

**LABOR MARKET STUDY FOR SKILLS FOR EMPLOYMENT
INVESTMENT PROJECT (SEIP): LEATHER AND FOOTWEAR SECTOR**

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Executive Summary

In terms of export earning leather and leather goods consists of the second largest exporting sector of Bangladesh. Even Bangladesh government declares the leather products and footwear sector as one of the highest priority sectors. Leather industry in Bangladesh had undergone significant transformation during the past two decades from a low value addition tanning activity to a producer of leather footwear and leather goods along with high value-added crust and finished leather. Though availability of cheap raw materials, but export earnings of this sector is declining after 2015-16 because of environmental issue, international market price and skill gap of the labor.

The low level of skills and productivity of the Bangladeshi labor is endemic, as indicated by labor force survey data that more than 60% of the labor force has either no education (40%) or only up to primary level (23%). With the approval of the National Education Policy (NEP), 2010 and the National Skill Development Policy (NSDP), 2011, the government embarked on major education and training reforms. In 2014 the government of Bangladesh has initiated the Skills for Employment Investment Program (SEIP), a multi-tranche financing facility supported by the Asian Development Bank (ADB) and Swiss Agency for Development and Cooperation (SDC), anchored in the National Skills Development Policy (NSDP), 2011. Under first and second Tranches, 223,000 have been trained and certified with a job placement rate of nearly 70 percent. The combined training target under the first two Tranches is 502,000. Female participation among trainees is more than 30 percent. In this backdrop, BIDS has conducted a study of the labor market in the Leather and Footwear sector for Skill for Employment Investment Project (SEIP) with the following objectives.

The main objective of the assignment is to analyze labor supply and demand over the next 10-year period (2020-2030) in order to assist the government and the private industry to better plan the capacity and quality of skills training systems according to the evolving skills/trade/market demands from rapidly growing industry sectors.

The second objective of the assignment is to determine sector priorities, assess skills gap by sector, analyze sector-wise occupational composition of employment (including gender composition of employment), assess occupation-wise training requirement by sector and trade.

To fulfill the objectives of the study, both quantitative and qualitative primary data have been collected. It employed a variety of methodologies such as document review, questionnaire survey using structured questionnaire with concerned enterprises and employees and Key Informant Interview (KIIs) with government officials/leaders/representatives of associations. For the questionnaire survey, a pre-tested (on December 2020) structured questionnaire has been used. Guideline/Checklist are developed for KIIs to

obtain information like skill gap/shortage, Covid-19 impacts for the sector, skill needs and labor demands, future projections for demand of labor, important suggestions for the development of the sector etc.

Total of 93 enterprises survey and 902 employees survey from different categories and skill have been conducted from Leather and Footwear industries and also from Tanneries. In addition, eight KIIs have been conducted with association leaders/industrialists and one consultation meeting with industrialists or higher authorities has been completed.

Findings

Tannery plays a vital role in the value chain of leather and footwear industries. This study includes 38 Tannery enterprises which employ 2232 employees in total. It shows that overall output per enterprise in 2019 stands out 2574 (in Lac Taka) while the export per enterprise is 1545 (in Lac Taka). Hence, export to output ratio per enterprise is around 60%. It means that nearly 60% of the revenues in the Tannery industry of Bangladesh comes from the export earnings. Moreover, the capital-labor ratio per enterprise per employee stands at 7.44 (in Lac Taka).

This study also includes 55 Leather and Footwear enterprises which employ 14305 employees in total. It shows that overall output per enterprise in 2019 stands out 7764 (in Lac Taka) while the export per enterprise is 4873 (in Lac Taka). Hence, export to output ratio per enterprise is around 63%. It means that nearly two-thirds of the revenues in the leather industry of Bangladesh comes from the export earnings. Moreover, the capital-labor ratio per enterprise per employee stands at 1.70 (in Lac Taka).

Findings from the survey of Tannery and Leather & Footwear Industries indicate that there are a number of skill gaps in different occupations in this sector. The overall mean value (4.5) of the extent of difficulties in filling-up vacancies suggests that there exists skill shortage in the Tannery industry of Bangladesh. The Tannery sector is burdened with no skill and semi-skilled workers or this sector at present may experience economic downturn. Overall, the existing occupations in the Tannery industry are subject to lower extent of automation technology in next 5-10 years. It is expected that the Tannery industry in Bangladesh may demand labor for employment in the industry and this statement is corroborated by the views of enterprises who view that overall, there will be 55% moderate growth and 6% high growth in labor demand in next 10 years. This sector has high potential for growth but this will require that the identified skill gaps and shortages are adequately addressed. Prevailing training facilities are not enough to meet the demand for skilled persons in this sector.

Overall, the Leather and Footwear industry will have a 30% employment growth in 2025 from current stage and the same figure rose to around 64% in 2030. It indicates an encouraging prospect of the leather industry of Bangladesh. Survey findings corroborate the idea that hard-to-fill vacancies arise due to the skill shortage

that is why, it is suggested to impart training to the existing labor force involved in the leather industry. Moreover, the purview of training should be extended to such a level where the new comers in the market can as well avail of training facilities.

Recommendations

The following steps could be taken to encourage improvements in skill and production in Tannery and Leather & Footwear sector:

1. Training activity of practical work, more supervision of staff and more staff appraisals/ performance reviews, training activity of practical work, and reallocating work appear to be the first three important actions for addressing the problem of skill gap in the Tannery and Leather & Footwear Industries in Bangladesh.
2. Need to establish more programs on Industry-led Apprenticeship.
3. CETP at the ‘Savar Leather Industrial Park’ needs to be functioning for achieving the target in the international market.

Specific Recommendation for Training in Tanneries

Trade/Occupation at BSCO 4-digit

1. Quality Controller Operator-Upskill, Training in new technology.
2. Drum helper- Upskill, Training in new technology.
3. Drum Man-New entrant
4. Machine operator- New entrant, Upskill and Training in new technology.
5. Mechanical engineer- New entrant, Upskill and Training in new technology.
6. Porter- New entrant, Upskill and Training in new technology.
7. Production in charge- Training in new technology.
8. Cutting operator- New entrant, Upskill and Training in new technology.
9. Splinting machine operator-Upskill.
10. Machine helper- New entrant, Upskill and Training in new technology
11. Flashing machine operator-Upskill.
12. Chemist- Upskill.

Specific Recommendation for Training in Leather and Footwear

Trade/Occupation at BSCO 4-digit

1. Supervisors and line leaders -Upskill, Training in new technology.
2. Lasting, Setting and Assembling Worker- Upskill, Training in new technology.
3. Advanced CAD design and pattern making-New entrant, Upskill, Training in new technology.

4. Quality Control Operator-Upskill.
5. Designer- New entrant, Upskill and Training in new technology.
6. Finishing operator- New entrant, Upskill and Training in new technology.
7. Lasting operator- New entrant, Upskill and Training in new technology.
8. Injection Machine Operator-Upskill.
9. Table operator- Upskill, management and Training in new technology.
10. Cutting operator- New entrant, Upskill and Training in new technology.
11. Mechanical engineer- New entrant, Upskill and Training in new technology.

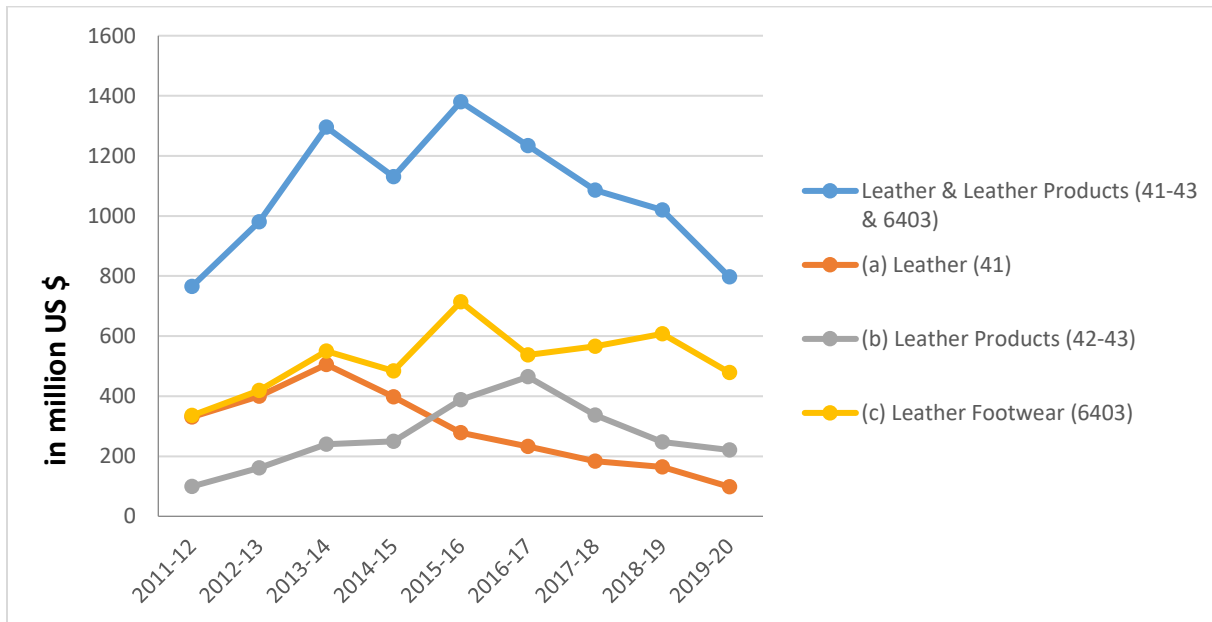
Chapter 1: Introduction

1.1 Background

In terms of export earning leather and leather goods consists of the second largest exporting sector of Bangladesh. Even Bangladesh government declares the leather products and footwear sector as one of the highest priority sectors. This industry emerged in the early 1940s in East Bengal due to raw materials availability. Non-Bengali migrants from India, who had the in-depth knowledge about leather processing, were the main entrepreneurs and employee of this sector during 1947-71. After the independence this sector came to the hand of Bangladeshi entrepreneurs through the government. Until 1980-81 the export of processed leather consisted almost entirely of wet blue leather. Later government took policy measures to raise the level of value addition in this sector, which attract new private investment. Finally, “the ban on export of wet blue leather in June 1990 led to the setting up of modern leather tanning units for the production of crust leather (tanned leather after further processing of wet blue leather) and finished leather and this was followed by new investment in leather goods industry. Leather industry in Bangladesh had undergone significant transformation during the past two decades from a low value addition tanning activity to a producer of leather footwear and leather goods along with high value-added crust and finished leather”¹. Though availability of cheap raw materials, but export earnings of this sector is declining after 2015-16 because of environmental issue, international market price and skill gap (Figure 1.1).

¹ Bhuyan, M. H. R. (November 13, 2019). “Leather goods industry in Bangladesh: Skill gap and training inadequacy.” *The Financial Express*. <https://today.thefinancialexpress.com.bd/26th-anniversary-issue-1/skill-gap-and-training-inadequacy-1573551355> accessed on 12 March 2021.

Figure 1.1: Export of Leather and Leather Goods



Source: Export Promotion Bureau, Government of the People's Republic of Bangladesh. Accessed on 12 March, 2021 from http://epb.gov.bd/site/view/epb_export_data/

Bangladesh has made a remarkable success in achieving steady and persistent acceleration of growth over the last few decades, with about one percentage point increase in every decade since the 1980s. Average real GDP growth over the last five years has been above 6.5 percent, which is much higher than the average growth rate of all developing countries (4.7 percent). The economy now aspires to attain the high middle-income status by 2030, and developed country status by 2041. To this end, in addition to factor accumulation (capital and labor), the economy requires to upgrade the skill base of the labor force to enhance the productivity.

It is argued that the contribution of productivity in the production process has been very low in Bangladesh. Almost 99 percent of the growth has been contributed by the accumulation of factors. The risk of growth relying solely on factor accumulation is that at one stage the diminishing marginal return of factors set in, which ultimately leads to a stagnation of growth. Though Bangladesh may be away from reaching the point of diminishing return, the country should consider improving the productivity of the labor force in order to maintain the high growth now and also to avoid ‘middle income trap’ in future.

The low level of skill and productivity of the Bangladeshi labor is endemic, as indicated by labor force survey data that more than 60% of the labor force has either no education (40%) or only up

to primary level (23%). With the approval of the National Education Policy (NEP), 2010 and the National Skill Development Policy (NSDP), 2011, the government embarked on major education and training reforms. In 2014 the government of Bangladesh has initiated the Skills for Employment Investment Program (SEIP), a multi-tranche financing facility supported by the Asian Development Bank (ADB) and Swiss Agency for Development and Cooperation (SDC), anchored in the National Skills Development Policy (NSDP), 2011. Under first and second Tranches, 223,000 have been trained and certified with a job placement rate of nearly 70 percent. The combined training target under the first two Tranches is 502,000. Female participation among trainees is more than 30 percent.

In this backdrop, BIDS has conducted a study of the labor market in the Leather and Footwear sector for Skill for Employment Investment Project (SEIP) with the following objectives.

1.2 Objective of the Study

The main objective of assignment is to analyze labor supply and demand over the next 10-year period (2020-2030) in order to assist the government and the private industry to better plan the capacity and quality of skill training systems according to the evolving skill/trade/market demands from rapidly growing industry sectors.

The second objective of the assignment is to determine sector priorities, assess skill gap by sector, analyze sector-wise occupational composition of employment (including gender composition of employment), assess occupation-wise training requirement by sector and trade.

1.2.1 Specific Objectives

The objective of this sub-component is to explore the labor market and overall skill gap in the Leather and footwear sector in Bangladesh. The specific objectives of this study are:

- i. To take a stock of the overall demand and supply of skill in Leather and Footwear sector and how these demand and supply will change in the next 10 years.
- ii. To measure various types of skill mismatch including skill gap, skill shortage, over-education and under-education, horizontal mismatch and other indicators of mismatch of the Leather and Footwear sectors.
- iii. To take stock of the government policy and interventions to produce and upgrade the skill for the Leather and Footwear sector.
- iv. To assess the type of training programs required to meet the skill demands in Leather and Footwear sector.

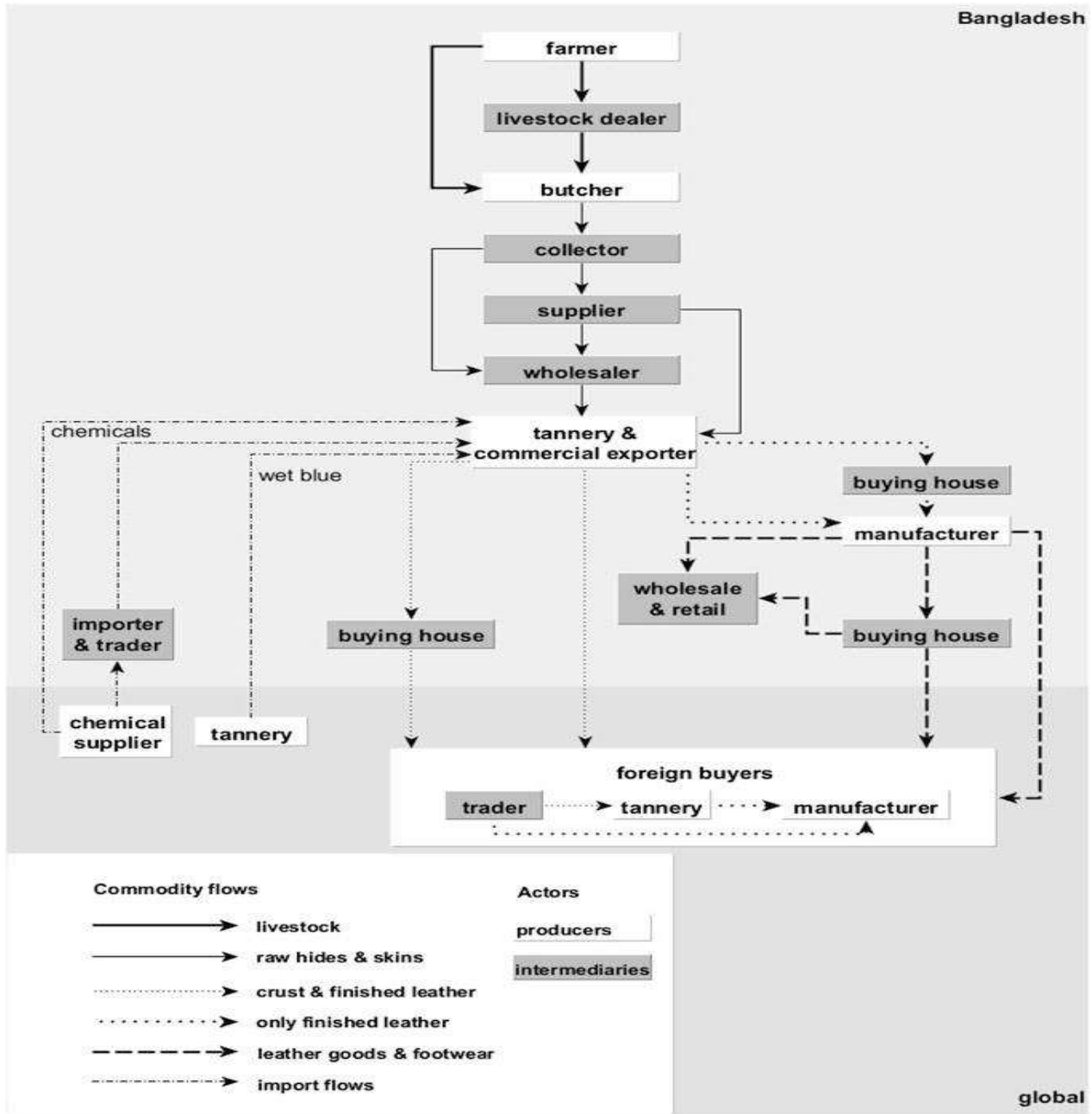
1.3 Literature Review

1.3.2 Literature Review on the Leather and Footwear Sector

Leather and footwear sector is an important sector for high value addition, employment generation, poverty alleviation, and income generation for the country (Khan, Hossain & Akbor, 2015). That is why the government has declared this sector as thrust sector in Industrial Policy 2016 (GoB, 2016). As already discussed in the previous section that this sector was established by the Non-Bengali migrants during the 1940s and later Bangladeshi entrepreneurs and workers learned and successfully run this sector as one of the leading exports earning sectors of the nation. The government shifted the leather industry from Narayanganj to Hazaribag in 1951. And later in 2003 the Bangladesh Small and Cottage Industries Corporation (BSCIC) started relocating an Industrial Park in Savar region of Dhaka to make this sector more environment friendly, which will ultimately increase the export of this sector attracting more international buyers (Ahmed and Karma, 2019). Shahriar et. al. (2021) identified few factors those needed to be addressed for achieving higher export targets in this sector, which are: (i) high trade and transport costs including the cumbersome and complex cross-border trading practices, which also increase the possibility of corruption, (ii) the trading of leather products is negatively influenced by the COVID-19 as well.

