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RESEARCH I KNOWLEDGE I DEVELOPMENT

A study by South Asian Network on Economic Modeling (SANEM)

on

the current trends in skills development sector of Bangladesh: challenges and possibilities

uttoron
Skills for better life

Chevron

swisscontact

This study was commissioned to South Asian Network on Economic Modeling (SANEM) by Uttoron – *Skills for better life* project implemented by Swisscontact and funded by Chevron. This report is developed by SANEM and does not necessarily reflect the opinion and beliefs of Swisscontact or Chevron.

table of contents

list of figures

list of tables

acronyms and abbreviations

3D	Three Dimensional
8FYP	8th Five-Year Plan
ADB	Asian Development Bank
APTA	Asia-Pacific Trade Agreement
AR	Augmented Reality
BANBEIS	Bangladesh Bureau of Educational Information and Statistics
BBS	Bangladesh Bureau of Statistics
BDT	Bangladeshi Taka
BIMSTEC	Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation
BMET	Bureau of Manpower Employment and Training
BPI	Bangladesh Partnership Initiative
BTEB	Bangladesh Technical Education Board
CBC	Carpet Backing Material
CNC	Computerized and Numeric Controlled
COVID-19	Corona Virus Disease 2019
CV	Curriculum Vitae
DTE	Directorate of Technical Education
EIM	Electrical Installation and Maintenance
EPB	Export Promotion Bureau
EU	European Union
FAO	Food and Agriculture Organisation
FDIs	Foreign Direct Investments
FY	Fiscal Year
GDP	Gross Domestic Product
GFO	General Finishing Operation
GoB	Government of Bangladesh
HHs	Households
HK	House Keeping
HSC	Higher Secondary Certificate
ICT	Information and Communication Technology
ILO	International Labour Organisation
IoT	Internet of Things
ISC	Industry Skills Council
IT	Information technology
ITES	IT-enabled Services
KII	Key Informant Interview
LDCs	Least Developed Countries

LE	Light Engineering
LEED	Leadership in Energy and Environmental Design
LEI	Light Engineering Industry
LFS	Labour Force Survey
MAC	Machinist
MDGs	Millennium Development Goals
MoE	Ministry of Education
MoEWOE	Ministry of Expatriate Welfare and Overseas Employment
MoLE	Ministry of Labour and Employment
MoU	Memorandum of Understanding
MPS	Mobile Phone Servicing
NGO	Non-Governmental Organization
NSDA	National Skills Development Authority
NSDC	National Skills Development Council
NSDP	National Skills Development Policy
NSP	National Skills Portal
NTVQF	National Technical and Vocational Qualifications Framework
PFO	Packaging Finishing Operation
PKSF	Palli Karma Sahayak Foundation
PPF	Plumbing and Pipefitting
RAC	Refrigeration and Air-conditioning
RMG	Ready-Made Garments
RPA	Robotic Process Automation
SAFTA	South Asian Free Trade Area
SANEM	South Asian Network on Economic Modeling
SAPTA	SAARC Preferential Trading Arrangement
SDCMU	Skills Development Coordination and Monitoring Unit
SDGs	Sustainable Development Goals
SEIP	Skills for Employment Investment Program
SMI	Survey of Manufacturing Industry
SSC	Secondary School Certificate
STP	Skills Training Providers
TTCs	Technical Training Centres
TVET	Technical and Vocational Education and Training
UK	United Kingdom
UN	United Nations
USD	United States Dollar
VAT	Value-Added Tax
VR	Virtual Reality
WEL	Welding

executive summary

The study, *"The Current Trends in Skills Development Sector of Bangladesh: Challenges and Possibilities"* was conducted by the South Asian Network of Economic Modeling (SANEM). The report highlights the importance and analyses the challenges of the skill development sector in the country and the private sector's perception regarding the upskilling and reskilling of workers. The study's main objective is to build a comprehensive analysis of the country's skill development industry and identify the innovative activities that have been implemented in it. Moreover, it seeks to identify the emerging sectors with high demand for a skilled workforce, identify significant challenges in the skills sector, provide specific recommendations for overcoming those challenges, and evaluate the effectiveness of skills development training by collecting primary data from beneficiaries and the private sector to understand their perception of the skill training and its impact.

