garments.

Source: Author's analysis based on Leathergoods and Footwear Manufacturers and Exporters Association of Bangladesh. Prospects of Bangladesh Leather Industry: Farm to Fashion Products. http://lfmeab.org/images/report/Prospects_of_Bangladesh_leather_industry.pdf.

procedures for engaging in cross-border trade, need to be efficient and streamlined to improve the business climate and attract foreign direct investment.

- Procurement of rawhides and skins needs to be streamlined through providing funding and developing more efficient collection and preservation facilities, especially during the Eid al-Adha festival. This will also enhance leather supply chain traceability.
- High import duties on chemicals need to be reviewed, including considering the possibility of allowing bonded warehousing facilities, which would exempt export-oriented goods from duties and other taxes.
- Much investments will be needed to develop skills, upgrade technical facilities, refine quality control, and improve technology and product innovation. More leather technology institutions equipped with knowledge of cutting-edge technologies need to be set up. Capacities of good initiatives, such as the Centre of Excellence for Leather Skill Bangladesh Limited, will need to be supported and expanded to create a large skilled workforce to meet the needs of different stages of the leather value chain.

- Infrastructure development at the Savar tannery site needs to be completed without delay, including making the CETP fully operational. Bangladesh should find ways to ensure efficient and sustainable financing of the infrastructure, including CETP. This will facilitate industry restructuring, improve competitiveness, and gain buyers' confidence.
- Land registration at the Savar tannery site should be completed as soon as possible. This will enable the firms, especially the small and medium-sized tanneries, to gain access to finance.
- Support needs to be provided to develop marketing and distribution channels helping producers and exporters gain easier market access and increase their margins.

Bangladesh needs to develop the necessary capability, particularly on expanding to more lucrative technology, and capital-intensive and high-value-adding stages of the leather and leather goods value chains. It is therefore pertinent for Bangladesh to focus on infrastructure and logistics, research and development, and technology to remain

competitive in a changing industrial landscape. To unlock its potential and realize its aspirations, Bangladesh also needs to implement policy reforms to improve its business environment. The suggested solutions can help raise leather exports from \$1.2 billion to about \$3.0 billion with the current market players. In addition, they can help attract new investment in the industry, further increasing export earnings from leather up to \$5.0 billion or more.