From livestock to manufacturers or buyers of the final products, the major players in the market are Tanneries and Leather and Footwear industries (Figure 1.2). Both crushed and finished leather as well as goods are exported from Bangladesh. Tanneries bought raw leather from traders and sell finished leather to local and international leather and footwear producers. For our study these two types of industries have to be captured to understand the skill gap on those industries. Three major leather trade associations play the vital role in this sector. Bangladesh Tannery Association (BTA) was established in 1958 (BLSC 2009) covering almost major tanneries of the country. Bangladesh Finished Leather, Leather goods and Footwear Exporters' Association (BFLLEA) started its journey in 1986, which covers export-oriented medium-sized and large tanneries that center on crust and finished leather along with footwear and leather goods production. The Leather Goods and Footwear Manufacturers and Exporters' Association of Bangladesh (LFMEAB) founded in 2003 with the leather footwear exporters. The leather goods and footwear subsectors have experienced dynamic growth until 2015.

Figure 1.2: Leather Value Chain in Bangladesh



Source: (Strasser, 2015)

Though Bangladesh covers only a 1% share of the world footwear market, but Bangladesh's leather sector is seeming competitive because of local cheap raw hide, low labour cost and a favorable business environment including government policy support with duty free access to major international markets (Paul, et. al. 2013). But currently this sector is facing serious problem of low productivity of labour and lack of CETP (Central Effluent Treatment Plant) in the industrial park.

1.3.2 Literature Review on Skill

This brief review of literature helps sharpen our understanding of various issues, forms and measurement of skill mismatch. These conceptual issues guide us to determine the scope of our study and also to design the questionnaire so that we can elicit the right information we want from the surveys.

A. Market failure: Transferable vs. non-transferable Skill

Employers have little incentives to invest in skill development of the employees if skill transferable in nature across firms or industries. Becker (1962) argued that firms will not pay for the training for general skill where return to firm be lower than the returns to employees. In this case, market fails and government should intervene. This provides a guideline for identifying the areas the government should consider to impart training on.

If the skill is very firm-specific, or transferable across only a small number of firms, wages may not rise as much as the productivity of the trained worker, and hence the firm can appropriate some of the returns to these skills. In such cases, the firm has a greater incentive to invest in an employee acquiring the skill.

B. Soft vs. Hard Skill

Soft skill includes non-cognitive abilities or personality traits such as teamwork, communication, work ethic, time management, work under pressure, etc. While there is an increasing evidence on the high return of soft skill, we do not consider capturing soft skill in this study. Our study focuses on hard skill only which includes specific skill to perform a specific job.

C. Skill Mismatch

Skill mismatch refers to various types of imbalances between skills offered and skills needed in the labor market. The broad concept of skill mismatch can assume different forms, such as vertical mismatch (over-education and under-education), horizontal mismatch (field of study), skill gaps, skill shortages and skill obsolescence. Skill mismatch, in all of its forms, is a major source of labor underutilization. For example, if workers in a firm are overeducated than is actually required for the particular job they are working in, this means that the firm is wasting a part of labor productivity which, if skill had matched perfectly, could have been used to generate a higher level of output. Similarly, under-education means that the firm is not operating at its full potential, losing

a part of output which could have been gained in the absence of the mismatch. All labor market actors, e.g. the government, corporations and workers need to ensure that the appropriate skill gets employed at the appropriate job in order to shape labor market outcomes which leads to higher growth, productivity and competitiveness (ILO, 2014). In developing countries, the first order problem is skill shortage and skill gap – there are not enough skilled workers available and if available they do not possess the required level of skill. In the following sections we will briefly discuss various forms of skill mismatch and how to measure them.

D. Forms of Skill Mismatch

Skill Gap

Skill Gap is a firm-level measure of skill mismatch based on employer's perception about the ability of employees. It measures the degree to which workers lack adequate competencies to successfully perform their current duties at job. This type of skill mismatch may cause lower output per worker, increase labor cost, incur additional costs on recruitment and training and adversely affect firm-level profitability.

Skill Shortage

Skill Shortage refers to a situation where employers cannot find suitable candidates with certain skills to fill job vacancies. Situations like this are characterized by market conditions where the demand for skills by employers cannot be met by the available supply at the equilibrium wage rates. An important feature of this firm-level measure is that it is directly linked with skill gap; whenever firms find it hard to fill vacancies due to lack of a particular skill-group, they are forced to recruit inadequately skilled workers into those positions

Over-education and Under-education

Measured at the level of individual's circumstances, over-education and under-education refer to the degree to which workers' education levels are above, below or poorly matched to those required for their current jobs. In case of job vacancies, the measure relates to the degree to which applicants' education level meet the hiring requirements. This is also known as vertical mismatch.

Horizontal Mismatch

Horizontal Mismatch refers to situations where workers get employed in jobs that are neither related to their education, nor to their skills and knowledge. The measure identifies any mismatch between the workers' primary field of study and the skill actually required for their current jobs.

E. Measurement Issues of Skill Mismatch

Skill Gap

Skill Gaps are typically measured from information perceived by the employer on skill insufficiencies among the workers in a firm. However, similar perception-based information is also collected from the employees themselves on their skills and expertise. For example, we can ask for responses in a scale from 1 (not at all) to 10 (to a very high extent) to the question: "To what extent does this work require more knowledge and skills than you can actually offer" with 9 and 10 denoting skill gaps. It is found in the literature that employees tend to over-report skill gap compared to employers, maybe because, while responding to questions on skill gap, the former are more likely to consider future career requirements, rather than immediate job requirements (McGuinness and Ortiz, 2016).

Skill Shortage

Surveys aiming to measure skill shortage generally involve asking two separate sets of question to employers, with one trying to establish the existence of unfilled or hard-to-fill vacancies and the other trying to gather information on the reasons underlying any recruitment difficulties. There are, however, some sources of bias in the estimate coming out of employers' responses. Employers tend to inflate the true magnitude of recruitment difficulties by adding to it their inability to offer necessary salary, working conditions to attract workers with relevant skills (Cedefop 2015).

Over-education and Under-education

There are three approaches in literature to measure over-education and under-education, namely subjective method, realized matches method and job evaluation method. The first two are the most commonly used methods in the literature. Each method has its own advantages and disadvantages and estimates from the three approaches might differ and produce conflicting results.

The subjective method collects a worker's self-assessed responses to questions "what are the level of qualifications required 'to get' or 'to do' your current job" and "what is the highest level of

qualification you have”. These responses are then compared to determine if the worker is overeducated (level of education higher than that is required), undereducated (level of education lower than that is required) or matched (level of education equal to the requirement). Variables denoting over-education and under-education might take both the forms of binary dummies and the years of over-education and under-education. The subjective method is relatively easier to apply in survey data. However, this method cannot be retrospectively applied to existing data and the method is prone to subjective bias.

The realized matching method or the empirical method estimates the mean or mode value of educational requirement for a particular job and compares it with each worker’s education level. The greatest advantage of this method is that it is applicable to existing micro datasets, such as national labor force survey, containing information on educational qualifications and occupation, hence facilitates cross-country comparisons. One of the disadvantages of the realized method is that instead of actual skill requirements, it takes an average measure of qualifications of all workers. Therefore, the method less closely captures the required education level “to do a job” compared to that of “to get a job”. Another drawback of the method is that due to limited sample size, it can only capture skill mismatch for broad occupational groups (e.g. health professionals), not at a disaggregated level for individual job title (e.g. nurse).

The job evaluation method uses the field expertise of professional job analysts to measure the educational requirements for different occupations. This approach is less prone to subjective bias as it uses specialized knowledge on the particular field and hence more accurate compared to the other methods.

Horizontal Mismatch

Measuring horizontal mismatch involves asking workers to assess the relevance of their current job with their field of study and expertise. Some studies measured the mismatch independently by comparing a field of study variable with occupation codes (Robst, 2007 and 2008 and Allen and de Weert, 2007).

F. Other indicators of mismatch

1. Relative wages

Any imbalance in the labor market is likely to be reflected in relative wages where wages and prices can move freely. As the market slowly adjusts to the shortage for particular skills, this trend will be observed as wage differential over time.

Chapter 2: Methodology

To study leather and footwear sector in Bangladesh we have to understand how the leather value chain in Bangladesh is organized. From livestock to manufacturers or buyers of the final products, the major players in the market are Tanneries and Leather and Footwear industries (discussed in detail in previous section). For our study these two types of industries have to be captured to understand the skill gap on those industries.

2.1 Sample Size Determination

The leather sector² (leather and leather goods including leather footwear) is the second largest export sector in Bangladesh after ready-made garments (RMG). There are 930 establishments in the leather sector employing around 75,500 persons, majority (75 percent) of them are employed in the leather footwear (BBS, 2012). The leather sector can be categorized into three types based on their products: tannery, finished leather and leather goods, and footwear. Those establishments are associated to Bangladesh Tanners Association (BTA); Bangladesh Finished Leather, Leather Goods and Footwear Exporters' Association (BFLLFEA) and Leather goods and Footwear Manufacturers and Exporters' Association of Bangladesh (LFMEAB).

To fulfill the aims and objectives of the study, we have chosen the sample establishment for the field survey to collect information on skill demand and their future needs. In determining the sample size of the factory survey, the study used the methodology widely used by the World Bank. The following formula has been used in determining the sample size:

$$n = \left[\frac{1}{N} + \frac{N-1}{N} \cdot \frac{1}{PQ} \left(\frac{k}{Z_{1-\alpha/2}} \right)^2 \right]$$

Where, N=population size, P=population proportion, Q=1-P, k=desired level of precision, $Z_{1-\alpha/2}$ is the value of the normal standard coordinate for a desired level of confidence, $1-\alpha$.

Given the limitations with the data, time and budget constraints, we use a 90 percent confidence interval and 7.5 percent level of precision, which is also used by the World Bank at the World

²This industry includes tanning and dressing of leather; manufacture of luggage, handbags, saddler and harness; dressing and dyeing of fur, manufacturing of footwear etc.

Bank Enterprise Survey 2009. Here, the population is the number of leather factories, which are 411³. Thus, assuming these parameters, the estimated sample size using the above formula is 93.

This study applied a stratified multistage sampling procedure considering geographical location, nature and size of factories to select the desired 93 enterprises. Therefore, the study randomly selected 93 leather factories considering their location, nature and size.

2.2 Data Collection Tools

To fulfill the objectives of the study, both quantitative and qualitative data have been collected. It employed a variety of methodologies such as document review, questionnaire survey using structured questionnaire with concerned enterprises and employees and Key Informant Interview (KIIs) with government officials/leaders/representatives of associations. For the questionnaire survey, a pre-tested (on December 2020) structured questionnaire has been used. Guideline/Checklist are developed for KIIs to obtain information like skill gap/shortage, COVID-19 impacts for the sector, skill needs and labor demands, future projections for demand of labor, important suggestions for the development of the sector etc. Total of 93 enterprises survey (from three categories mentioned in previous section) and 902 employees survey from different categories and skill have been conducted from Leather and Footwear industries and also from Tanneries (Table 2.1, 2.2 & 2.3). Employee survey covers all types of occupations on those industries from higher officials to elementary workers (Table 2 & 3). Employee survey has major focus related to production level workers, which covers almost 47.34% Plant and machine operators for Leather and Footwear industries and 55.56% for Tanneries (Table 2.1 & 2.2). In addition eight KIIs have been conducted with association leaders/industrialists and one consultation meeting with industrialists or higher authorities has been completed (Annex-1).

³ The number of enterprise is sum of the member of three associations: Bangladesh Tanners Association-148; Bangladesh Finished Leather, Leather Goods and Footwear Exporters Association-137 and Leather goods and Footwear Manufacturers and Exporters Association of Bangladesh-126.

Table 2.1: List of Surveyed Industries and Employees

Industry	Number of Surveyed Industry	Percentage	Number of Surveyed Employees	Percentage
Leather and Footwear	38	40.86	414	45.90
Tannery	55	59.14	488	54.10
Total	93	100	902	100

Source: BIDS-Skill Survey 2020-2021

Table 2.2: List of Surveyed Employees from Leather and Footwear Industries

Occupation Category	Number	Percentage
Managers	16	3.86
Professionals	49	10.04
Technicians and associate professionals	10	2.05
Service and sales workers	10	2.05
Craft workers & plant operators	140	28.69
Plant and machine operators, and assemblers	231	47.34
Elementary occupations	32	6.56
Full Sample	488	100

Source: BIDS-Skill Survey 2020-2021

Table 2.3: List of Surveyed Employees from Tanneries

Occupation Category	Number	Percentage
Managers	16	3.86
Professionals	30	7.25
Technicians and associate professionals	10	2.42
Service and sales workers	16	3.86
Craft workers & plant operators	81	19.57
Plant and machine operators, and assemblers	230	55.56
Elementary occupations	31	7.49
Full Sample	414	100

Source: BIDS-Skill Survey 2020-2021

2.3 Limitations

At the beginning of the survey conducted for this study a list of industries was collected from three associations (BTA, BFLLEA, LFMEAB), and then 93 industries were randomly selected from those lists using stratified multistage sampling. Because of the Covid-19 situation, it took time to start the survey and have to make few changes (around 10%) operationalizing the survey at the

field level. Most of the time industry owners hesitated to permit entrance of the enumerators to their industries due to Covi-19. Finally, the request from SEIP project and Ministry of Industry helped a lot to receive access to those industries. With this permission, we have to take extra health related measures even for the enumerators according to the guideline of WHO (World Health Organization) and Ministry of Health, Bangladesh. All these measures finally delayed the survey process and incurred extra cost and time to conduct questionnaire survey and to gather qualitative primary information. This study surveyed representative numbers of Tanneries in Bangladesh, but in case of Leather and Footwear primary data are collected from a representative number of mainly export oriented and large industries. Huge number of industries who mainly supply leather and footwear for local market and belong to medium, small, micro and cottage (Leather and Footwear) industries kept beyond the antenna of this study. Those can be covered in future research.

Chapter 3: Understanding the Skill Gap in Tanneries and Leather & Footwear Industries

Previous studies reveal that if the skill is very firm-specific, or transferable across only a small number of firms, wages may not rise as much as the productivity of the trained worker, and hence the firm can appropriate some of the returns to these skills. In such cases, the firm has a greater incentive to invest in an employee acquiring the skill. Skill Gaps are typically measured from information perceived by the employer on skill insufficiencies among the workers in a firm. That is why, this chapter will deal with the survey findings from the enterprises related mainly on their production, labor skill and related skill. However, similar perception-based information is also collected from the employees themselves on their skill and expertise, which is discussed in the next chapter.

3.1 Findings from the Tannery Survey

Tannery plays a vital role in the value chain of leather and footwear industries. Table 3.1 shows that this study includes 38 tannery enterprises which employ 2232 employees in total. It shows that overall output per enterprise in 2019 stands out 2574 (in lac taka) while the export per enterprise is 1545 (in lac taka). Hence, export to output ratio per enterprise is around 60%. It means that nearly 60% of the revenues in the tannery industry of Bangladesh comes from the export earnings. Moreover, the capital-labor ratio per enterprise per employee stands at 7.44 (in lac taka).

Table 3.1: Brief Description of the Surveyed Tanneries

Indicators	Full sample
Employment (in Person)	2232
No. of Enterprises	38
Output per enterprise (2019) in lac taka	2573.68
Export per enterprise (in lac taka)	1544.74
Capital stock per enterprise (in lac taka)	436.84
Capital labor ratio (in lac taka)	7.44
Export/Output ratio	60.02

Source: BIDS-Skill Survey 2020-2021

Table 3.2: Description of Employment level and conditions of employees across firms

Occupation	BSCO Code 1 digit	No. of firms	Total Employment	Employment Per Enterprise	Average age	Monthly mean salary	Percentage of female workers
Managers	1	38	189	4.97	44	57268	1.63
Professionals	2	28	107	3.82	36	29394	2.21
Clerical support staff	4	13	31	2.38	36	20730	0.00
Service and sales workers	5	30	87	2.9	40	11911	0.00
Craft and related trades workers	7	38	929	24.45	34	21579	1.01
Plant and machine operators, and assemblers	8	18	173	9.61	34	18674	1.85
Elementary occupations	9	33	716	21.7	30	10418	3.92
Full Sample		38	2232	11.27	37	25766	1.66

Source: BIDS-Skill Survey 2020-2021

Table 3.2 reports the description of the employment level, average employment in years, average age and salaries of the employees across the occupation categories of the Tannery industry in Bangladesh. Moreover, Percentage of female workers and the extent of job formality in employment has also been reported. Craft and related trades workers (42%), followed by elementary occupations (32%) are the dominant in the Tannery industry of Bangladesh. Besides, Plant and machine operators, and assemblers and Managers each has roughly 8% share in total employment in the Tannery industry of Bangladesh. These four occupations together consist of the 90% of the total employment in the Tannery industry. The number of observations (firms) column shows that all 38 firms covered in this study have Craft and related traders, and managers employed. Importantly, only 13 firms employed the Clerical support staff category employees. The average age of the employees across categories of occupations ranges from 30 (Elementary occupations) to 44 (Managers). The mean age of the employees in the Tannery industry is 37 years old.