Chapter three of the report outlines mixed methodology approach combining qualitative and quantitative techniques to achieve its research objectives. The methodology of the study consisted of three integral parts: a comprehensive desk review, a primary survey, and Key Informant Interviews (KIIs). Firstly, the in-depth desk review scanned secondary documents and data to provide an overview of the skill profile of Bangladesh. Secondly, the primary survey was conducted to evaluate the effectiveness of skills development training using a questionnaire developed in line with the study's objectives. Thirdly, the study included 33 KIIs from the private and public sectors to understand their perception of skills training and its impact.

The following section, chapter four reports on the skills development sector in Bangladesh is facing major challenges such as a significant portion of the workforce is not enrolled in any kind of educational institution. While private institutions dominate the sector, there is scope for greater collaboration between the private and public sectors, hence, this may lead to diversification of training programs. However, there has been an upward trend in enrolment of technical vocational education and training (TVET) in recent years, this trend can be leveraged to improve the skill level of the labour force and increase productivity.

The seven emerging sectors of Bangladesh was identified in the study considering their contribution to overall GDP, employment, and export earnings. The chosen sectors also aligns with high priority sectors mentioned in the Industrial Policy of the country. Chapter five of the report details out an overview and addresses the concerning factors in each industry. Agro and Food-processing industry is the first sector in focus as Bangladesh is an agricultural nation where agriculture sector accounts for 14.23% of the GDP and employs 40.6% of the workforce. The demand for agricultural products is expected to increase by 15% between 2019 and 2028, providing a significant export growth opportunity for the processed food sector in Bangladesh. However, market access, compliance with SPS criteria, and issues with cultivation, packaging, power, and infrastructure pose challenges for the sector.

The ready-made garments (RMG) sector in Bangladesh is the second sector in focus as it involves a major worldwide hub for clothing sourcing, with over 4,000 factories. RMG exports more than doubled between 2011 and 2019, growing at a 7% yearly rate and accounting for 6.3% of the worldwide garment export industry. Bangladesh has over 1,430 textile mills, with 52 nations offering duty-free access to its goods. However, concerns about automation-related job losses, moving up the fashion value chain, compliance and workplace safety, and potential decline in RMG exports after graduation from LDC status pose challenges for the industry.

Next sector is Bangladesh's IT industry is primarily represented by software development and IT-enabled services such as BPO and e-commerce. The industry's revenue has been growing, and export revenue has increased by 21% annually, surpassing $1 billion in 2019. Bangladesh has a large pool of online workers. The government is committed to promoting the sector by making it easier to conduct business and investing in digitization and IT parks. However, there are still challenges, such as expanding the population's access to and use internet services. The government invests in education and training in cutting-edge technologies such as IoT and AI. Private investment in vocational and training institutes can expand opportunities for Bangladeshi youth to learn IT skills.

Bangladesh's pharmaceutical sector has overgrown domestic and international markets and is one of the most technologically advanced sectors of the country. The industry has gradually succeeded in meeting the demands of the local market. Exports have been steadily increasing at an increasing rate, demonstrating the industry's ability to make headway into the global marketplace. Bangladesh exports pharmaceutical items to 151 countries, with South Asian, African, and North American countries being the most prominent export destinations. Patent exemption, institutional assistance, and rising demand in Asian and African markets have contributed to increased pharmaceutical export revenues. However, the industry faces challenges such as low labour-force participation of women, a shortage of training among the workforce and a severe lack of training among those working in the pharmaceutical industry.

Leather and leather goods are one of the industries with significant development potential in Bangladesh due to the abundance of low-cost labour and raw materials. The industry has four product segments: tannery output, finished leather, leather goods, and leather footwear. The major products are Bags, purses, luggage, belts, wallets, jackets, and footwear. There are 3,500 small businesses, 90 medium businesses, and 15 large businesses. The industry needs to address the insufficient use of technology, lack of training programs, dependence on expensive imported raw materials, lack of market knowledge, and difficulties in obtaining loans. With the LDC graduation, stricter international standards, higher competition, and the loss of preferential trade benefits will be a significant challenge for the industry.