REFERENCES

- M. Ahamed. 2014. A Report on Leather and Leather Goods Industry of Bangladesh. JB Group Research Department, JBBC Corporation.
- Asian Development Bank. 2017. *Southwest Bangladesh Economic Corridor Comprehensive Development Report*. Unpublished.
- Bangladesh Foreign Trade Institute. 2016. *Sector-Based Need Assessment of Business Promotion Council Leather Sector*. http://www.bfti.org.bd/pdf/BPC_research-Leather.pdf.
- A. Clothier. 2005. *The Chinese Footwear Industry and Its Influence on the World Trade*. Paper prepared for the Fifteenth Session of the Leather and Leather Products Industry Panel of the United Nations Industrial Development Organization. León, Mexico. 10–14 September.
- C. Coonan. 2013. Rising Labour Costs Erode China's Competitiveness. *The National*. 15 July. <http://www.thenational.ae/business/rising-labour-costs-erode-china-s-competitiveness-1.646456>.
- B. K. Debnath. 2017. Our Leather Industry. *The Independent*. 7 September.
- Emerging Credit Rating Limited. 2016. *Leather Industry of Bangladesh: A New Hope for Export Diversification*. Dhaka. <http://emergingrating.com/wp-content/uploads/2016/09/Leathe-Industry-in-Bangladesh.pdf>.
- R. I. Khan. 2014. Leather Footwear Industry in Bangladesh: A Sector Awaiting Boom. *IDLC Monthly Business Review*. 10 (5). Dhaka: Industrial Development Leasing Company of Bangladesh. <http://idlc.com/public/documents/mbr/14/Monthly%20Business%20Review%20-%20May%202014.pdf>.
- Leathergoods and Footwear Manufacturers and Exporters Association of Bangladesh (LFMEAB). Prospects of Bangladesh Leather Industry: Farm to Fashion Products. http://lfmeab.org/images/report/Prospects_of_Bangladesh_leather_industry.pdf.
- LMFEAB. Investment Prospects in Bangladesh Leather Sector. http://lfmeab.org/images/report/LEATHER_SECTOR_INVESTMENT_BROCHURE_LFMEAB.pdf.
- Malaysia Insights. 2014. Malaysia's Shoe Industry Steps Up. 28 August. <http://www.malaysia-insights.com/malysias-shoe-industry-steps-up/>.
- M. A. Nikhat. 2017. Leather Industry – Bangladesh's 3rd Engine for Growth. *LightCastle Partners*. 17 April. <http://www.lightcastlebd.com/insights/2017/04/17/leather-industry-bangladeshs-third-engine-of-growth>.
- H. Paul et al. 2013. Bangladeshi Leather Industry: An Overview of Recent Sustainable Developments. *Society of Leather Technologists and Chemists*. 97 (1). pp. 25–32. http://www.researchgate.net/publication/235609270_Bangladeshi_Leather_Industry_An_Overview_of_Recent_Sustainable_Developments.
- X. T. T. Phan, C. H. Pham, and L. Pham. 2016. The Competitive Advantages of Vietnam Footwear Industry: An Analysis. *International Journal of Financial Research*. 7 (3). Special issue. <http://www.sciedu.ca/journal/index.php/ijfr/article/viewFile/9550/5788>.
- Z. Rahman. 2017. *Comprehensive Report 2017 on Bangladesh Leathergoods and Footwear Industry*. Dhaka: LFMEAB / Confederation of International Footwear Association. <http://www.hkfootwear.org/content/upload/1511230567.pdf>.
- M. Razzaque. 2018. Leather Goods: Bangladesh's Next Cash Cow. *Dhaka Tribune*. 24 February. <http://www.dhakatribune.com/business/2018/02/24/leather-goods-bangladeshs-next-cash-cow>.
- M. Razzaque, M. Uddin, and J. Rahman. 2018. *Leather and Leather Goods Exports from Bangladesh: Performance, Prospects and Policy Priorities*. Dhaka: Bangladesh Enterprise Institute.
- S. A. Shah. 2018. Time for Local Shoemakers to Innovate. *The Malaysian Reserve*. <http://themalaysianreserve.com/2018/06/11/time-for-local-shoemakers-to-innovate/>.
- J. Strasser. 2015. *Bangladesh's Leather Industry: Local Production Networks in the Global Economy*. Springer Geography.

About the Asian Development Bank

ADB is committed to achieving a prosperous, inclusive, resilient, and sustainable Asia and the Pacific, while sustaining its efforts to eradicate extreme poverty. Established in 1966, it is owned by 67 members—48 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.

ADB Briefs are based on papers or notes prepared by ADB staff and their resource persons. The series is designed to provide concise, nontechnical accounts of policy issues of topical interest, with a view to facilitating informed debate. The Department of Communications administers the series.

ADB recognizes “China” as the People’s Republic of China and “Vietnam” as Viet Nam.

The views expressed in this publication are those of the authors and do not necessarily reflect the views and policies of ADB or its Board of Governors or the governments they represent. ADB encourages printing or copying information exclusively for personal and noncommercial use with proper acknowledgment of ADB. Users are restricted from reselling, redistributing, or creating derivative works for commercial purposes without the express, written consent of ADB.

Asian Development Bank
6 ADB Avenue, Mandaluyong City
1550 Metro Manila, Philippines
Tel +63 2 632 4444
Fax +63 2 636 2444

www.adb.org/publications/series/adb-briefs



Creative Commons Attribution 3.0 IGO license (CC BY 3.0 IGO)

© 2018 ADB. The CC license does not apply to non-ADB copyright materials in this publication.

<https://www.adb.org/terms-use#openaccess>

<http://www.adb.org/publications/corrigenda>

pubsmarketing@adb.org