As expected, the average monthly salary is the highest for the manager category employees (Table 3.2). Though Craft and related trades workers, and Elementary occupation categories occupy the 74% of the total employment in the Tannery industry, their respective average monthly salaries stand at 21579 Taka (\$254), and 10418 Taka (\$123), respectively, assuming an exchange rate of

85 taka per dollar. Overall, the mean monthly salary irrespective of the occupation categories is 25766 Taka (\$303). In the Tannery industry of Bangladesh, female employees consist of roughly 1.7% of total employment. It implies that the Tannery is mainly a male-dominated industry. The highest female participation is in the elementary occupation categories accounting for roughly 4% in this particular category.

Table 3.3: Extent of Formality- contract type with respect to BSCO 1-digit level occupation

Occupation	BSCO Code 1 digit	No. observations (firms)	Employment	Percentage of permanent workers with written contract	Percentage of temporary workers	Percentage of workers with full time contact	Percentage of workers with part time contract
Managers	1	38	189	81.00	19	95.74	4.26
Professionals	2	28	107	76.95	23.05	96.43	3.57
Clerical support staff	4	13	31	66.67	33.33	89.74	10.26
Service and sales workers	5	30	87	78.33	21.67	100.00	0.00
Craft and related trades workers	7	38	929	56.96	43.04	90.35	9.65
Plant and machine operators, and assemblers	8	18	173	50.7	49.3	94.25	5.75
Elementary occupations	9	33	716	51.07	48.93	90.22	9.78
Full Sample		38	2232	66.73	33.27	94	6

Source: BIDS-Skill Survey 2020-2021

Tables 3.3 shows the extent of formality in a broader perspective- contract type with respect to BSCO 1-digit level occupation. The extent of job formality in the Tannery industry has been analyzed with respect to the job permanency (Permanent versus temporary employees) and engagement in work time (fulltime versus parttime). Table 3 also shows the extent of formality-contract type with respect to BSCO 1-digit level occupation. Among all surveyed employees in the Tannery industry, around 67% of them are permanent. Closer inspection reveals that around 43% of the Craft and related traders, 49% of the Plant and machine operators, and assemblers, and 49% of the Elementary occupation employees work as temporary employees. However, around 94% of the total employees are fulltime workers. Hence, it may be safely concluded that the extent of job formality in the Tannery industry of Bangladesh is very low.

Table 3.4: Comparative Changes in Employment during 2018 and 2019

Occupation	BSCO Code 1 digit	Employees hired in the years		Employees left in the years		Net inclusion in employment in 2018 Net inclusion in employment in 2019 Differences in Net inclusion in employment in 2018-19		
		2018	2019	2018	2019			
Managers	1	3	1	1	3	2	-2	-4
Professionals	2	1	0	1	3	0	-3	-3
Clerical support staff	4	0	1	0	0	0	1	1
Service and sales workers	5	1	1	2	3	-1	-2	-1
Craft and related trades workers	7	74	122	73	74	1	48	47
Plant and machine operators, and assemblers	8	8	15	5	28	3	-13	-16
Elementary occupations	9	55	79	67	107	-12	-28	-16
Full Sample		142	219	149	218	-7	1	8

Source: BIDS-Skill Survey 2020-2021

Table 3.4 illustrates the comparative changes in Employment during 2018 and 2019 (the normal years without being affected by Covid-19 pandemic). Net inclusion in employment in a particular year (i) is defined as the total hiring in year (i) less of the total firing in year (i). If this figure is positive, it means that more employees are hired than fired. In other words, the industry employs people and demand employees. The net inclusion in employment of the Tannery industry of Bangladesh in the year 2018 and 2019 registered to be -7 and 1 employees, respectively. In both years, this industry employed more technical category and primary profession category employees. The differences in net inclusion in employment during 2018-19 is 8, which implies that 8 employees were more recruited in 2019 than in 2018.

3.2 Occupation by Qualification Matrix in Tanneries

This section sheds light on the desired versus currently held workforce's educational attainment of the Tannery industry in Bangladesh. The comparative analysis between Table 3.5 and 3.6 reveal that around 77% of the managers are desired to have at least Bachelor degree (the figure sums both bachelors and masters' percentages) degree, but in reality, 69% of the currently held workforce at managerial level have at least Bachelor (the figure sums both bachelors and masters' percentages) degree. This basically shows the gap in educational qualifications of the employees across desired level and obtained level. The similar pattern follows for the other occupation categories.

Table 3.5: Desired Occupation by Qualification Matrix-Level of Education

BSCO Code	Occupation	Illiterate	Class 1 to 5	Class 6 to 10	SSC equivalent	HSC equivalent	Diploma	Vocation	Bachelor	Masters
1	Manager	0	3.25	0	2.44	13.82	3.25	0	30.89	46.34
2	Professional	0	2.86	0	5.71	5.71	37.14	0	28.57	20
3	Technician and associate professional									
4	Clerical support staff	0	0	0	20	13.33	6.67	6.67	26.67	26.67
5	Service and sales staff	6.06	21.21	60.61	9.09	0	0	0	3.03	0
6	Skilled agricultural, forestry and fishery workers									
7	Technical workers	2.36	9.45	36.22	26.77	10.24	4.72	3.15	7.09	0
8	Factory and machine operators and machine assemblers	0	30.77	38.46	15.38	7.69	3.85	0	3.85	0
9	Primary profession	11.54	32.69	48.08	3.85	0	0	0	3.85	0
	Total	2.68	11.92	24.57	12.41	8.76	6.08	1.22	15.82	16.55

Source: BIDS-Skill Survey 2020-2021

Table 3.6 shows that around 91% of the Service and sales staff, 84% of the technical workers, 96% of the Factory and machine operators and machine assemblers, and all of the Primary profession employees (100%) do not study even up to SSC level. The same figure for overall employees stands at 57.21%.

Table 3.6: Occupation by Qualification Matrix -Average Qualification Level Currently Held by the Workforce -Level of Education

BSCO Code	Occupation	Illiterate	Class 1 to 5	Class 6 to 10	SSC equivalent	HSC equivalent	Diploma	Vocation	Bachelor	Masters
1	Manager	0.83	1.67	4.17	4.17	12.5	7.5	0	35	34.17
2	Professional	2.86	0	5.71	5.71	0	40	0	37.14	8.57
4	Clerical support staff	0	0	13.33	13.33	26.67	6.67	6.67	13.33	20
5	Service and sales staff	0	33.33	57.58	0	3.03	3.03	0	3.03	0
7	Technical workers	0.82	22.13	39.34	21.31	8.2	4.1	2.46	1.64	0
8	Factory and machine operators and machine assemblers	0	42.31	38.46	15.38	3.85	0	0	0	0
9	Primary profession	5.88	62.75	31.37	0	0	0	0	0	0
	Total	1.49	20.65	25.37	9.7	7.71	7.46	1	14.93	11.69

Source: BIDS-Skill Survey 2020-2021

Table 3.7 describes the differences in educational attainment of the workforce in the Tannery industry with respect to the educational background like science, arts and commerce. For example, around 19% of the managers are desired to have Arts background while around 24% of the Arts background are at present working in the managerial posts in the Tannery industry. This phenomenon applies mostly to all categories of occupations. However, around 64% of the enterprises reported to have no idea about the desired background of the workforce employed across various occupation levels.

Table 3.7: Desired versus Currently held Occupation by Qualification Matrix-Field of Education

BSCO code 1-digit	Occupation	Desired Qualifications				Average qualification level currently held by workforce		
		Science	Arts	Commerce	Do not Know	Science	Arts	Commerce
1	Manager	11.38	19.51	42.28	26.83	18.18	23.97	37.19
2	Professional	62.86	0	11.43	25.71	62.86	0	14.29
3	Technician and associate professional							
4	Clerical support staff	13.33	0	40	46.67	20	13.33	26.67
5	Service and sales staff	0	0	0	100	3.33	3.33	3.33
6	Skilled agricultural, forestry and fishery workers							
7	Technical workers	8.06	2.42	3.23	86.29	4.88	8.94	1.63
8	Factory and machine operators and machine assemblers	11.54	0	0	88.46	0	7.69	0
9	Primary profession	2.04	0	0	97.96	0	2.13	0
	Total	12.9	6.7	16.38	64.02	13.6	11.59	14.36

Source: BIDS-Skill Survey 2020-2021

3.3 Skill Shortage

This section describes the existent skill shortage in the Tannery industry of Bangladesh. Skill shortage is described in terms of gender preferences across occupations, extent of physical labor, extent of difficulties in filing up the vacancies and time taken to fill up the vacant positions.

Table 3.8: Gender Preferences across Occupations in the Tannery Industry

BSCO code 1-digit	Occupations	Male	Female	No Preference
1	Manager	77.5	0	22.5
2	Professional	77.14	5.71	17.14
4	Clerical support staff	38.46	7.69	53.85
5	Service and sales staff	93.94	3.03	3.03
7	Technical workers	76.61	0	23.39
8	Factory and machine operators and machine assemblers	77.78	0	22.22
9	Primary profession	45.83	12.5	41.67
	Total	73.5	2.5	24

Source: BIDS-Skill Survey 2020-2021

Table 3.8 illustrates the gender preferences across occupations (BSCO code 1-digit level) in the Tannery Industry. As this study mentioned Tannery industry to be a male-dominated industry, the veracity of this statement is proved once again in Table 3.8. Across the occupation categories, 74% prefer male for employment while around 24% accounted for no gender preference. Only 3% preferred females for employment in the Tannery industry. Females are mostly preferred for primary profession.

Table 3.9: Extent of Physical Labor across BSCO Code 1-digit level Occupations in the Tannery Industry

BSCO code 1-digit	Occupations	1 to 3 (Low level)	4 to 6 (Medium level)	7 to 10 (High level)	Mean
1	Manager	27.5	55.83	16.67	4.7
2	Professional	14.29	65.71	20	5.1
4	Clerical support staff	15.38	46.15	38.46	5.5
5	Service and sales staff	24.24	57.58	18.18	4.9
7	Technical workers	3.23	33.06	63.71	7.3
8	Factory and machine operators and machine assemblers	0	37.04	62.96	7.7
9	Primary profession	16.67	27.08	56.25	6.5
	Total	15	44.75	40.25	6.0

Source: BIDS-Skill Survey 2020-2021

Table 3.9 shows the extent of physical labor across BSCO code 1-digit level occupations in the Tannery industry. It reports that technical workers (64%), factory and machine operators and

machine assemblers (63%) and primary profession (56%) employees on average experience high (the mean also exceeding a value of 7) extent of physical labor (7 to 10). On the contrary, the manager, professional, Technicians and associate professional level employees perform jobs on an average with medium level or low level of physical labor. These findings conform to the phenomenon that white-collar job holders like managers, professionals etc. undergo less physical labor than the blue-collar jobs like technical workers, and primary profession workers etc. and completely match with the expectation and reality. Overall, roughly 40% of the Tannery industry employees experience high (7 to 10) extent of physical labor with a mean level of 6.

Table 3.10: Extent of Difficulties in filing up the vacancies across Occupations in the Tannery

BSCO code 1-digit	Occupations	1 to 3 (Low level)	4 to 6 (Medium level)	7 to 10 (High level)	Mean	No. of Unfilled vacancies currently	Total Employment level at present	Unfilled vacancies as % of total current employment
1	Manager	24.17	58.33	17.5	4.8	0	189	0.0
2	Professional	22.86	40	37.14	5.5	2	107	1.9
4	Clerical support staff	46.15	53.85	0	3.2	6	31	19.4
5	Service and sales staff	51.52	42.42	6.06	3.5	0	87	0.0
7	Technical workers	29.84	44.35	25.81	4.8	21	929	2.3
8	Factory and machine operators and machine assemblers	22.22	74.07	3.7	4.4	0	173	0.0
9	Primary profession	56.25	39.58	4.17	3.5	10	716	1.4
	Total	32.5	49.75	17.75	4.5	39	2232	1.7

Source: BIDS-Skill Survey 2020-2021

Table 3.10 illustrates the extent of difficulties in filing up the vacancies across BSCO code 1-digit level occupations in the Tannery industry of Bangladesh. It shows that technicians and associate professionals (37%), and technical workers (26%), are the top two occupation-categories that experience high (7 to 10) extent of difficulties in filing up the vacancies. The overall mean value (4.5) of the extent of difficulties in filling-up vacancies suggests that there exists skill shortage in the Tannery industry of Bangladesh. Unfilled vacancies constitute around 1.7% of total current employment in the Tannery industry. It may imply that the Tannery sector is burdened with no skill and semi-skilled workers or this sector at present may experience economic downturn.

Table 3.11: Time taken to fill up the Vacant Positions across Occupations in the Tannery Industry

Occupation (BSCO Code 4 digit)	Immediately	Less than a week	More than a week but less than a month	More than a month
Managing Director	0.00	28.00	56.00	16
Executive Director	0.00	16.67	66.67	16.67
Senior General Manager	14.29	0.00	57.14	28.57
General Manager	20.00	0.00	70.00	10
Deputy General Manager	0.00	0.00	100.00	0
Manager	5.71	31.43	57.14	5.71
Assistant General Manager	0.00	70.00	10.00	20
Engineer and other professionals	0.00	40.00	48.00	12
Secretarial/Clerical	0.00	61.54	23.08	15.38
Supervisors and line leaders	8.57	40.00	48.57	2.86
Sewing Operators	0.00	100.00	0.00	0
Machine Operator and Welder/Electrician	5.71	31.43	54.29	8.57
Cutting Operator and Aged Colors	0.00	50.00	50.00	0
Lasting, Setting and Assembling	11.11	22.22	66.67	0
Inventory, Material Selection and Completion	0.00	14.29	85.71	0
Quality Controller Operator	12.50	25.00	62.50	0
Accountant	0.00	50.00	50.00	0
Chairman	0.00	0.00	100.00	0
Chemist	0.00	33.33	0.00	66.67
Driver	0.00	0.00	100.00	0
Fitterman	7.14	57.14	35.71	0
Floor moving worker	0.00	100.00	0.00	0
Hanging worker	0.00	100.00	0.00	0
Marketing officer	0.00	33.33	66.67	0
Packing & floor moving worker	0.00	100.00	0.00	0
Peon	13.33	36.67	50.00	0
Porter	16.67	38.89	44.44	0
Sample operator	0.00	50.00	50.00	0
Security guard	3.33	43.33	53.33	0
Storekeeper	0.00	0.00	66.67	33.33
Table operator	0.00	40.00	60.00	0
Total	5.50	37.25	51.00	6.25

Source: BIDS-Skill Survey 2020-2021

Table 3.11 reports the time taken to fill up the vacant positions across BSCO Code 4-digit level Occupations in the Tannery Industry. Overall, 51% of the vacancies irrespective of the occupational categories take more than a week but less than a month to fill up the positions. It takes more than a month to fill up the vacant positions for Chemist (66.67%), Storekeeper (33.33%) and Machine Operator and Welder/Electrician (8.5%), Service and sales workers (3%) and Craft and related trades workers (3%). Overall, 38% and 5% of the vacant positions in the Tannery industry takes “less than a week” and are filled-up “immediately”, respectively. This finding shows that vacant positions take less than a month to be filled up.

Table 3.12: Main Causes for Hard-To-Fill Vacancies across Occupations in the Tannery

BSCO Code 1-digit	Occupation	Poor salary and others benefits	Low number of applicants with the required skills	Low number of applicants with the required attitude, motivation or personality	Low number of applicants generally	Lack of work experience the company demands	Lack of qualifications the company demands	Poor career progression /lack of prospects	Job entails shift work/unsociable hours	Too much competition from other employers	Seasonal Work
1	Manager	15.4	84.6	84.6	30.8	76.9	92.30	23.10	23.10	23.10	23.10
2	Professional	61.5	84.6	84.6	53.8	53.8	61.50	61.50	46.20	15.40	7.70
7	Technical workers	69.2	76.9	69.2	69.2	30.8	23.10	69.20	84.60	38.50	46.20
8	Factory and machine operators and machine assemblers	52	80	52	45.8	48	44.00	40.00	56.00	12.00	28.00
9	Primary profession	100	100	50	100	50	50.00	50.00	0.00	0.00	0.00
	Total	51.5	81.8	68.2	50.8	51.5	53.00	47.00	51.50	19.70	25.80

Note: The Color indicates: =1st cause; =2nd cause; =3rd cause

Source: BIDS-Skill Survey 2020-2021

Table 3.12 illustrates the main causes for hard-to-fill vacancies across BSCO code 1-digit level occupations in the Tannery industry. There is no single cause that affect the hard-to-fill vacancies for most of the occupations. “Low number of applicants with the required attitude, motivation or personality”, appear to be the main cause for the Hard-To-Fill vacancies for exactly two occupation categories. Around 52% of the enterprises think that “Poor salary and others benefit” is a cause for Hard to fill vacancies. In this way, enterprises consider Low number of applicants with the required skill (82%), Low number of applicants with the required attitude, motivation or personality (68.2%) and Lack of qualifications the company demands (53%) to be the first three causes of hard to fill vacancies.