The light engineering (LE) industry in Bangladesh is a crucial source of export earnings and has the potential to meet domestic demand. The sector comprises over 40,000 workshops/enterprises and employs around 10 million people. The market size is approximately 25,000 crore per year, and before the pandemic, the growth rate was 20-25% per year. The LE industry faces challenges such as price fluctuation of raw materials, lack of skilled workforce, cheap imports, and lack of access to funding for small workshops.

Jute industry of Bangladesh is the second-largest producer and leading exporter of jute and jute-based products. The growing demand for eco-friendly products has increased exports to over a hundred countries, with main destinations including Turkey, China, Pakistan, India, the EU, and the United States makes the industry one of the emerging sector of the country. Despite being the leading producer, the jute industry in Bangladesh has suffered a blow, with 79 of the 397 jute mills closing in recent years due to a lack of technological breakthroughs. The cost of jute goods production in Bangladesh is among the lowest in the world due to a young and competitive labour market and government incentives.

The study conducted KIIs with HR officials and mid-level executives in charge of recruitment in seven sectors to gain insights into the factors driving the skill demands of these sectors. The study found that the recruitment process across all sectors is marked by a high level of informality, with companies relying on internal networks and employee recommendations rather than posting recruitment notices. The study

also found that entry-level workers often go through a probational period and participate in on-job training, however, this does not result in promotion rather they stay involved in primary level positions. The study found a general level of satisfaction with the skill level of existing entry-level workers, but this should not be interpreted as a signal of competency or readiness for the future job market. The study also highlighted concerns about the gap between the purview of skill development programs and the industry's demand, as well as future concerns about the impact of the fourth industrial revolution on the low-skilled workforce. The study found that the RMG sector faces challenges with retaining skilled workers and lacking professionalism and cooperation from workers. The sector is also facing competition from other countries with more skilled labour. The Pharmaceutical sector is increasingly technology-intensive and requires higher level of technical skills from workers. The Agro and Food Processing sector faces issues with employee retention and lack of skilled workers. The Leather and Leather Products sector needs workers to acquire new skills and adopt new technologies. The IT and software sector is facing difficulty retaining employees and recruiting new candidates. The Light Engineering sector relies heavily on on-job training and faces challenges with frequent job switching and low wages. The Jute and Jute products sector lacks permanent workers and faces high employee turnover.

The eighth chapter of the report highlights the skills required by the helper, operator, and supervisor in each sector. It also lists the basic lines of trade involved in each of the seven sectors. Furthermore, the section also tabulates the sector-specific challenges related to the skill gap that were mentioned in the informant interviews.

1. introduction

Over the last decade, Bangladesh has registered an annual average GDP growth rate between 5% and 7%. In general, strong export performance and a steady remittance inflow contributed to economic growth and ensured macroeconomic stability. There has also been notable progress in some areas of human development such as health, education, and child and maternal mortality. The country made significant progress in achieving the Millennium Development Goals (MDGs) and aims to achieve the Sustainable Development Goals (SDGs) by 2030. Bangladesh is in the process of graduating from the Least Developed Countries (LDCs) status by 2026.

However, some longstanding issues remain a severe concern for the country's long-term growth and development path. The problem of skill gap and skill mismatch is a prime concern in this regard. To alleviate productivity, boost domestic industry and ensure Bangladesh's competitive edge in the global value chain, there is no alternative to upskilling the country's workforce.

The significance of the issue of skill development becomes even more pertinent when the current demography is taken into consideration. Almost 65% of the country's population is now in the working age bracket of 15 to 64 years. The window of the demographic dividend that Bangladesh now enjoys will close around 2040. There is scope to argue that the demographic dividend has already peaked and from this point onward it will continue to decline.

Upon Bangladesh's graduation from LDC in 2026, it will lose many preferential trade benefits which have aided greatly in the country's standing in the world market. While on one hand, LDC graduation will open windows of greater opportunities like the increased flow of Foreign Direct Investments (FDIs), there are concerns that without structural strength the country's export may face serious risks. Needless to say, the skill will be a core component of this structural strength.

More importantly, the world economy is going through a massive technological transformation creating unprecedented challenges in the near future. The introduction of artificial intelligence and automation in production systems, the incorporation of cutting-edge innovations like 3D printing and nanotechnologies, and advances in supply chain management have changed the dynamics of the labour market and warrant appropriate shifts in the policy paradigm. Therefore, it has become imperative that domestic policies regarding labour and in particular, the youth focus on the development of skills.

It is commendable that the government has been emphasizing the skill development of the youth. There has been a growth of both public and private TVET institutions over the last decade. Along with the government, development partners and non-government organizations (NGOs) have taken quite a few initiatives for the skill development of the Bangladesh labour force.

The government's commitment to the skill development sector is reflected in the National Skill Development Policy 2011 and the draft National Skill Development Policy 2020. The 8th Five Year Plan, and the Perspective Plan 2041, also prioritize the skill development of the youth.

However, whether the TVET system has been able to successfully cater to the demand of the local industry and overseas job remain a matter of concern. The design of the curriculum, quality of the trainers, access to TVET education, amenities and facilities essential for a learning environment, state of collaboration between the TVET institutions and the private sector, preparedness of the TVET system to address the challenges of the 4th industrial revolution—all of these issues need to be analyzed in depth.

The constraints to developing an efficient TVET system need to be identified. In this regard, it must be acknowledged that three prime stakeholders—the trainees, the management bodies of TVET institutions and the representatives of the private sector—need to be taken into consideration if the dynamics of the skill development sector are to be grasped.

2. objectives

The overall objective of the study is to construct an overall analysis of the national skill development sector and identify the innovations/new activities incorporated into the skills development domain of the country. The study also aims to evaluate the effectiveness of skills development training by collecting primary data from beneficiaries and the private sector to understand their perception regarding the skills training and its impact, explore possible ways of collaboration with the private sector regarding skills training, identify new and emerging sectors with high demand for a skilled workforce, identify the significant challenges of the skills sector, and provide specific recommendations to overcome those challenges.

3. methodology

Given the research objectives, this study adopted a mixed approach combining qualitative and quantitative techniques. The core methodology of the study consisted of three integral parts. **First**, the study included a comprehensive desk review. The desk review scanned secondary documents and data to provide an overview of the skill profile of Bangladesh. **Second**, a primary survey was conducted to evaluate the effectiveness of skills development training. **Third,** the study conducted 33 KIIs from both the private and public sectors to understand their perception regarding skills training and its impact.

3.1 desk review

In-depth desk research was one of the main methods for this study. This was accomplished by reviewing pertinent national documents as well as scanning and analyzing the current secondary data. Following is a list of reviewed documents:

1. National Skills Development Policy (NSDP) 2011
2. Draft National Skills Development Policy 2020
3. Training Institute/Center Registration Guidelines
4. Documents related to ILO's Skills 21 – Empowering citizens for inclusive and sustainable growth
5. Documents related to ADB's Skills for Employment Investment Program (SEIP)
6. Documents related to the Uttoron project of Swiss Contact Bangladesh
7. Journal articles and reports on skill development in Bangladesh

3.2 survey methodology

A primary survey was conducted with the participants of training programs run by the Uttoron Program of Swisscontact Bangladesh. The primary survey aimed to assess the participants' perceptions regarding the skill training program. For this, the study developed a questionnaire in line with the objectives of the study.

sample size determination

To determine the sample size of the survey, the study considered the skill training programs run by the Uttoron Program of Swisscontact Bangladesh as the population for the study. 1931 beneficiaries completed the skill training program provided by Uttoron. Given the time constraint, the study surveyed a sample drawn from the population. According to statistics, the population of this study can be considered "large". Conventionally, for a large population, 385 samples are considered for a survey.

According to Cochran's formula (widely used formula), the estimated sample for a large population is as follows:

$$n_0 = \frac{Z^2 pq}{e2}$$

$$= \frac{(1.96)^2 (0.5)(0.5)}{(0.05)^2}$$

$$= 384.16$$

Here, n^0 is the estimated sample size, Z^4 is the abscissa of the normal curve that cuts off an area α at the tails (1 - α equals the desired confidence level, e.g., 95%), e is the desired level of precision, p is the estimated proportion of an attribute that is present in the population, and q is 1-p. The value for Z is found in statistical tables that contain the area under the normal curve. Let, ±5% precision levels (confidence interval), where the confidence level is 95% and estimated proportion, P=.5 (assume maximum variability).