3.4 Actions Taken/Will Be Taken in Near Future to Address Hard-To-Fill Vacancies

After discussing the impact of hard-to-fill vacancies, this study now shifts its focus on what actions should be taken or will be taken in near future to address hard-to-fill vacancies. Table G.5.1 shows that increasing salaries could solve the hard-to-fill vacancy problem for most of the occupations (overall, 96%). It may be argued that increased salaries might attract the more skilled people towards the Tannery industry and the problem of hard-to-fill vacancy problem can be resolved to a greater extent. Moreover, innovating new recruitment methods or channels and imparting training to the existing workforce involved in the Tannery industry have been widely proposed. Hence, these findings corroborate the idea that hard-to-fill vacancies arise due to the skill shortage that is why, it is suggested to impart training to the existing labor force involved in the Tannery industry beside increasing salaries. It particularly appears to be a third suggestion that can be taken in near future to address hard to fill vacancies in the Tannery industry. Moreover, the purview of training should be extended to such a level where the new comers in the market can as well avail of training facilities.

Table 3.13: Actions Taken/Will Be Taken in Near Future to Address Hard-To-Fill Vacancies in the Tannery

BSCO Code 1-digit	Occupation	Increasing salaries	Increasing the training given to your existing workforce	Redefining existing jobs	Increasing advertising/ recruitment spend	Increasing / expanding training programs (e.g., partnership with local or international consultants/training institutes)	Using new recruitment methods or channels	Recruiting workers who are foreigners
1	Manager	100.00	85.71	71.43	71.43	71.43	100.00	14.29
2	Professional	100.00	20.00	20.00	30.00	20.00	30.00	10.00
7	Technical workers	100.00	33.33	26.67	33.33	26.67	33.33	
8	Factory and machine operators and machine assemblers	95.00	25.00	25.00	20.00	20.00	25.00	5.00
9	Primary profession	50.00	50.00	50.00	50.00	50.00	50.00	
	Total	96.30	35.19	31.48	33.33	29.63	38.89	5.66

Source: BIDS-Skill Survey 2020-2021

3.5 Action Taken or will be Taken in Near Future to Address the Problems of Skill Gap

What actions should be/will be taken in near future to address the problem of skill gap across occupations in the Tannery industry need to be understood for the development of this sector. More staff appraisals / performance reviews (98%), training activity of practical work (91%), and

reallocating work appear to be the first three important actions for addressing the problem of skill gap in the Tannery industry of Bangladesh.

Table 3.14: Actions Taken/Will Be Taken in Near Future to Address the Problem of Skill Gap in the Tannery Industry

BSCO Code 1-digit	Occupation	Increase training activity / spend or increase / expand trainee programs	Reallocating work	recruitment activity / spend	More staff appraisals / performance reviews	Advisor recruitment	More supervision of staff	Recruiting workers who are foreigners	Changing working practice	training activity of practical work
1	Manager	75.00	75.00	37.50	100.00	50.00	75.00		87.50	62.50
2	Professional	50.00	100.00	33.33	100.00	50.00	83.33	20.00	66.67	100.00
4	Clerical support staff	100.00	100.00	100.00	100.00	100.00	100.00		100.00	100.00
5	Service and sales staff	100.00	100.00	100.00	100.00	100.00	100.00		100.00	100.00
7	Technical workers	52.94	94.12	53.33	94.12	50.00	88.24	2.50	82.35	94.12
8	Factory and machine operators and machine assemblers	13.33	86.67	28.57	100.00	6.67	86.67	7.14	93.33	93.33
9	Primary profession	57.14	100.00	71.43	100.00	50.00	100.00		71.43	100.00
	Total	48.21	91.07	47.17	98.21	40.74	87.50	7.55	83.93	91.07

Source: BIDS-Skill Survey 2020-2021

3.6 Types of Training Needed

It is important to understand what are the most important trainings needed across occupations in the Tannery industry of Bangladesh. Table 3.15 is of particular interest since it charts what training should be organized to get rid of the skill shortage and skill gap problem existing in the Tannery industry of Bangladesh. Types of trainings vary across occupational groups. For example, work related trainings, safety training and training to adapt new technology are the most three important trainings needed by the technical workers, Factory and machine operators and machine assemblers, and primary profession employees in the Tannery industry.

Table 3.15: The Most Important Trainings Needed across Occupations in the Tannery Industry

BSCO-1	BSCO-4	Training name	
Manager	General Manager	Work related training	25.0
		Management training	25.0
		Training in new technology	50.0
Manager	Manager	More additional training for new officers-employees	25.0
		Health and Safety / First Aid Training	12.5
		Management training	62.5
	Supervisors and line leaders	Basic training for new officers and employees	28.0
		More additional training for new officers-employees	4.0
		Health and Safety / First Aid Training	12.0
		Work related training	20.0
		Training in new technology	28.0
		Management training	8.0
Technical workers	Lasting, Setting and Assembling	Health and Safety / First Aid Training	100.0
Technical workers	Quality Controller Operator	Basic training for new officers and employees	11.1
		Others	11.1
		Health and Safety / First Aid Training	11.1
		Work related training	22.2
		Management training	11.1
		Training in new technology	33.3
Factory and machine operators and machine assemblers	Drum helper	Health and Safety / First Aid Training	50.0
		Work related training	25.0
		Training in new technology	25.0
Factory and machine operators and machine assemblers	Drum man	Basic training for new officers and employees	40.0
		More additional training for new officers-employees	20.0
		Health and Safety / First Aid Training	20.0
		Work related training	10.0
		Management training	10.0
Factory and machine operators and machine assemblers	Helper	Basic training for new officers and employees	7.7
		Others	15.4
		Health and Safety / First Aid Training	30.8
		Work related training	23.1
		Training in new technology	23.1
Factory and machine operators and machine assemblers	Lasting operator	Basic training for new officers and employees	66.7
		Health and Safety / First Aid Training	33.3

BSCO-1	BSCO-4	Training name	
Factory and machine operators and machine assemblers	Machine operator	Basic training for new officers and employees	11.9
		More additional training for new officers-employees	2.4
		Health and Safety / First Aid Training	23.8
		Work related training	26.2
		Supervision / Management training	4.8
		Management training	7.1
Professional	Mechanical/Mechanical engineer	Basic training for new officers and employees	28.6
		Training in new technology	42.9
		Work related training	28.6
		Basic training for new officers and employees	40.0
		More additional training for new officers-employees	20.0
		Training in new technology	20.0
Primary profession	Porter	Work related training	20.0
		Training in new technology	100.0
		Work related training	100.0
		Training in new technology	100.0
Technician and associate professional	Production in charge	Training in new technology	100.0
Technician and associate professional	Technician	Work related training	100.0
Technical workers	Cutting operator	Basic training for new officers and employees	22.2
		More additional training for new officers-employees	11.1
		Health and Safety / First Aid Training	44.4
		Work related training	11.1
		Training in new technology	11.1
Professional	Admin	Basic training for new officers and employees	25.0
		Management training	33.3
		Supervision/Management training	33.3
		Work related training	8.3
Professional	Engineer	Basic training for new officers and employees	22.2
		Training in new technology	22.2
		Health and Safety/First Aid Training	22.2
		Work related training	33.3
Manager	Production manager	Work related training	33.3
		Training in new technology	33.3
		Management training	33.4
Factory and machine operators and machine assemblers	Skilled labor	Basic training for new officers and employees	100.0
Manager	Human resource officer	Basic training for new officers and employees	33.3
		Supervision / Management training	33.3
		Management training	33.4

BSCO-1	BSCO-4	Training name	
Factory and machine operators and machine assemblers	Speed machine operator	Health and Safety / First Aid Training	100.0
Factory and machine operators and machine assemblers	Splinting machine operator	Work related training	100.0
Professional	Leather Engineering	Training in new technology	100.0
Factory and machine operators and machine assemblers	Machine helper	More additional training for new officers-employees	25.0
		Health and Safety / First Aid Training	8.3
		Work related training	33.3
		Training in new technology	33.3
Factory and machine operators and machine assemblers	Flashing machine operator	Work related training	100.0

Source: BIDS-Skill Survey 2020-2021

100% of the Lasting, Setting and Assembling workers asked for Health and Safety/First Aid training, where 66.7% Lasting Operators need basic training. SEIP can use this table to operationalized their future training in the Tannery sector.

3.7 Extent of Automation and Labor Displacement

It seems from the survey that the industry will not be so much affected by automation technology. Table 3.16 shows the extent of automation technology in next 5-10 years and the resulting extent of job displacement across BSCO code 1-digit level occupations in the Tannery industry of Bangladesh.

The enterprises think that automation technology will replace around 17% of the technical workers and 12% of the professional jobs in next 5-10 years. Consequently, 14% of the technical workers and 12% of the professional employees belong to the high level of job displacement due to the upcoming automation technology in next 5-10 years. Overall, the existing occupations in the Tannery industry are subject to lower extent of automation technology in next 5-10 years. As a result, there will be a low extent of job displacement (the mean value being around 3) due to automation technology.

Table 3.16: Extent of Automation Technology in next 5-10 Years

BSCO code 1-digit	Occupations	To what extent this occupation is subject to automation technology in next 5-10 years				Due to automation, what will be the extent of job displacement			
		1 to 3 (Low level)	4 to 6 (Medium level)	7 to 10 (High level)	Mean	1 to 3 (Low level)	4 to 6 (Medium level)	7 to 10 (High level)	Mean
1	Manager	78.85	15.38	5.77	2.2	84.62	7.69	7.69	2.0
2	Professional	76.47	11.76	11.76	2.6	82.35	5.88	11.76	2.3
4	Clerical support staff	62.5	37.5	0	3.1	87.5	12.5	0	2.0
5	Service and Sales Staff	70.59	29.41	0	2.5	61.11	33.33	5.56	2.7
7	Technical workers	39.53	43.02	17.44	4.2	39.53	46.51	13.95	4.0
8	Factory and machine operators and machine assemblers	33.33	61.11	5.56	4.1	33.33	61.11	5.56	4.2
9	Primary profession	52	48	0	3.1	60	40	0	2.8
	Total	55.61	34.98	9.42	3.3	58.48	32.59	8.93	3.1

Source: BIDS-Skill Survey 2020-2021

3.8 Labor Demand Projection for the Next 10 Years

This section discusses the labor demand projection for the next 10 years for existing occupations. Table 3.17 reports the extent of average growth in labor demand in next 5-10 years across BSCO code 1-digit level occupations in the Tannery industry. It shows that high growth in the existing jobs of the Tannery industry of Bangladesh seems not possible. However, enterprises think that there will be “Moderate growth” in labor demand in the next 10 years in all occupations like Factory and machine operators and machine assemblers (86%), Technical workers (78%), and Service and Sales Staff (61%), etc. Hence it is expected that the Tannery industry in Bangladesh may demand labor for employment in the industry and this statement is corroborated by the views of enterprises who view that overall, there will be 55% moderate growth and 6% high growth in labor demand in next 10 years.

Table 3.17: Extent of Average Growth in Labor Demand in next 5-10 years across BSCO Code 1-digit level Occupations in the Tannery Industry

BSCO code 1-digit	Occupations	No Growth	Moderate Growth	High Growth	Very high growth
1	Manager	71.43	26.53	1.02	1.02
2	Professional	37.04	59.26	0	3.7
4	Clerical support staff	54.55	36.36	9.09	0
5	Service and Sales Staff	39.13	60.87	0	0
7	Technical workers	10.28	77.57	6.54	5.61
8	Factory and machine operators and machine assemblers	9.09	86.36	4.55	0
9	Primary profession	30.56	41.67	27.78	0
	Total	36.73	54.63	6.17	2.47

Source: BIDS-Skill Survey 2020-2021

Table 3.18 illustrates the projected number of job growth across BSCO code 1-digit level occupations in the Tannery industry in Bangladesh. Overall, the Tannery sector will experience around 11% job growth across all occupation categories by 2023. It is expected that the industry will have a 45% employment growth in 2025 from current stage and the same figure rose to around 98% in 2030. It indicates an encouraging prospect of the Tannery industry of Bangladesh.

Table 3.18: Projected number of Job Growth across BSCO Code 1-digit level Occupations in the Tannery Industry

BSCO code 1-digit	Occupations	Growth (%) with respect to current level of employment		
		By 2023	By 2025	By 2030
1	Manager	11.03	32.31	59.21
2	Professional	21.91	59.25	106.31
4	Clerical support staff	-31.43	-20	-2.86
5	Service and Sales Staff	-23.19	-1.45	24.64
7	Technical workers	16.25	62.98	158.26
8	Factory and machine operators and machine assemblers	30.04	83.58	138.71
9	Primary profession	6.14	33.02	67.13
	Total	10.96	44.56	97.75

Source: BIDS-Skill Survey 2020-2021

3.9 Findings from the Leather and Footwear Industry

Market value chain studies for leather and footwear show that Leather and Footwear Industries play the vital role for the final products in this sector. Table 1 shows that this study includes 55 leather enterprises which employ 14305 employees in total. It shows that overall output per enterprise in 2019 stands out 7764 (in lac BDT) while the export per enterprise is 4873 (in lac

BDT). Hence, export to output ratio per enterprise is around 63%. It means that nearly two-thirds of the revenues in the leather industry of Bangladesh comes from the export earnings. Moreover, the capital-labor ratio per enterprise per employee stands at 1.70 (in lac taka).

Table 3.19: Brief Description of the Leather and Footwear Industry in Bangladesh

Indicators	Full sample
Employment (in Person)	14305
No. of Enterprises	55
Output per enterprise (2019) in lac taka	7763.64
Export per enterprise (in lac taka)	4872.73
Capital stock per enterprise (in lac taka)	441.82
Capital labor ratio (in lac taka)	1.70
Export/Output ratio	62.76

Source: BIDS-Skill Survey 2020-2021

Table 3.20: Description of Employment Level and Conditions of Employees across the Firms

Occupation	BSCO Code 1 digit	No. observations (firms)	Total Employment	Employment Per Enterprise	Average age	Monthly mean salary	Percentage of female workers
Managers	1	54	661	12	44	92285	8.42
Professionals	2	51	216	4	37	49454	1.16
Technicians and associate professionals	3	2	3	2	39	76417	0.00
Clerical support staff	4	22	62	3	36	36448	10.91
Service and sales workers	5	40	190	5	34	14442	2.50
Craft and related trades workers	7	55	7559	137	30	17503	22.43
Plant and machine operators, assemblers	8	47	4517	96	29	14713	40.73
Elementary occupations	9	48	1097	23	30	13952	7.43
Full Sample		55	14305	45	34	35552	13.66

Source: BIDS-Skill Survey 2020-2021

Table 3.20 reports the description of the employment level, average employment in years, average age and salaries of the employees across the occupation categories. Moreover, Percentage of female workers and the extent of formality in employment has also been mentioned. Craft and related trades workers (55%), followed by the Plant and machine operators (32%), and assemblers, and elementary occupations (8%) are the dominant in the leather industry of Bangladesh. These

three occupations together consist of the 95% of the total employment in the leather industry. The number of observations (firms) column shows that all 55 firms covered in this study have Plant and machine operators, and assembler occupation employees employed. Importantly, only two firms employed the Technicians and associate professional category employees. The average age of the employees across categories of occupations ranges from 29 (Plant and machine operators, and assemblers) to 44 (Managers). The mean age of the employees in the leather industry is 34 years old.

As expected, the average monthly salary is the highest for the Manager category employees (Table 3.20). Though Craft and related trades workers, Plant and machine operators, and assemblers, and Elementary occupation categories occupy the 95% of the total employment in the leather industry, their respective average monthly salaries stand at 17503 Taka (\$206), 14713 Taka (\$173), and 13952 Taka (\$164), respectively, assuming an exchange rate of 85 taka per dollar. Overall, the mean monthly salary irrespective of the occupation categories is 35552 Taka (\$418). In the leather industry of Bangladesh, female employees consist of around 14% of total employment. Importantly, 41% of the Plant and machine operators, and assembler employees are female, followed by 22% female employees in the Craft and related trades occupation. Moreover, Clerical support staff category of occupation has around 11% of female in its total employment. Except these three categories of occupations, female employees consist of less than 10% of each of the occupation category.

Table 3.21: Extent of Formality- Contract Type with Respect to BSCO 1-digit Level Occupation

Occupation	BSCO Code 1 digit	No. observations (firms)	Employment	Percentage of permanent workers with written contract	Percentage of temporary workers	Percentage of workers with full time contact	Percentage of workers with part time contact
Managers	1	54	661	89.94	10.06	97.98	2.02
Professionals	2	51	216	88.87	11.13	97.71	2.29
Technicians and associate professionals	3	2	3	50.00	50.00	100.00	0.00
Clerical support staff	4	22	62	72.12	27.88	99.39	0.61
Service and sales workers	5	40	190	79.33	20.67	100.00	0.00
Craft and related trades workers	7	55	7559	73.14	26.86	96.06	3.94
Plant and machine operators, and assemblers	8	47	4517	70.75	29.35	99.14	0.86
Elementary occupations	9	48	1097	75.11	24.89	95.83	4.17
Full Sample		55	14305	79	21	97.82	2.18

Source: BIDS-Skill Survey 2020-2021

The extent of job formality in the leather industry has been analyzed with respect to the job permanency (Permanent versus temporary employees) and engagement in work time (fulltime versus part-time). Table 3.21 also shows the extent of formality- contract type with respect to BSCO 1-digit level occupation. Among all surveyed employees in the leather industry, around 79% of them are permanent. Closer inspection reveals that around 27% of the Craft and related traders, 29% of the Plant and machine operators, and assemblers, and 25% of the Elementary occupation employees work as temporary employees. However, around 98% of the total employees are fulltime workers, which indicates high level of job formality in the leather industry of Bangladesh.