To be population-representative, the final sample size is determined by the following formula:

Sample Size,

$$n = \frac{n_o}{1+\frac{(n_o-1)}{N}}$$

$$= \frac{385}{1+\frac{(385-1)}{1931}}$$

$$=321$$

Here, n is the sample size, n^0 is the estimated sample size for a large population and N (1931) is the true population of the study. The formula provides a sample size of 321. The study followed a simple random sampling technique in determining the samples.

sampling framework

The skill training program run by Uttoron covered four districts of Bangladesh. Therefore, the divisional weights were used to capture the geographical representatives of the beneficiaries. For instance, the 321 samples were distributed among the districts based on each district's population proportion of the total population of this study. Habiganj district had the highest number of samples 106, followed by Dhaka (96), Sylhet (81) and Moulavibazar (38).

table 1: sample distribution across districts

Location	Population	Weight	Sample
Dhaka	577	0.30	96
Habiganj	638	0.33	106
Moulavibazar	230	0.12	38
Sylhet	486	0.25	81
Total	**1931**	**1.00**	**321**

Source: Authors' calculation

The Uttoron Program provided skill training in eight trades. However, the number and types of trades were not uniform across the districts.

[4] Value of Z derived from normal distribution table

table 2: samples distribution across districts, trades and gender

Location and Trade	*Population*			*Weight*			*Sample*		
Dhaka	***Male***	***Female***	***Total***	***Male***	***Female***	***Total***	***Male***	***Female***	***Total***
EIM	176	14	190	0.41	0.10	0.33	29	2	32
GFO/PFO	26	119	145	0.06	0.81	0.25	4	20	24
MAC	48	0	48	0.11	0.00	0.08	8	0	8
MPS	102	14	116	0.24	0.10	0.20	17	2	19
RAC	29	0	29	0.07	0.00	0.05	5	0	5
WEL	49	0	49	0.11	0.00	0.08	8	0	8
Total	**430**	**147**	**577**	1.00	1.00	1.00	71	24	96
Habiganj	***Male***	***Female***	***Total***	***Male***	***Female***	***Total***	***Male***	***Female***	***Total***
EIM	278	22	300	0.53	0.19	0.47	46	4	50
GFO/PFO	57	94	151	0.11	0.81	0.24	9	16	25
PPF	121	0	121	0.23	0.00	0.19	20	0	20
WEL	66	0	66	0.13	0.00	0.10	11	0	11
Total	**522**	**116**	**638**	1.00	1.00	1.00	87	19	106
Moulavibazar	***Male***	***Female***	***Total***	***Male***	***Female***	***Total***	***Male***	***Female***	***Total***
EIM	130	29	159	0.66	0.91	0.69	22	5	26
GFO/PFO	1	1	2	0.01	0.03	0.01	0	0	0
PPF	4	0	4	0.02	0.00	0.02	1	0	1
WEL	63	2	65	0.32	0.06	0.28	10	0	11
Total	**198**	**32**	**230**	1.00	1.00	1.00	33	5	38
Sylhet	***Male***	***Female***	***Total***	***Male***	***Female***	***Total***	***Male***	***Female***	***Total***
EIM	81	32	113	0.26	0.19	0.23	13	5	19
GFO/PFO	52	95	147	0.17	0.56	0.30	9	16	24
HK	31	7	38	0.10	0.04	0.08	5	1	6
MAC	64	28	92	0.20	0.16	0.19	11	5	15
PPF	5	0	5	0.02	0.00	0.01	1	0	1
RAC	82	9	91	0.26	0.05	0.19	14	1	15
Total	**315**	**171**	**486**	1.00	1.00	1.00	52	28	81
Sum	**1465**	**466**	**1931**	-	-	-	**244**	**77**	**321**

source: authors' calculation

For example, Dhaka and Sylhet districts covered six trades each. However, Habiganj and Moulavibazar districts covered four trades each. When looking at types of trades, Dhaka did not cover PPF, while Sylhet only covered HK. To avoid biases that could arise from not taking into consideration the number and types of trades within each district, the study distributed samples across trades within each district.