Table 3.22: Comparative Changes in Employment During 2018 and 2019

Occupation	BSCO Code 1 digit	Employees hired in the years		Employees left in the years		Net inclusion in employment in 2018	Net inclusion in employment in 2019	Differences in Net inclusion in employment in 2018-19
		2018	2019	2018	2019			
Managers	1	42	58	33	27	9	31	22
Professionals	2	9	21	13	5	-4	16	20
Clerical support staff	4	2	2	3	1	-1	1	2
Service and sales workers	5	4	17	4	9	0	8	8
Craft and related trades workers	7	1156	1465	920	695	236	770	534
Plant and machine operators, and assemblers	8	465	486	284	293	181	193	12
Elementary occupations	9	63	168	58	73	5	95	90
Full Sample		1741	2217	1315	1103	426	1114	688

Source: BIDS-Skill Survey 2020-2021

Table 3.22 illustrates the comparative changes in Employment during 2018 and 2019 (the normal years without being affected by Covid-19 pandemic). Net inclusion in employment in a particular year (i) is defined as the total hiring in year (i) less of the total firing in year (i). If this figure is positive, it means that more employees are hired than fired. In other words, the industry employs people and demand employees. The net inclusion in employment of the leather industry of Bangladesh in the year 2018 and 2019 registered to be 426 and 1114 employees, respectively. In both years, this industry employed more technical category and primary profession category employees. The differences in net inclusion in employment during 2018-19 is 688, which implies that 688 employees were more recruited in 2019 than in 2018.

3.10 Occupation by Qualification Matrix

This section sheds light on the desired versus currently held workforce's educational attainment of the leather industry in Bangladesh. The comparative analysis between Table 3.23 and 3.24 reveal that around 84% of the managers are desired to have at least Bachelor degree (the figure sums both bachelors and masters' percentages) degree, but in reality, 79% of the currently held workforce at managerial level have at least Bachelor (the figure sums both bachelors and masters'

percentages) degree. This basically shows the gap in educational qualifications of the employees across desired level and obtained level. The similar pattern follows for the other occupation categories.

Table 3.23: Desired Occupation by Qualification Matrix-Level of Education

BSC O Code	Occupation	Illiterate	Class 1 to 5	Class 6 to 10	SSC equivalent	HSC equivalent	Diploma	Vocational	Bachelor	Masters
1	Manager	0	0.43	0	6.09	7.83	1.74	0	30.87	53.04
2	Professional	0	1.61	0	3.23	4.84	29.03	11.29	24.19	25.81
3	Technician and associate professional	0	0	50	0	0	0	0	50	0
4	Clerical support staff	0	0	0	0	40.91	4.55	0	22.73	31.82
5	Service and sales staff	0	10.87	56.52	26.09	2.17	0	0	4.35	0
7	Technical workers	0.86	3.46	36.89	30.55	13.26	4.9	0.86	8.36	0.86
8	Factory and machine operators and machine assemblers	2.27	3.41	55.68	26.14	10.23	0	0	1.14	1.14
9	Primary profession	2.6	22.08	63.64	11.69	0	0	0	0	0
	Total	0.8	4.46	28.95	18.99	9.84	4.58	1.14	14.19	17.05

Source: BIDS-Skill Survey 2020-2021

Table 3.23 shows that around 93% of the Service and sales staff, 72% of the technical workers, 88% of the Factory and machine operators and machine assemblers, and, all of the Primary profession employees (100%) do not study even up to SSC level. The same figure for overall employees stands at 53.2%.

Table 3.24: Occupation by Qualification Matrix -Average Qualification Level Currently Hold by Workforce

BSC O Code	Occupation	Illiterate	Class 1 to 5	Class 6 to 10	SSC equivalent	HSC equivalent	Diploma	Vocation	Bachelor	Masters
1	Manager	0	1.75	7.42	5.68	3.49	2.62	0.44	35.81	42.79
2	Professional	0	3.23	4.84	4.84	4.84	33.87	11.29	22.58	14.52
3	Technician and associate professional	0	0	50	0	0	0	0	50	0
4	Clerical support staff	0	0	4.76	14.29	19.05	4.76	4.76	28.57	23.81
5	Service and sales staff	0	15.56	75.56	6.67	2.22	0	0	0	0
6	Skilled agricultural, forestry and fishery workers									
7	Technical workers	0	11.88	44.06	27.54	11.88	1.16	0.29	2.9	0.29
8	Factory and machine operators and machine assemblers	0	24.14	52.87	16.09	5.75	0	0	1.15	0
9	Primary profession	1.3	38.96	57.14	2.6	0	0	0	0	0
	Total	0.12	12.1	34.33	15.32	7.14	3.69	1.15	13.13	13.02

Source: BIDS-Skill Survey 2020-2021

Table 3.25 describes the differences in educational attainment of the workforce in the leather industry with respect to the educational background like science, arts and commerce. For example, around 7% of the managers are desired to have Arts background while around 12% of the Arts background are at present working in the managerial posts in the leather industry. This phenomenon applies mostly to all categories of occupations. However, around 69% of the enterprises reported to have no idea about the desired background of the workforce employed across various occupation levels.

Table 3.25: Desired versus Currently held Occupation by Qualification Matrix-Field of Education

	BSCO code 1-digit	Desired Qualifications				Average qualification level currently held by workforce		
		Science	Arts	Commerce	Do not Know	Science	Arts	Commerce
1	Manager	9.44	6.87	41.2	42.49	10.3	12.45	37.77
2	Professional	70.97	0	4.84	24.19	67.74	3.23	3.23
3	Technician and associate professional	100	0	0	0	100	0	0
4	Clerical support staff	4.55	9.09	27.27	59.09	5	15	25
5	Service and sales staff	0	5.13	2.56	92.31	0	5.13	0
6	Technical workers	6.19	4.02	3.41	86.38	6.1	12.2	1.22
7	Factory and machine operators and machine assemblers	7.5	3.75	1.25	87.5	3.8	1.27	1.27
8	Primary profession	0	6.78	0	93.22	4.84	4.84	0
	Total	11.48	4.88	14.41	69.23	11.41	9.71	12.14

Source: BIDS-Skill Survey 2020-2021

3.11 Skill Shortage in the Leather and Footwear Industry

This section describes the existent skill shortage in the Leather industry of Bangladesh. Skill shortage is described in terms of gender preferences across occupations, extent of physical labor, extent of difficulties in filling up the vacancies and time taken to fill up the vacant positions.

Table 3.26: Gender Preferences across Occupations in the Leather and Footwear Industry

BSCO code 1-digit	Occupations	Male	Female	No Preference
1	Manager	64.32	1.88	33.8
2	Professional	85	0	15
3	Technicians and associate professionals	50	50	0
4	Clerical support staff	31.82	18.18	50
5	Service and sales staff	82.5	0	17.5
7	Technical workers	42.58	4.69	52.73
8	Factory and machine operators and machine assemblers	33.33	6.67	60
9	Primary profession	40	12.31	47.69
	Total	53.48	4.6	41.92

Source: BIDS-Skill Survey 2020-2021

Table 3.26 illustrates the gender preferences across occupations (BSCO code 1-digit level) in the Leather and Footwear Industry. As this study mentioned leather industry to be a male-dominated industry, the veracity of this statement is proved once again in Table 3.26. Across the occupation categories, 53% prefer male for employment while around 42% accounted for no gender preference. Only 5% preferred females for employment in the leather industry. Females are mostly

preferred for Technicians and associate professionals and Clerical support staff categories of occupations.

Table 3.27: Extent of Physical Labor across BSCO Code 1-digit level Occupations in the Leather and Footwear Industry

BSCO code 1-digit	Occupations	1 to 3 (Low level)	4 to 6 (Medium level)	7 to 10 (High level)	Mean
1	Manager	24.88	47.89	27.23	5
2	Professional	6.67	63.33	30	6
3	Technicians and associate professionals	0	100	0	5
4	Clerical support staff	22.73	40.91	36.36	6
5	Service and sales staff	7.5	62.5	30	6
7	Technical workers	0.39	42.19	57.42	7
8	Factory and machine operators and machine assemblers	0	31.67	68.33	7
9	Primary profession	7.69	40	52.31	7
	Total	9.89	45.82	44.29	6

Source: BIDS-Skill Survey 2020-2021

Table 3.27 shows the extent of physical labor across BSCO code 1-digit level occupations in the Leather industry. It reports that technical workers (57%), factory and machine operators and machine assemblers (68%) and primary profession (52%) employees on average experience high (the mean also exceeding a value of 7) extent of physical labor (7 to 10). On the contrary, the manager, professional, Technicians and associate professional level employees perform jobs on an average with medium level or low level of physical labor. These findings conform to the phenomenon that white-collar job holders like managers, professionals etc. undergo less physical labor than the blue-collar jobs like technical workers, and primary profession workers etc. and completely match with the expectation and reality. Overall, nearly half of the leather industry employees (around 44%) experience high (7 to 10) extent of physical labor.

Table 3.28: Extent of Difficulties in Filing up the Vacancies across BSCO Code 1-digit Level Occupations in the Leather and Footwear Industry

BSCO code 1-digit	Occupations	1 to 3 (Low level)	4 to 6 (Medium level)	7 to 10 (High level)	Mean	No. of Unfilled vacancies currently	Total Employment level at present	Unfilled vacancies as % of total current employment
1	Manager	28.64	53.99	17.37	4.57	3	661	0.5
2	Professional	16.67	65	18.33	5.08	7	216	3.2
3	Technicians and associate professionals	50	0	50	4.50	0	3	0.0
4	Clerical support staff	40.91	54.55	4.55	3.82	4	62	6.5

5	Service and sales staff	40	57.5	2.5	3.73	0	190	0.0
7	Technical workers	30.98	49.41	19.61	4.49	50	7559	0.7
8	Factory and machine operators and machine assemblers	20.34	47.46	32.2	5.15	71	4517	1.6
9	Primary profession	44.62	55.38	0	3.62	2	1097	0.2
	Total	30.31	52.93	16.76	4.47	137	14305	1.0

Source: BIDS-Skill Survey 2020-2021

Table 3.28 illustrates the extent of difficulties in filling up the vacancies across BSCO code 1-digit level occupations in the leather and footwear industry. It shows that technicians and associate professionals (50%), factory and machine operators and machine assemblers (32%), and technical workers (20%), are the top three occupation-categories that experience high (7 to 10) extent of difficulties in filling up the vacancies. The overall mean value (4.47) of the extent of difficulties in filling-up vacancies suggests that there exists skill shortage in the leather industry of Bangladesh. Unfilled vacancies constitute roughly 1% of total current employment in the leather industry. It may imply that the leather sector is burdened with no skill and semi-skilled workers or it may at present experience economic downturn.

Table 3.29: Time taken to fill up the Vacant Positions across Occupations in the Leather and Footwear Industry

Occupation (BSCO Code-1 digit)	Occupation (BSCO Code-4 digit)	Immediately	Less than a week	More than a week but less than a month	More than a month
Manager	Managing Director	6.82	18.18	63.64	11.36
Manager	Executive Director	3.45	27.59	58.62	10.34
Manager	Senior General Manager	10.00	30.00	40.00	20
Manager	General Manager	19.23	19.23	53.85	7.69
Manager	Deputy General Manager	0.00	40.00	50.00	10
Manager	Manager	10.42	14.58	66.67	8.33
Manager	Assistant General Manager	0.00	16.67	83.33	0
Professional	Engineer and other professionals	0.00	27.66	61.70	10.64
Clerical support staff	Secretarial/Clerical	0.00	40.91	59.09	0
Technical workers	Supervisors and line leaders	11.76	33.33	52.94	1.96
Factory and machine operators and machine assemblers	Sewing Operators	8.33	55.56	27.78	8.33
Technical workers	Machine Operator and Welder/Electrician	9.30	41.86	39.53	9.3
Technical workers	Cutting Operator and Aged Colors	4.65	41.86	48.84	4.65
Technical workers	Lasting, Setting and Assembling	8.57	40.00	51.43	0
Manager	Inventory, Material Selection and Completion	15.38	26.92	57.69	0
Technical workers	Advanced CAD design and pattern making	16.00	20.00	56.00	8
Technical workers	Quality Control Operator	8.33	33.33	58.33	0
Professional	Accountant	0.00	66.67	33.33	0
Manager	Chairman	50.00	0.00	50.00	0
Technician and associate professional	Checker	0.00	0.00	100.00	0
Factory and machine operators and machine assemblers	Colors operator	0.00	100.00	0.00	0
Professional	Designer	0.00	100.00	0.00	0
Technical workers	Dry & color worker	0.00	100.00	0.00	0
Factory and machine operators and machine assemblers	Fitterman	0.00	12.50	87.50	0
Technical workers	Floor moving worker	0.00	100.00	0.00	0

Occupation (BSCO Code-1 digit)	Occupation (BSCO Code-4 digit)	Immediately	Less than a week	More than a week but less than a month	More than a month
Factory and machine operators and machine assemblers	Hanging worker	0.00	66.67	33.33	0
Technical workers	Loader	100.00	0.00	0.00	0
Professional	Marketing officer	0.00	33.33	66.67	0
Professional	Mechanical/Mechanical engineer	0.00	0.00	100.00	0
Technical workers	Packing & floor moving worker	0.00	81.82	18.18	0
Primary profession	Peon	27.78	24.07	48.15	0
Primary profession	Porter	10.00	60.00	30.00	0
Technical workers	Sample operator	25.00	62.50	12.50	0
Service and sales staff	Security guard	0.00	38.89	61.11	0
Factory and machine operators and machine assemblers	Sewing helper	100.00	0.00	0.00	0
Technical workers	Socks	100.00	0.00	0.00	0
Service and sales staff	Storekeeper	0.00	50.00	50.00	0
Primary profession	Sweeper	0.00	0.00	100.00	0
Factory and machine operators and machine assemblers	Table operator	28.57	42.86	28.57	0
Technician and associate professional	Technician	0.00	0.00	0.00	100
Full Sample		9.60	32.96	52.29	5.15

Source: BIDS-Skill Survey 2020-2021

Table 3.29 reports the time taken to fill up the vacant positions across BSCO Code 4-digit level Occupations in the Leather Industry. Overall, 53% of the vacancies irrespective of the occupational categories take more than a week but less than a month to fill up the positions. It takes more than a month to fill up the vacant positions for Technicians (100%), Advanced CAD Design and Pattern Making (8%), Senior General Managers (20%) and Sewing Operators (8.33%). Overall, 33% and 10% of the vacant positions in the leather industry takes “less than a week” and are filled-up “immediately”, respectively. This finding shows that vacant positions do not take usually longer time to be filled up.

Table 3.30: Main Causes for Hard-To-Fill Vacancies across Level of Occupations in the Leather and Footwear Industry

BSCO Code 1-digit	Occupation	Poor salary and others benefit	Low number of applicants with the required skills	Low number of applicants with the required attitude, motivation or personality	Low number of applicants generally	Lack of work experience the company demands	Lack of qualifications the company demands	Poor career progression/lack of prospects	Job entails shift work/un sociable hours	Too much competition from other employers	Seasonal Work
1	Manager	35.5	83.9	80.6	45.2	80.6	90.3	45.2	41.9	25.8	12.9
2	Professional	68.8	68.8	56.3	43.8	31.3	25.0	56.3	50.0	6.3	12.5
3	Technician and associate professional	50.0	100.0	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0
4	Clerical support staff	100.0	100.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
7	Technical workers	69.2	69.2	79.5	41.0	46.2	48.7	61.5	69.2	25.6	15.4
8	Factory and machine operators and machine assemblers	65.7	65.7	54.3	40.0	60.0	60.0	60.0	60.0	25.7	26.5
9	Primary profession	0.0	0.0	0.0	0.0	100.0	100.0	0.0	0.0	0.0	0.0
	Total	59.2	72.0	68.8	43.2	57.6	60.0	54.4	55.2	22.4	17.1

Note: The Color indicates: =1st cause; =2nd cause; =3rd cause

Source: BIDS-Skill Survey 2020-2021

Table 3.30 illustrates the main causes for hard-to-fill vacancies across BSCO code 1-digit level occupations in the leather industry. There is no single cause that affect the hard-to-fill vacancies for most of the occupations. “Low number of applicants with the required skills”, “Low number of applicants generally”, “Lack of work experience the company demands”, and “Lack of qualifications the company demands” appear to be the main cause for the Hard-To-Fill vacancies for exactly two occupation categories. Around 59% of the enterprises think that “Poor salary and others benefit” is a cause for Hard to fill vacancies. In this way, enterprises consider Low number of applicants with the required skill (72%), Low number of applicants with the required attitude, motivation or personality (68.8%) and Lack of qualifications the company demands (60%) to be the first three causes of hard to fill vacancies.

3.12 Actions Taken or Will be Taken in Near Future to Address Hard-to-fill Vacancies

After discussing the impact of hard-to-fill vacancies, this study now rivets its focus on what actions should be taken or will be taken in near future to address hard-to-fill vacancies. Table 3.31 shows that increasing salaries could solve the hard-to-fill vacancy problem for most of the occupations (overall, 93%). It may be argued that increased salaries might attract the more skilled people towards the leather industry and the problem of hard-to-fill vacancy problem can be resolved to a greater extent. Moreover, imparting training to the existing workforce involved in the leather industry and redefining existing jobs have been widely proposed. Hence, these findings corroborate the idea that hard-to-fill vacancies arise due to the skill shortage that is why, it is suggested to impart training to the existing labor force involved in the leather industry. It particularly appears to be a second suggestion that can be taken in near future to address hard to fill vacancies in the leather industry. Moreover, the purview of training should be extended to such a level where the new comers in the market can as well avail of training facilities.

Table 3.31: Actions Taken/Will Be Taken in Near Future to Address Hard-To-Fill Vacancies the Leather and Footwear Industry

BSCO Code 1-digit	Occupation	Increasing salaries	Increasing the training given to your existing workforce	Redefining existing jobs	Increasing advertising /recruitment spend	Increasing / expanding training programs (e.g., partnership with local or international consultants/training institutes	Using new recruitment methods or channels	Recruiting workers who are foreigners	others
1	Manager	93.75	93.75	75.00	68.75	68.75	62.50	41.67	66.67
2	Professional	93.75	43.75	50.00	56.25	56.25	56.25	18.75	60.00
3	Technician and associate professional	100.00	100.00	100.00	100.00	100.00	100.00	100.00	
7	Technical workers	94.87	46.15	48.72	33.33	33.33	33.33	15.38	60.00
8	Factory and machine operators and machine assemblers	90.32	51.61	48.39	38.71	35.48	41.94	12.90	50.00
9	Primary profession								
	Total	93.20	55.34	53.40	44.66	43.69	44.66	19.19	55.00

Source: BIDS-Skill Survey 2020-2021

3.13 Actions Taken or Will be Taken in Near Future to Address the Problem of Skill Gap

Table 3.32 describes what actions should be/will be taken in near future to address the problem of skill gap across BSCO code 1-digit level occupations in the leather industry. Training activity of practical work (98%), more supervision of staff (94%), and more staff appraisals / performance reviews (94%) appear to be the first three important actions for addressing the problem of skill gap in the leather industry.

Table 3.32: Actions Taken/Will Be Taken in Near Future to Address the Problem of Skill Gap in the Leather and Footwear Industry

BSCO Code 1-digit	Occupation	Increase training activity / spend or increase / expand trainee programs	Reallocating work	recruitment activity / spend	More staff appraisals / performance reviews	Advisor recruitment	More supervision of staff	Recruiting workers who are foreigners	Changing working practice	training activity of practical work
1	Manager	100.00	71.43	71.43	71.43	100.00	71.43		85.71	100.00
2	Professional	50.00	100.00	30.00	100.00	40.00	100.00		60.00	100.00
4	Clerical support staff	100.00	50.00	100.00	50.00	100.00	50.00		100.00	100.00
5	Service and sales staff	100.00	100.00	100.00	100.00	50.00	100.00		100.00	100.00
7	Technical workers	69.39	95.92	46.94	95.92	55.10	97.96	4.35	91.84	100.00
8	Factory and machine operators and machine assemblers	66.67	88.89	46.67	93.33	48.89	93.33	7.69	88.89	97.62
9	Primary profession	87.50	100.00	87.50	100.00	37.50	100.00		50.00	87.50
	Total	70.73	91.87	51.22	93.50	53.66	94.31	4.46	85.37	98.28

Source: BIDS-Skill Survey 2020-2021

3.14 Types of Training Needed

Table 3.33 shows the most important trainings needed across occupations in the leather industry of Bangladesh. This table is of particular interest since it charts what training should be organized to get rid of the skill shortage and skill gap problem existing in the leather industry of Bangladesh. Types of trainings vary across occupational groups. For example, work related trainings, safety training and training to adapt new technology are the most three important trainings needed by the technical workers, Factory and machine operators and machine assemblers, and primary profession employees.

Table 3.33: The Most Important Trainings Needed across Occupations in the Leather Industry

BSCO code 1-digit	BSCO code 4-digit	Training name	Percentage
Manager	Manager	More additional training for new officers-employees	14.3
		Health and Safety / First Aid Training	14.3
		Work related training	14.3
		Supervision / Management training	28.6
		Management training	28.6
Technical workers	Supervisors and line leaders	Basic training for new officers and employees	5.4
		More additional training for new officers-employees	5.4
		Health and Safety / First Aid Training	16.2
		Work related training	24.3
		Supervision / Management training	2.7
		Management training	5.4
		Training in new technology	18.9
		Others	21.6
Technical workers	Lasting, Setting and Assembling	Basic training for new officers and employees	13.6
		More additional training for new officers-employees	4.5
		Health and Safety / First Aid Training	18.2
		Work related training	31.8
		Others	9.1
		Management training	4.5
		Training in new technology	18.2
Manager	Inventory, Material Selection and Compliance	Health and Safety / First Aid Training	100.0
Technical workers	Advanced CAD design and pattern making	Basic training for new officers and employees	16.7
		More additional training for new officers-employees	50.0
		Training in new technology	33.3
Technical workers	Quality Controller Operator	Basic training for new officers and employees	6.3
		More additional training for new officers-employees	6.3
		Health and Safety / First Aid Training	25.0
		Work related training	25.0
		Others	31.3

BSCO code 1-digit	BSCO code 4-digit	Training name	Percentage
Professional	Accountant	Management training	100.0
Professional	Chemist	Work related training	100.0
Professional	Designer	Basic training for new officers and employees	33.3
		Training in new technology	33.3
		Work related training	33.3
Factory and machine operators and machine assemblers	Drum helper	Basic training for new officers and employees	33.3
		Work related training	33.3
		Health and Safety / First Aid Training	33.3
Factory and machine operators and machine assemblers	Drum man	Work related training	100.0
Technical workers	Finishing operator	Basic training for new officers and employees	28.6
		Training in new technology	28.6
		Work related training	42.9
Primary profession	Helper	Basic training for new officers and employees	3.8
		Others	19.2
		Health and Safety / First Aid Training	23.1
		Work related training	34.6
		Training in new technology	19.2
Factory and machine operators and machine assemblers	Lasting operator	Basic training for new officers and employees	16.7
		Training in new technology	16.7
		Health and Safety / First Aid Training	16.7
		Work related training	50.0
Factory and machine operators and machine assemblers	Machine operator	Basic training for new officers and employees	15.8
		More additional training for new officers-employees	3.9
		Health and Safety / First Aid Training	18.4
		Work related training	27.6
		Supervision / Management training	3.9
		Management training	1.3
		Training in new technology	23.7
		Others	5.3
Professional	Mechanical/Mechanical engineer	Basic training for new officers and employees	21.4
		Training in new technology	35.7

BSCO code 1-digit	BSCO code 4-digit	Training name	Percentage
		Health and Safety / First Aid Training	14.3
		Work related training	28.6
Primary profession	Porter	Basic training for new officers and employees	33.3
		Training in new technology	33.3
		Work related training	33.3
Factory and machine operators and machine assemblers	Injection Machine Operator	More additional training for new officers-employees	100.0
Factory and machine operators and machine assemblers	Table operator	More additional training for new officers-employees	33.3
		Management training	33.3
		Training in new technology	33.3
Technician and associate professional	Technician	Work related training	100.0
Technical workers	Cutting operator	Basic training for new officers and employees	20.6
		More additional training for new officers-employees	2.9
		Health and Safety / First Aid Training	20.6
		Work related training	35.3
		Training in new technology	8.8
		Others	11.8
Professional	Admin	More additional training for new officers-employees	16.7
		Others	16.7
		Work related training	16.7
		Supervision / Management training	16.7
		Management training	33.3
Professional	Engineer	Work related training	77.8
		Training in new technology	11.1
		Others	11.1
Manager	Human resource officer	Basic training for new officers and employees	6.7
		Others	6.7
		Health and Safety / First Aid Training	13.3
		Work related training	13.3
		Supervision / Management training	20.0
		Management training	26.7
		Training in new technology	13.3

BSCO code 1-digit	BSCO code 4-digit	Training name	Percentage
Factory and machine operators and machine assemblers	Splitter machine operator	Basic training for new officers and employees	33.3
		Training in new technology	33.3
		Health and Safety / First Aid Training	33.3
Factory and machine operators and machine assemblers	Wet blue operator	Training in new technology	100.0
Professional	Merchandising	Basic training for new officers and employees	100.0
Technical workers	Maintenance	Work related training	100.0
Technician and associate professional	Social compliment	Basic training for new officers and employees	100.0
Professional	Medical	Health and Safety / First Aid Training	100.0
Service and sales staff	Fire	Health and Safety / First Aid Training	50.0
		Training in new technology	50.0

Source: BIDS-Skill Survey 2020-2021

100% of the Wet Blue Operators need training in the new technology, where 35.3% Cutting Operator need upskilling training or work-related training. Around 50% Lasting Operator need the same training. SEIP can use this table to operationalize their future training in the Tannery sector.

3.15 Existing Training Facilities by SEIP and Associations

Since, the enterprises emphasized that increasing training activities is the number one solution that they think can minimize the skill gap we asked them about the Technical and Vocational Education and Training (TVET) programs and training courses on Leather and Footwear sector under Skills for Employment Investment Program (SEIP). Their responses are arranged in the following tables:

Table 3.34: Course Wise Training Summary of Leather goods and Footwear Manufacturers and Exporters Association of Bangladesh & Tranche 1

SL.	Course Name	Type	Target	Enrollment		Assessment			Certification	Job Placement Total	Percentage (JP Window End) (%)
				Total	Female	Total	Absent	Dropout			
1	Sewing Machine Operation	New Entrant	1,770	1,770	1,305	1,671	23	76	1,671	1,585	94.85
2	Cutting Machine Operation	New Entrant	422	422	238	392	7	23	392	379	96.68
3	Setting and Assembling Operation	New Entrant	1,828	1,828	1,040	1,689	39	100	1,689	1,590	94.14
4	COMPLIANCE & SOCIAL WELFARE	Up skill	210	210	41	210	-	-	210	210	100.00
5	House-keeping & OHS in workplace	Up skill	30	30	3	30	-	-	30	30	100.00
6	Productivity Improvement Technique	Up skill	90	90	7	90	-	-	90	90	100.00
7	TOTAL QUALITY MANAGEMENT (TQM)	Up skill	271	271	37	271	-	-	271	271	100.00
8	SUPERVISORY, MANAGEMENT AND LEADERSHIP SKILLS DEVELOPMENT	Up skill	239	239	37	239	-	-	239	239	100.00
Total			4,860	4,860	2,708	4,592	69	199	4,592		4,394

Table 3.35: Course-wise Training Summary of Leather goods and Footwear Manufacturers and Exporters Association of Bangladesh & Tranche 2

SL.	Course Name	Type	Target	Enrollment		Assessment			Certification	Job Placement	
				Total	Of Which Female	Total	Absent	Dropout		Total	Percentage (JP Window End) (%)
1	Cutting Machine Operation	New Entrant	357	357	148	314	-	43	314	311	99.04
2	Sewing Machine Operation	New Entrant	3,363	4,112	2,926	3,475	32	605	3,475	3,110	95.84
3	Setting Operation (Footwear)	New Entrant	2,400	2,611	1,767	2,192	12	407	2,187	2,012	100.00
4	Setting & Assembling Operation (Leather Goods)	New Entrant	840	838	569	728	20	90	728	696	100.00
5	Lasting & Assembling Operation (Footwear)	New Entrant	1,200	1,201	705	1,004	5	192	1,003	949	100.00
6	Standard Social Compliance in the Industry	Up skill	500	501	106	488	-	13	487	477	100.00
7	Total Quality Management (TQM)	Up skill	450	451	71	426	2	23	426	424	100.00

SL	Course Name	Type	Target	Enrollment		Assessment			Certification	Job Placement	
				Total	Of Which Female	Total	Absent	Dropout		Total	Percentage (JP Window End) (%)
8	Supervisory, Management & Leadership Skills Development	Up skill	450	450	53	441	-	9	440	438	99.55
9	Productivity Improvement Technique	Up skill	400	400	57	386	-	14	385	384	100.00
10	Pattern Making, Grading & CAD-CAM Operation	Up skill	180	180	18	168	-	12	160	159	99.38
Total			10,140	11,101	6,420	9,622	71	1,408	9,605	8,960	100.00

Table 3.36: Course Wise Training Summary of Executive Development Centre Skills for Employment Investment Program East West University & Tranche 2

SL	Course Name	Target	Enrollment		Assessment			Certification	Job Placement	
			Total	Of Which Female	Total	Absent	Dropout		Total	Percentage (JP Window End) (%)
1	Graduate Diploma in Leather and Footwear Management Program	300	330	61	268	-	3	268	196	73.13

Table 3.34, 3.35 and 3.36 depicts the training outcome provided by SEIP in the last three phases known as TRANCHE. SEIP began training in the Leather and Footwear sector in the first phase or TRANCHE-1 with eight courses, which expanded to ten courses in TRANCHE-2. Since then a total of 15,000 youths have been enrolled in the programme and 13,552 completed the course successfully with certification, with 90.34% completion rate. However, it should be mentioned that these courses were new skill and upskill training for the new entrance and on job people in selected trades. In addition, 300 Graduate diploma enrolment were under SEIP Tranche 2 at East West University on Graduate Diploma where 268 completed their graduation and job placement was 73.31% (Table 3.36). In Tranche 3 SEIP is going to organize training with Leather goods and Footwear Manufacturers and Exporters Association of Bangladesh for 10,000 trainees on following trades: Cutting Machine Operation, Sewing Machine Operation, Setting Operation (Footwear), Setting & Assembling Operation (Leather Goods), Lasting & Assembling Operation (Footwear), Advanced (Multitasking) Sewing Machine Operation and Advanced (Multitasking) Lasting & Finishing Operation.

3.16 Extent of Automation and Labor Displacement

Table 3.37 shows the extent of automation technology in next 5-10 years and the resulting extent of job displacement across BSCO code 1-digit level occupations in the leather industry of Bangladesh. It seems that the industry will not be so much affected by automation technology. The enterprises think that automation technology will replace around 13% of the factory and machine operators and machine assemblers, and 11% of the technical workers jobs in next 5-10 years. Consequently, 9% of the technical workers and 6% of the Factory and machine operators and machine assembler employees belong to the high level of job displacement due to the upcoming automation technology in next 5-10 years. Overall, the existing occupations in the leather industry are subject to lower extent of automation technology in next 5-10 years. As a result, there will be a low extent of job displacement (the mean value being around 3) due to automation technology.

Table 3.37: Extent of Automation Technology in Next 5-10 Years and the Resulting Extent of Job Displacement in the Leather and Footwear Industry

BSCO code 1-digit	Occupations	To what extent this occupation is subject to automation technology in next 5-10 years				Due to automation, what will be the extent of job displacement			
		1 to 3 (Low level)	4 to 6 (Medium level)	7 to 10 (High level)	Mean	1 to 3 (Low level)	4 to 6 (Medium level)	7 to 10 (High level)	Mean
1	Manager	83.33	13.16	3.51	1.9	86.67	9.17	4.17	1.8
2	Professional	81.48	11.11	7.41	2.1	86.67	10	3.33	1.8
3	Technician and associate professional	100	0	0	1.0	100	0	0	1.0
4	Clerical support staff	77.78	22.22	0	2.4	100	0	0	1.8
5	Service and Sales Staff	84.21	15.79	0	1.8	84.21	15.79	0	1.8
7	Technical workers	53.11	36.16	10.73	3.6	57.3	34.05	8.65	3.4
8	Factory and machine operators and machine assemblers	28.26	58.7	13.04	4.6	43.75	50	6.25	4.1
9	Primary profession	71.88	25	3.13	2.5	68.75	28.13	3.13	2.5
	Total	63.76	28.71	7.53	2.9	68.69	25.45	5.86	2.8

Source: BIDS-Skill Survey 2020-2021

3.17 Labor Demand Projection for the Next 10 Years

This section discusses the labor demand projection for the next 10 years for existing occupations. Table 3.38 reports the extent of average growth in labor demand in next 5-10 years across BSCO code 1-digit level occupations in the leather industry. It shows that high growth in the existing jobs of the leather industry of Bangladesh seems not possible. However, enterprises think that there will be “Moderate growth” in labor demand in the next 10 years in all occupations like Technician and associate professional (100%), Factory and machine operators and machine assemblers (81%), Technical workers (77%), professional (73%) etc. Hence it is expected that the leather industry in

Bangladesh may demand labor for employment in the industry and this statement is corroborated by the views of enterprises who view that overall, there will be 63% moderate growth and 6% high growth in labor demand in next 10 years.

Table 3.38: Extent of Average Growth in Labor Demand in Next 5-10 Years s in the Leather and Footwear Industry

BSCO code 1-digit	Occupations	No Growth	Moderate Growth	High Growth	Very high growth
1	Manager	61.8	36.52	1.69	0
2	Professional	27.45	72.55	0	0
3	Technician and associate professional	0	100	0	0
4	Clerical support staff	58.82	41.18	0	0
5	Service and Sales Staff	30.3	69.7	0	0
7	Technical workers	9.82	76.79	10.27	3.13
8	Factory and machine operators and machine assemblers	1.92	80.77	15.38	1.92
9	Primary profession	26.79	62.5	10.71	0
	Total	29.69	62.48	6.53	1.31

Source: BIDS-Skill Survey 2020-2021

Table 3.39 illustrates the projected number of job growth across BSCO code 1-digit level occupations in the leather industry in Bangladesh. Overall, the Leather industry will experience around 9% job growth across all occupation categories by 2023. It is expected that the industry will have a 30% employment growth in 2025 from current stage and the same figure rose to around 64% in 2030. It indicates an encouraging prospect of the leather industry of Bangladesh.