Finally, the study considered the gender aspect in determining samples under each trade within each district. Among the beneficiaries, 24% were female. However, the proportion of the female population was not homogenous across districts. For example, only 14% of beneficiaries were female in the Moulavibazar district, while the rate was 35% in the Sylhet district (Table 3). Hence, the district-wise gender proportion was consumed while samples were distributed across gender under each trade within each district.

table 3: district-wise sample distribution by gender

Dhaka			
Gender	***Population***	***Weight***	***Sample***
Male	430	0.75	71
Female	147	0.25	24
Total	577	1.00	96
Habiganj			
Gender	***Population***	***Weight***	***Sample***
Male	522	0.82	87
Female	116	0.18	19
Total	638	1.00	106
Moulavibazar			
Gender	***Population***	***Weight***	***Sample***
Male	198	0.86	33
Female	32	0.14	5
Total	230	1.00	38
Sylhet			
Gender	***Population***	***Weight***	***Sample***
Male	315	0.65	52
Female	171	0.35	28
Total	486	1.00	81

source: authors' calculation

The study used simple random sampling[5] to determine samples across gender under each trade within each district.

[5] Simple random sampling is a robust sampling technique in which each entity has an equal probability of being chosen in a sample and each entity has been chosen independently. The probability of an entity being in the sample is equal to the ratio of sample size and the population size.

questionnaire development

The questionnaire for the survey was developed based on the review of relevant documents where the objectives of the study were the frame of reference. The questionnaire was written in two languages: Bengali and English (Annex 1). The Bengali questionnaire is a translation of the English questionnaire using the colloquial form to ensure the understanding of both the interviewer and the respondent.

survey manual

A survey manual was developed by the research team under the supervision of experts as a guide for the enumerators and the supervisors to conduct the survey efficiently. The survey manual included the overview of the survey, background and objectives, sampling design, specified responsibilities of the Enumerators and the Supervisors, general guidance to fill up the questionnaire, necessary definitions and question by question explanation for the demanding parts, unit conversion etc.

hiring and training of enumerators

A 2-layer selection process was followed for the recruitment of the enumerators. Generally, SANEM employs enumerators with a minimum Bachelor's degree in the field of Social Sciences. Enumerators with prior experience were prioritized for recruitment. Upon scrutiny of CVs, 24 candidates who fulfil eligibility requirements were selected for a 4-day training. Based on overall performance and qualifications, 16 enumerators were selected after the training program.

The four-day training was provided for the enumerators and supervisors, where the enumerators were briefed in detail on the questionnaire, the manner of conducting the interviews, and other relevant matters. The training module was composed of three modules: (i) learning session, (ii) task session, and (iii) evaluation session.

In the learning session, the trainers briefed the enumerators on the background and rationale of the study. The questionnaire was explained in detail. The trainers also responded to queries by the enumerators. Enumerators were also introduced to the data input method (Google Form) and trained in its usage. Intensive one-to-one exercises were conducted in the task session. Trainees interacted with each other acting as interviewers or interviewees and filling up blank questionnaires. The trainers closely monitored the process to implement the final stage of the selection process. In the last stage, i.e., in the evaluation session, the enumerators and supervisors were evaluated based on their performance in carrying out their respective assignments. Later, a discussion on queries by the trainees was conducted by the trainers.

data collection

The survey was conducted over the phone. Data was collected through a printed questionnaire and then input into a google form. The processing and analysis were completed using the Stata software.

3.3 key informant interviews (KIIs)

Key Informant Interview (KII) is an essential tool for comprehensive qualitative research. The KIIs are useful for gaining a thorough grasp of the skill development sector and the functions played by the private sector, governmental bodies, non-governmental organizations and development partners within it. These KIIs also fill in the information gaps left by desk research and secondary data analysis. As a part of the primary data collection (qualitative nature), the research team conducted Key Informant Interviews (KIIs) with all the relevant stakeholders.