Table 3.39: Projected number of Job Growth in the Leather and Footwear Industry

BSCO code 1-digit	Occupations	Growth (%) with respect to current level of employment		
		By 2023	By 2025	By 2030
1	Manager	6.02	23.16	57.09
2	Professional	42.72	55.32	85.76
3	Technician and associate professional	50	150	250
4	Clerical support staff	-8.57	11.43	45.71

5	Service and Sales Staff	-14.81	18.4	36.46
7	Technical workers	1.55	19.94	43.44
8	Factory and machine operators and machine assemblers	31.46	75.27	140.78
9	Primary profession	15.02	32.9	99.33
	Total	9.03	29.73	64.29

Source: BIDS-Skill Survey 2020-2021

Chapter 4: Findings from the Employee Survey

However, skill gaps are typically measured from information perceived by the employer on skill insufficiencies among the workers in a firm. But, we have conducted a linked survey – employee linked enterprise survey to understand the skill production function of the workers – what are the factors that help form skill? This understanding is essential because this will inform policy makers about the factors to promote to upgrade skill. We have picked two employees from each occupation/task with the consultation of the manager in such a way that one is the skilled one and the other is the unskilled one in manager's view since the manager/employer knows best about the level of skill of his or her workers.

As stated earlier, this study covers 93 factories from Tannery and Leather & Footwear. From these, a total of 902 employees are surveyed. To obtain related information, employees were asked some issues regarding their current occupation and occupation history, academic performance, vocational training, job progression at the current enterprise, self-assessed skill & skill demand, extent of formality, employee's job satisfaction, health status, impact of covid-19 and coping mechanism etc.

4.1 Salient Socio-economic Characteristics

Table 4.1 summarizes the salient characteristics of the respondents (employees) of Tanneries. Findings from table suggest that the average age of respondents is 37.31 years. Among respondents 94.9% are male and 5.1 % are female. Average family size of respondents is 5.62. In case of average monthly income, personal income is 15365 Tk. where household income is 18020 Tk.

Table 4.1: Salient Socio-economic Characteristics: Tannery

Occupation Category	Age (average)	Sex		Average Family Size	Monthly Personal Income (Tk.)	Monthly Household Income (Tk.)
		Male	Female			
Managers	40.63	100.0	0.0	4.69	25469	27719
Professionals	43.45	100.0	0.0	6.20	27306	35639
Technicians and associate professionals	35.50	80.0	20.0	5.20	20100	25000
Service and sales workers	54.31	100.0	0.0	6.00	9250	10669
Craft workers & plant operators	36.89	96.3	3.8	5.48	14089	16465
Plant and machine operators, and assemblers	35.37	95.2	4.8	5.55	14441	16782
Elementary occupations	37.06	83.9	16.1	6.39	10414	10753
Full Sample	37.31	94.9	5.1	5.62	15365	18020

Source: BIDS-Skill Survey 2020-2021

Table 4.2 summarizes the salient characteristics of the respondents (employees) of Leather and Footwear industries. Findings from table suggest that the average age of respondents is 36.31 years. Among respondents 62.5% are male and 37.5 % are female. Average family size of respondents is 5.78. In case of average monthly income, personal income is 14584.81 Tk. where household income is 16391.78 Tk. Average personal and household income of the employees in Leather and Footwear Industries are lower than the average income of the employees of the Tanneries (Table 4.1 and Table 4.2).

Table 4.2: Salient Socio-economic Characteristics: Leather and Footwear

Occupation Category	Age (average)	Sex		Average Family Size	Monthly Personal Income (Tk.)	Monthly Household Income (Tk.)
		Male	Female			
Managers	46.38	87.5	12.5	4.44	35402.5	39152.5
Professionals	36.63	93.9	6.1	5.55	26651	30069.39
Technicians and associate professionals	32.00	80.0	20.0	5.80	17877.2	19877.2
Service and sales workers	46.70	80.0	20.0	6.90	13100	13850
Craft workers & plant operators	30.12	76.4	23.6	4.77	12310.6	14019.21
Plant and machine operators, and assemblers	32.06	77.9	22.1	4.88	12586.95	14176.13
Elementary occupations	36.31	62.5	37.5	5.78	9506.25	10146.88
Full Sample	33.00	78.5	21.5	5.02	14584.81	16391.78

Source: BIDS-Skill Survey 2020-2021

4.2 Education

Table 4.3 provides distribution of the respondents/employees by educational level. As we have collected information of employee who have passed at least primary school certificate, we have found 99 employees who have not passed at least primary school certificate. With regard to distribution of the respondents by educational level, it is seen that more than fifty percent (59.4%) of respondents passed primary level, 15.8% of respondents passed JSC level, 9.5 % passed SSC, 4.9 % passed HSC and 2.4 % obtained diploma certificate. Moreover, about 4.1 % of the respondents completed bachelor degree and 3.9% of the respondents completed master degree for Tanneries. As expected highest percentages of people passed Masters level among Managers (Table 4.3)

Table 4.3: Distribution of the Respondents by Educational level: Tannery

Occupation Category	PSC	JSC	SSC	HSC	Diploma	Honors	Masters
Managers	0.0	18.8	0.0	25.0	6.3	12.5	37.5
Professionals	17.2	10.3	3.4	3.4	3.4	37.9	24.1
Technicians and associate professionals	30.0	10.0	10.0	0.0	0.0	20.0	30.0
Service and sales workers	56.3	6.3	18.8	12.5	6.3	0.0	0.0
Craft workers & plant operators	46.3	20.0	18.8	8.8	6.3	0.0	0.0
Plant and machine operators, and assemblers	72.5	16.2	7.4	2.6	.4	.9	0.0
Elementary occupations	77.4	12.9	6.5	0.0	3.2	0.0	0.0
Full Sample	59.4	15.8	9.5	4.9	2.4	4.1	3.9

Source: BIDS-Skill Survey 2020-2021

Table 4.4 provides distribution of the respondents/employees by educational level. As we have collected information of employee who have passed at least primary school certificate, we have found 99 employees who have not passed at least primary school certificate. With regard to distribution of the respondents by educational level, it is seen that almost fifty percent (48.6%) of respondents passed primary level, 22.5% of respondents passed JSC level, 8.8 % passed SSC, 7.2 % passed HSC and 2.5 % obtained diploma certificate. Moreover, about 5.5 % of the respondents completed bachelor degree and 4.9% of the respondents completed master degree for Leather and Footwear industries. As expected highest percentages of people passed Masters Level among Managers, which consist almost fifty percent of them (Table 4.4).

Table 4.4: Distribution of the Respondents by Educational Level: Leather and Footwear

Occupation Category	PSC	JSC	SSC	HSC	Diploma	Honors	Masters
Managers	6.3	18.8	0.0	6.3	6.3	12.5	50.0
Professionals	6.1	20.4	2.0	12.2	8.2	28.6	22.4
Technicians and associate professionals	0.0	20.0	40.0	0.0	10.0	20.0	10.0
Service and sales workers	30.0	20.0	20.0	0.0	0.0	20.0	10.0
Craft workers & plant operators	39.3	27.9	15.0	9.3	3.6	2.9	2.1
Plant and machine operators, and assemblers	64.5	22.1	5.2	6.5	.4	1.3	0.0
Elementary occupations	81.3	9.4	9.4	0.0	0.0	0.0	0.0
Full Sample	48.6	22.5	8.8	7.2	2.5	5.5	4.9

Source: BIDS-Skill Survey 2020-2021

4.3 Training

Respondents were asked whether they attended vocational training or not. Moreover, training related other important information has also been collected. Table 4.5 illustrates some training related information which is not arranged by the employers in case of Tanneries (Table 4.5). If we consider duration of the course, there exists variation among different occupation categories. The duration of course (more than 6 months) has been found 50%. 81% Craft workers & plant operators' staffs and for Plant and machine operators, and assemblers received training for less than one week.

Table 4.5: Vocational Training Information (not arranged by the employers): Tannery

Occupation	Duration of the course						Certifies		
	< 1 week	1-2 weeks	3-4 weeks	1-3 months	4-6 months	>6 months	Yes	No	don't know
Managers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Professionals	100.0	0.0	0.0	0.0	0.0	0.0	33.3	66.7	0.0
Technicians and associate professionals	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Service and sales workers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Craft workers & plant operators	50.0	0.0	0.0	0.0	0.0	50.0	50.0	50.0	0.0
Plant and machine operators, and assemblers	81.8	9.1	0.0	0.0	0.0	9.1	0.0	100.0	0.0
Elementary occupations	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Full Sample	75.0	5.0	0.0	0.0	0.0	20.0	20.0	80.0	0.0

Source: BIDS-Skill Survey 2020-2021

Table 4.6 illustrates some training related information which is not arranged by the employers in case of Leather and Footwear Industries. If we consider duration of the course, there exists variation among different occupation categories. 100% Technicians and associate professionals received less than one-week training and 81% for Plant and machine operators, and assemblers received the same training not arranged by the employers.

Table 4.6: Vocational Training Information (not arranged by the employers): Leather and Footwear

Managers	Duration of the course						Certifies		
	< 1 week	1-2 weeks	3-4 weeks	1-3 months	4-6 months	>6 months	Yes	No	don't know
Managers	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0
Professionals	50.0	8.3	8.3	33.3	0.0	0.0	58.3	41.7	0.0
Technicians and associate professionals	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0
Service and sales workers	0.0	0.0	100.0	0.0	0.0	0.0	0.0	100.0	0.0
Craft workers & plant operators	15.4	0.0	0.0	84.6	0.0	0.0	53.8	46.2	0.0
Plant and machine operators, and assemblers	80.0	0.0	0.0	20.0	0.0	0.0	20.0	80.0	0.0
Elementary occupations	100.0	0.0	0.0	0.0	0.0	0.0	20.0	80.0	0.0
Full Sample	51.3	2.6	5.1	41.0	0.0	0.0	46.2	53.8	0.0

Source: BIDS-Skill Survey 2020-2021

Table 4.7 illustrates some training related information which is arranged by the employers. If we consider duration of the course, there also exists variation among different occupation categories. If we consider overall situation, about all of respondents from professional occupation category completed less than one-week training arranged by the employers in case of Tannery industries.

Table 4.7: Vocational Training Information (arranged by the employers): Tannery

Professionals	Duration of the course						Certifies		BTEB Certified		
	< 1 week	1-2 weeks	3-4 weeks	1-3 months	4-6 months	>6 months	Yes	No	Yes	No	don't know
Managers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Professionals	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	100.0	0.0
Technicians and associate professionals	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Service and sales workers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Craft workers & plant operators	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	0.0	0.0
Plant and machine operators, and assemblers	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0
Elementary occupations	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Full Sample	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	50.0	50.0	0.0

Source: BIDS-Skill Survey 2020-2021

Table 4.8 illustrates some training related information which is arranged by the employers. If we consider duration of the course, there also exists variation among different occupation categories. If we consider overall situation, about all of respondents from professional occupation category completed less than one-week training arranged by the employers in case of Leather and Footwear industries.

Table 4.8: Vocational Training Information (arranged by the employers): Leather and Footwear

Professionals	Duration of the course						Certifies		BTEB Certified		
	< 1 week	1-2 weeks	3-4 weeks	1-3 months	4-6 months	>6 months	Yes	No	Yes	No	don't know
Managers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Professionals	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	100.0	0.0
Technicians and associate professionals	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Service and sales workers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Craft workers & plant operators	62.5	0.0	0.0	37.5	0.0	0.0	0.0	100.0	0.0	33.3	66.7
Plant and machine operators, and assemblers	75.0	0.0	0.0	25.0	0.0	0.0	0.0	100.0	0.0	0.0	100.0
Elementary occupations	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Full Sample	72.0	0.0	0.0	28.0	0.0	0.0	72.0	100.0	50.0	50.0	0.0

Source: BIDS-Skill Survey 2020-2021

Moreover, respondents were asked about their opinion regarding need for training in Tanneries. Table 4.9 indicates the responses. From Table 4.9, overall 39.1% argued that training is needed to increase skill, 49.8% stated 'training needed for carrier progression', and 60.8% stated 'training

needed to adapt with the technological change’. Respondents were again asked their opinion to what extent he thinks that his job will be taken away by automation. The result (3.20) indicates slightly in favor of not replacing job.

4.4 Training by SEIP and Need Projection by the Employee

As already discussed in 3.5 that SEIP has organized training for new entrant and upskill with Leather goods and Footwear Manufacturers and Exporters Association of Bangladesh and East West University in Tranche 1 and Tanche 2, and going to organize the training with the same organizations in Tranche 3, but all these training courses are fully providing support to Leather and Footwear sectors. SEIP should focus also the backward linkage important sector like Tannery which has been unfolded through this study.

Table 4.9: Need for Training: Tannery

Occupation Category (BSCO 4 digit)	Training needed increase your skill?		Training needed for carrier progression?		Training needed to adapt with the technological change?		Opinion on extent of Automation replacing your job? 1 to 10 scale (1=not at all 10=replace all)
	Yes	No	Yes	No	Yes	No	
Management director	100	0	0	100	0	100	1.00
Manager	50	50	66.67	33.33	58.33	41.67	4.17
Marketing manager	0	100	100	0	0	100	2.00
Purchase manager	100	0	100	0	100	0	3.50
Casting in charge	0	100	0	100	0	100	5.00
Engineer	42.86	57.14	100	0	42.86	57.14	2.86
Mechanical	28.57	71.43	28.57	71.43	28.57	71.43	3.71
Senior accountant	50	50	70	30	40	60	3.70
Senior electrician	0	100	100	0	0	100	1.00
Admin	0	100	0	100	0	100	1.00
Commercial officer	100	0	100	0	100	0	4.67
Technician	80	20	80	20	80	20	3.40
Floor in charge	20	80	20	80	20	80	5.00
Security	0	100	6.25	93.75	0	100	1.81
Electrician	40	60	40	60	60	40	3.00
Cutting operator	66.67	33.33	66.67	33.33	66.67	33.33	5.67
Senior supervisor	44	56	48	52	44.9	55.1	3.45
Dry helper	100	0	100	0	100	0	5.00
Finishing in charge	57.14	42.86	57.14	42.86	38.46	61.54	2.36
Packing man	0	100	0	100	0	100	2.67
Table asst. Operator	46.38	53.62	53.62	46.38	50.72	49.28	3.91
Split machine operator	34.78	65.22	47.83	52.17	36.26	63.74	3.33
Shift Machine operator	41.3	58.7	56.52	43.48	39.13	60.87	2.63
Worker	29.41	70.59	29.41	70.59	17.65	82.35	2.53
Shading helper	33.33	66.67	66.67	33.33	33.33	66.67	1.80
Office assistant	25.81	74.19	45.16	54.84	25.81	74.19	2.26
Full sample	39.13	60.87	49.76	50.24	39.17	60.83	3.20

Source: BIDS-Skill Survey 2020-2021

Respondents were asked about their opinion regarding need for training in Leather and Footwear Industries. Table 4.10 indicates the responses. From Table 4.10, overall 43.6% argued that training is needed to increase skill, 52% stated ‘training needed for carrier progression’, and 42.1% stated

‘training needed to adapt with the technological change’. Respondents were again asked their opinion to what extent he thinks that his job will be taken away by automation. The result (3.61) indicates slightly in favor of not replacing job.

Table 4.10: Need for Training: Leather and Footwear

Occupation Category (BSCO Code 4 digit)	Training needed increase your skill?		Training needed for carrier progression?		Training needed to adapt with the technological change?		Opinion on extent of Automation replacing your job? 1 to 10 scale (1=not at all 10=replace all)
	Yes	No	Yes	No	Yes	No	
Sr. Officer	0.00	100	100.00	0	0.00	100	2.00
Manager	33.33	66.67	41.67	58.33	41.67	58.33	4.89
Purchase manager	66.67	33.33	66.67	33.33	66.67	33.33	6.33
Casting in charge	100.00	0	100.00	0	100.00	0	6.00
Engineer	0.00	100	100.00	0	0.00	100	3.50
Mechanical	0.00	100	0.00	100	0.00	100	1.00
Designer	50.00	50	50.00	50	33.33	66.67	4.70
Senior accountant	20.00	80	60.00	40	20.00	80	3.10
Admin	50.00	50	50.00	50	50.00	50	2.00
Commercial officer	45.00	55	65.00	35	35.00	65	2.74
Floor in charge	30.00	70	60.00	40	30.00	70	2.30
Security	10.00	90	30.00	70	10.00	90	2.30
Ironman	0.00	100	0.00	100	0.00	100	1.00
Electrician	25.00	75	50.00	50	25.00	75	3.63
Cutting operator	57.14	42.86	61.90	38.1	52.38	47.62	3.05
Senior supervisor	39.29	60.71	42.86	57.14	37.50	62.5	3.78
Supply environment	50.00	50	50.00	50	50.00	50	4.50
Finishing in charge	42.50	57.5	50.00	50	35.00	65	3.45
Packing man	58.33	41.67	75.00	25	58.33	41.67	4.00
Posting helper	100.00	0	100.00	0	100.00	0	4.50
Table asst. Operator	49.25	50.75	53.73	46.27	50.38	49.62	4.12
Split Machine Operator	48.84	51.16	51.16	48.84	44.19	55.81	3.32
Shift Machine Operator	46.15	53.85	58.97	41.03	48.72	51.28	3.79
Worker	40.00	60	40.00	60	40.00	60	2.50
Shading helper	50.00	50	62.50	37.5	50.00	50	3.75
Office assistant	31.25	68.75	34.38	65.63	31.25	68.75	2.63
Full sample	43.65	56.35	52.05	47.95	42.09	57.91	3.61

Source: BIDS-Skill Survey 2020-2021

4.5 Self Assessed Skill & Skill Demand

Respondents were asked about some issues regarding self-assessed skill & skill demand. Table 4.11 indicates their opinion regarding these issues in case of Tanneries. If we see overall results of their opinions regarding the issues indicated in first row in the table, we found the result 7.43 (close to highly proficient) in assessing level of proficiency in performing job. Similarly, their opinions

regarding helping job by formal education and training are around 5.55 which indicates moderate results. They think that their experience in this enterprise has increased skill and their skill have market demand in current industry and outside the industry as result is close to 7.08. They also argued that it will be difficult (6.43) if they want to leave this job to find a similar/ better job.