A total of 33 KIIs were conducted. Following is a brief overview of the KIIs:

table 4: number of KIIs

SL	Sector	No of KIIs
1	Agro and food processing and agro-machineries manufacturing industry	4
2	RMG	4
3	ICT/Software Industry	6
4	Pharmaceutical Industry	5
5	Leather and leather goods industry	3
6	Light engineering industry	3
7	Jute and Jute products industry	3
8	NSDA	2
9	BTEB	3
10	SEIP	1
Total		**34**

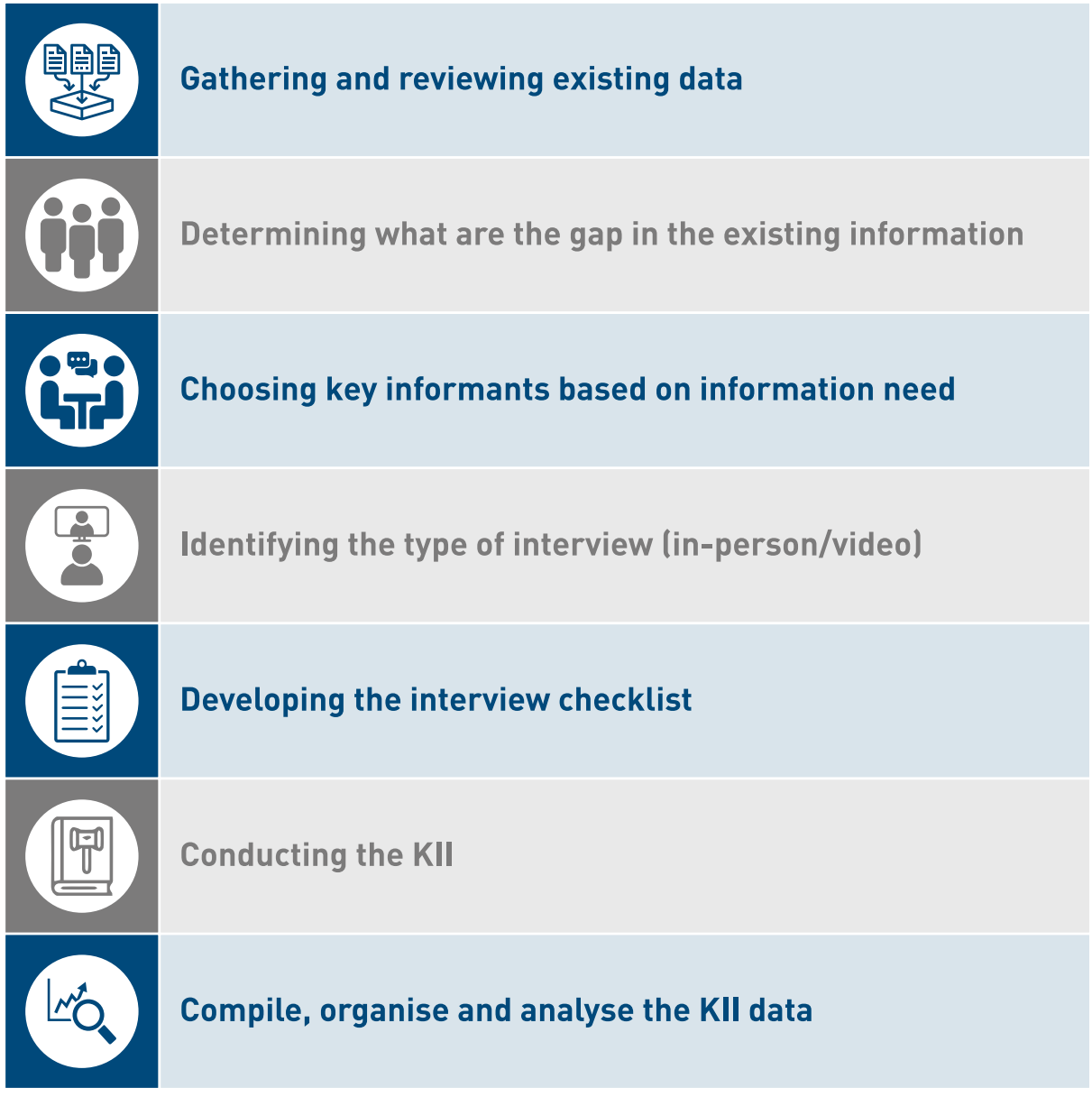
methods of interview

Face-to-face interviews and phone interviews are the two methods used most frequently for KIIs. Given the time constraints, SANEM followed both face-to-face interviews and phone interviews. SANEM tried to get face-to-face interviews. However, when in-person interviews were not an option, SANEM conducted the interviews over the phone, via Skype, or through Zoom.

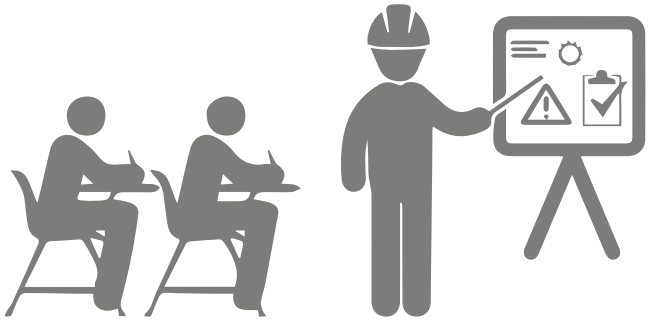
KIIs implementation

A systematic strategy was used to plan the KIIs (Figure *1*). The information to be sought from the key informants was identified based on the information gaps found during the desk research. The study team sought out the proper personnel who can fill