Table 4.11: Self Assessed Skill & Skill Demand: Tannery

Occupation category (BSCO digit 1)	Self-assessed level of proficiency in performing job	Formal education helps to perform work proficiently	Trainings (not arranged by the employers) in performing work proficiently	Trainings (arranged by the employers) in performing your work proficiently	Experience in this enterprise has increased your skill	Assessment of the market demand of skill in the industry
Managers	7.94	7.06	7.75	7.38	6.94	6.19
Professionals	8.13	7.40	8.10	7.83	7.97	7.37
Technicians and associate professionals	7.60	6.50	7.90	7.30	7.30	6.20
Service and sales workers	6.63	5.63	6.56	6.56	6.63	7.19
Craft workers & plant operators	7.09	5.95	6.98	6.77	6.78	6.02
Plant and machine operators, and assemblers	7.54	5.27	7.43	7.06	7.12	6.40
Elementary occupations	6.84	3.68	6.71	6.58	6.94	6.65
Full Sample	7.43	5.55	7.33	7.02	7.08	6.43

Source: BIDS-Skill Survey 2020-2021

Respondents were asked about some issues regarding self-assessed skill & skill demand. Table 4.12 indicates their opinion regarding these issues in case of Leather and Footwear Industries. If we see overall results of their opinions regarding the issues indicated in first row in the table, we found the result 7.41 (close to highly proficient) in assessing level of proficiency in performing job. Similarly, their opinions regarding helping job by formal education and training are around 5.91, which indicates moderate results. They think that their experience in this enterprise has increased skill and their skill have market demand in current industry and outside the industry as result is close to 7.05. They also argued that it will be difficult (6.25) if they want to leave this job to find a similar/ better job.

Table 4.12: Self Assessed Skill & Skill Demand: Leather and Footwear

Occupation category	Self-assessed level of proficiency in performing job	Formal education helps to perform work proficiently	Trainings (not arranged by the employers) in performing work proficiently	Trainings (arranged by the employers) in performing your work proficiently	Experience in this enterprise has increased your skill	Assessment of the market demand of skill in the industry
Managers	8.13	7.75	8.44	8.19	7.81	6.13
Professionals	7.94	7.41	8.04	7.86	7.59	7.43
Technicians and associate professionals	7.30	6.40	8.40	7.60	7.10	6.00
Service and sales workers	8.10	6.70	7.40	7.70	7.50	6.50
Craft workers & plant operators	7.29	6.10	7.06	6.84	6.89	6.01
Plant and machine operators, and assemblers	7.31	5.56	7.13	6.91	6.95	6.02
Elementary occupations	7.25	3.97	7.34	7.06	7.16	7.13
Full Sample	7.41	5.91	7.29	7.07	7.05	6.25

Source: BIDS-Skill Survey 2020-2021

4.6 Coping with Covid-19

Like other industries of the world Leather and Footwear sector faced serious problem at the second week of March 2020 in Bangladesh. All the retail showrooms were forced to shut down by the government order. At the same time Tanneries and Leather and Footwear industries kept one-month public holiday. One month later they started production again and paid full payment to the employees. Workers were asked what type of support at that time to lead their life and livelihoods.

Table 4.13: Received any help from Govt. to Reduce Covid-19 Shock

	Number	Percentage
Tanneries		
Yes	126	30.43
No	288	69.57
Leather and Footwear		
Yes	94	19.26
No	394	80.74

Source: BIDS-Skill Survey 2020-2021

Survey results show that in case of Tannery 30.43% employees received help from Government and in case of Leather and Footwear Industries only 19.26% received government help (Table 4.13). Then, they were asked that what type of help they needed at that financial hardship.

Table 4.14: If no, then what Type of Help Needed

Types of help	Number	Percentage
Tannery		
Financial and Food Help	32	13
Financial	215	87
Leather and Footwear		
Financial and Food Help	18	5.16
Financial	331	94.84

Source: BIDS-Skill Survey 2020-2021

13% workers of Tanneries sought for both financial and food help and 87% sought for financial help. Where, 18% employees from Leather and Footwear Industries sought for both financial and food help and almost 95% sought for only financial help at that time (Table 4.14). A few of them were also received help from non-government sources as well. 18.69% employees of Tanneries received help from non-govt. source and 23.35% employees of Leather and Footwear Industries received help from non-govt. sources (Table 4.15).

Table 4.15: Received any help from Govt. to Reduce Covid-19 Shock

	Number	Percentage
Tanneries		
Yes	77	18.69
No	335	81.31
Leather and Footwear		
Yes	113	23.35
No	371	76.65

Source: BIDS-Skill Survey 2020-2021

Table 4.16: Engaged in any other Profession during Last Seven Months for Covid-19 Shock

	Number	Percentage
Tannery		
Yes	7	1.69
No	406	98.31
Leather and Footwear		
Yes	7	1.44
No	480	98.56

Source: BIDS-Skill Survey 2020-2021

At the time of Covid-19 shock all other options for financial involvement were very limited. Survey data also reveal that only 1.69% employees from Tanneries and only 1.44% employees from Leather and Footwear Industries were able to engage themselves any other professions to cope with the shock of Covid-19 (Table 4.16).

Chapter 5: Qualitative Findings from KIIs and FGDs

This chapter deals with the qualitative findings from the Key Informant Interviews and with the association leaders/industrialists and consultation meeting (Focus Group Discussions) with the industrialists or higher authorities.

FGD's Findings

5.1 Impact of Covid-19

At the beginning of the countrywide epidemic of Covid-19 Leather and Footwear industries kept one-month public holiday. Entrepreneurs paid 65% of the total salary to their employees. One month later they started production again and paid full payment to the employees. Most of the entrepreneurs received loan from the government at a 2% interest rate, which helped them a lot to continue their production. When the leaders of this section were asked about the new skill required in their industries because of Covid-19 situation, all of them answered no. That means this special situation due to Covid-19 do not required any new skill in their sectors to continue current level of production.

5.2 Skill gap

As already described in background section that this sector started in 1940s through non-Bengali migrant workers and entrepreneurs, from that time production workers of this sector (i.e. sewing operator, machine operator, welder/electrician, cutting operator and aged colours, lasting, setting and assembling operator, inventory, material selection and compliance operator, advanced design and pattern making operator, quality control operator etc.) are receiving on job training for basic skill. They enter as helper in each occupation and then receive basic training from their seniors. This is the tradition in this sector. At the time of FGDs higher officials agreed that they depend on apprentice at the beginning and they don't have any formal training facilities or they do not spend any money to train their production level workers. Basically, the engineers enter here with formal education. At the time of interview Vice-president of BTA identified a new issue of skill gap when they are introducing new machines in their industries. They have to rely on the suppliers for trouble shooting of those new machineries, which finally cause serious production problem in their industries. They want services of skill people in this specific area.

In footwear sector they want training for lasting operator, sewing operator, cutting operator and

quality controller. In future needs they project for high-tech assembling machine operator, high-tech sewing machine operator, hydraulic cutting operator.

In Tanners sector they want training for flashing machine operator, drum machine operator, chemist, manager, leather engineer, cutting operator and quality controller. In future needs they project for hydraulic shaving machine operator, splinting machine operator.

KII's Findings

5.3 Relocating Industries and Environmental Issues

Absence of functional Central Effluent Treatment Plant (CETP) is another issue identified by the association leaders. This sector lost lots of international buyers because of the absence of CETP when they had most of their industries in Hazaribagh area of the capital. Then government forcefully shifted them to Savar Leather Industrial Estate to rescue the environment of the river and surrounding areas. At the time of sudden shift from Hazaribagh to Savar small and medium industries failed to cope with the financial shock and many of them were bound to close their businesses. President and vice president of Bangladesh Tanners Association (BTA) expressed their deep concern about the slow process of relocation and CETP establishment at Savar. President says “global buyers are hesitating placing work orders because of lack of environmental compliance at Savar Leather Industrial Park”. Even they are also concerning of solid waste management causing enormous pollution in the surrounding areas. In Savar, Tanneries are bound to dispose of untreated waste into a nearby river and open spaces due to proper space to manage those wastes. These pollutions put negative impression about Bangladeshi leather and leather goods to the international buyers’ community. Department of Environment under Ministry of Environment and Forest refused to certify Savar Leather Industrial Park, which causes serious problem to export products in international market. Finally, this sector has faced declining trend of exports.

5.4 Skill gap

At the time of Key Informant Interviews, associations’ leaders urge for setting up new training institutes in this sector. Basically, Institute of Leather Engineering & Technology (ILET) is providing bachelor degrees of 120 students per year in three basic engineering courses namely Leather Engineering, Footwear Engineering and Leather Goods Engineering. For each course this

institute recruits 40 students. Even they have very limited number of training program (only one week or so) for the workers of this sector in Bangladesh. Center of Excellence for Leather Skill Bangladesh Ltd. (COEL) has the program on Industry-led Apprenticeship, NTVQF Machine Operations (Footwear) Level 1, Soft Skill Training, Designing and Pattern Making, and Compliance Audit and Consultancy. But all these training are very limited in number to meet the actual training demand in this sector.

5.5 Conclusion

The KIIs and consultation of leather and footwear leaders indicates that there are a number of skill gaps in workers in different occupations in this sector. This sector has high potential for growth but this will require that the identified skill gaps and shortages, and environmental issues are adequately addressed. Even few more skills are needed in future to address the automation of industries those have been identified by the leaders of three associations in this sector.

Chapter 6: Conclusion and Recommendations

Findings from the survey of Tannery and Leather & Footwear Industries indicates that there are a number of skill gaps in workers in different occupations in this sector. The overall mean value (4.5) of the extent of difficulties in filling-up vacancies suggests that there exists skill shortage in the Tannery industry of Bangladesh. The Tannery sector is burdened with no skill and semi-skilled workers or this sector at present may experience economic downturn. Overall, the existing occupations in the Tannery industry are subject to lower extent of automation technology in next 5-10 years. It is expected that the Tannery industry in Bangladesh may demand labor for employment in the industry and this statement is corroborated by the views of enterprises who view that overall, there will be 55% moderate growth and 6% high growth in labor demand in next 10 years. This sector has high potential for growth but this will require that the identified skill gaps and shortages are adequately addressed. Hard-to-fill vacancies arise due to the skill shortage that is why, it is suggested to impart training to the existing labor force involved in the Tannery industry besides increasing salaries. Prevailing training facilities are not enough to meet the demand for skilled persons in this sector.

Overall, the Leather and Footwear industry will experience around 9% job growth across all occupation categories by 2023. It is expected that the industry will have a 30% employment growth in 2025 from current stage and the same figure rose to around 64% in 2030. It indicates an encouraging prospect of the leather industry of Bangladesh. Survey findings corroborate the idea that hard-to-fill vacancies arise due to the skill shortage that is why, it is suggested to impart training to the existing labor force involved in the leather industry. It particularly appears to be a second suggestion that can be taken in near future to address hard to fill vacancies in the Leather and Footwear Industry. Moreover, the purview of training should be extended to such a level where the new comers in the market can as well avail of training facilities.

The following steps could be taken to encourage improvements in skill and production in Tannery and Leather & Footwear sector:

1. What actions should be/will be taken in near future to address the problem of skill gap across occupations in the industry need to be understood for the development of this sector. Training activity of practical work, more supervision of staff and more staff appraisals / performance reviews, training activity of practical work, and reallocating work appear to

be the first three important actions for addressing the problem of skill gap in the Tannery and Leather & Footwear Industries in Bangladesh.

2. Need to establish more programs on Industry-led Apprenticeship.
3. CETP at the 'Savar Leather Industrial Park' needs to be functioning for achieving the target in the international market.

Specific Recommendation for Training in Tanneries

Trade/Occupation at BSCO 4-digit

1. Quality Control Operator-Up skill, Training in new technology.
2. Drum helper- Upskill, Training in new technology.
3. Drum Man-New entrant
4. Machine operator- New entrant, Upskill and Training in new technology.
5. Mechanical engineer- New entrant, Upskill and Training in new technology.
6. Porter- New entrant, Upskill and Training in new technology.
7. Production in charge- Training in new technology.
8. Cutting operator- New entrant, Upskill and Training in new technology.
9. Splinting machine operator-Upskill.
10. Machine helper- New entrant, Upskill and Training in new technology
11. Flashing machine operator-Upskill.
12. Chemist- Upskill.

Specific Recommendation for Training in Leather and Footwear

Trade/Occupation at BSCO 4-digit

1. Supervisors and line leaders -Upskill, Training in new technology.
2. Lasting, Setting and Assembling Worker- Upskill, Training in new technology.
3. Advanced CAD design and pattern making-New entrant, Upskill, Training in new technology.

4. Quality Control Operator-Upskill.
5. Designer- New entrant, Upskill and Training in new technology.
6. Finishing operator- New entrant, Upskill and Training in new technology.
7. Lasting operator- New entrant, Upskill and Training in new technology.
8. Injection Operator-Upskill.
9. Table operator- Upskill, management and Training in new technology.
10. Cutting operator- New entrant, Upskill and Training in new technology.
11. Mechanical engineer- New entrant, Upskill and Training in new technology.

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Annex-1

Key Informant Interviews Participants List

SI	Name	Designation	Association/Industry
1	Md. Shaheen Ahamed	Chairman	Bangladesh Tanners Association (BTA)
2	Md. Eliasur Rahman (Babul)	Senior Vice Chairman	BTA
3	Md. Mizanur Rahman	Vice Chairman	BTA
4	Mr. Md. Nasir Khan	Vice President	The Leather goods And Footwear Manufacturers & Exporters Association of Bangladesh (LFMEAB)
5	Kazi Roushan Ara (Shumi)	Executive Director	COEL & LFMEAB
6	Md. Aabdul Rahim	Managing Director	M/S Ayesha Leather Footwear
7	Md. Rashed Khan Ujjal	Managing Director	Asif Leather Limited
8	Md. Mizanur Rahman	Director	M/S Samanta Leather Complex Ltd

Consultation Meeting/FGD Participants List

Sl	Name	Designation	Industry/Association
1	Kamruzzaman	General Manager	Bengal Shoe Industry Ltd
2	Riaz Uddin Bhuiya	Company Secretary	Fortune Shoes Ltd
3	Dipak Kanti Dey	HRM & Admin Manager	Alliance Leather Goods & Footwear Ltd
4	Redoyan Hossain	Manager	Shah Amanat Footwear
5	Sadia Sultana Popi	Manager	Sathi Leather Ltd
6	Md. Razu Ahmed	Admin Manager	M/S Mizan Leather Exports
7	Abdullah Al Mamun	Manager	Fur Skin Leather
8	Md. Abu Jafar	General Manager	Kalam & Brothers Tannery Ltd
9	Md. Jakir Hossain	Director	Poyran Tannery
10	Mazharul Islam	General Manager	Maizdee Tannery Ltd
11	Mirza Abdul Momin Beg	Manager	M/S International Tannery
12	Md. Muktar Hossain	General Manager	Samira Tannery Ltd

Annex-2
Checklist for KII

Covid-19 Related:

1. Due to COVID-19 pandemic, did you shut down the operations of your factory?
Not at all -----; For some time -----; If so, from when to when -----
2. If not all, did you have full or partial operation?
Full operation -----; Partial operation-----
3. If partial operation, what was the output on average relative to normal output?
Less than 25% _____; 25-50% _____, 50-75% _____
4. What strategies or coping mechanisms you used to minimize the impact of Covid-19 on your business?
Kept producing main products only _____; Laid off some workers _____;
Lowered salaries of workers _____; Others _____
5. During Covid-19 Pandemic did you face any problems in worker attendance, or getting skilled workers?
Problems of attendance _____; Skilled worker availability _____
6. If the answer is the “latter”, then please state the problem in details.
7. Discuss problems of management in the time of covid, particularly labor employment and skill issues as these affect the enterprises generally and how they recovered from it.

Skill Related:

1. List the four critical JOBS for continuing industrial production (except administrative & accounting jobs) in your factory.
2. Have you faced any problem to ensure full time production due to skill shortage of labors?
If yes how much (in percent) in 2018 or 2019?

3. If the Enterprise states “Low number of applicants with the required skills” then write down the reasons for lower applicants?
4. Reasons for skill gap
 - (a) Lack of proper skills of doing the JOB from the educational degree (like: team work, verbal and writing skills etc.)
 - (b) Lack of proper skills of doing the JOB because of lack of specialized training (like food certification, food handling and testing techniques that are not available in the country)
 - (c) Lack of Technical Skills in food handling and processing
 - (d) The Curriculum taught in educational institutions are backward and don't support the industry's current need
5. How to address the problems of skill gap?
6. Have you arranged any training for employees of this enterprise over the last two (2018 and 2019) years?
7. Mention 5 (five) most important occupations that require further training.
8. Mention 5 most important occupations that you think will be/ may be subject to automation, fully or partially, in next 5 to 10 years.
9. Do you have any plan to expand your business in next 5 to 10 years?
10. What is your vision of expansion of production in your factory in the next 10 years?
11. The name of occupations/trade that ARE NOT CURRENTLY EMPLOYED in your enterprise but you would like to hire them now or in near future to expand your business or increase productivity or cutting labor cost.

General:

1. Discuss the overall general problems you are currently facing in your industry or sector.
2. Your suggestions to overcome those problems.
3. Overall recommendations for this sector in next 5 and 10 years.