in these informational gaps once they were identified. In consultation with Swisscontact, a sector-specific tailored checklist was created for each interview. Microsoft word and excel were used to systematically compile, arrange, and evaluate the KII transcripts.

figure 1: KII implementation plan



source: UCLA center for health policy research[6]



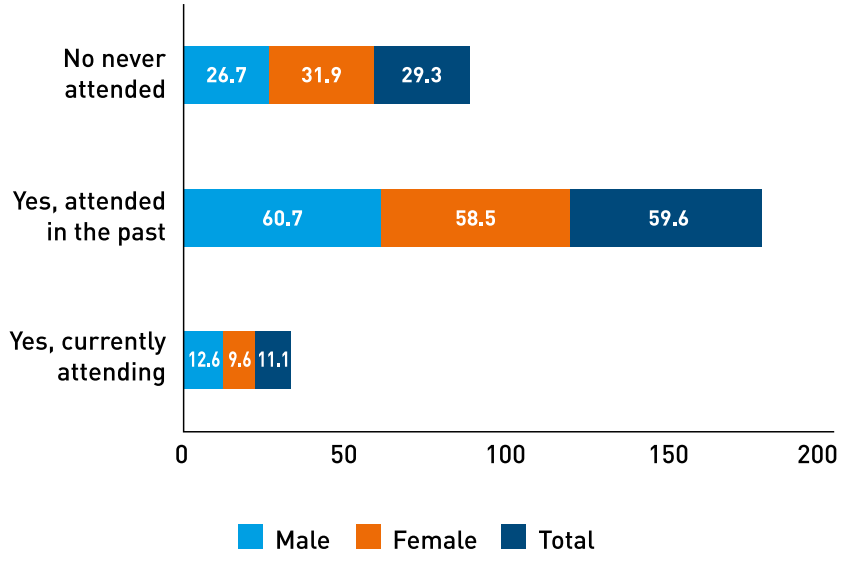
[6] UCLA Center for Health Policy Research, https://healthpolicy.ucla.edu/programs/health-data/trainings/ Documents/tw_cba23.pdf

4. an overview of the skills development sector of Bangladesh

4.1 an overall skill profile of Bangladesh

The current scenario concerning the skill level of the Bangladesh workforce does not offer an encouraging picture. For example, a significant portion of the workforce was never enrolled in any kind of educational institution (Figure 2). Lack of training in basic formal education seriously impedes the workers' capacity to contribute to the economy. It can be argued that a lack of formal education among workers can lead to communication failure between management and workers and give rise to misunderstandings over a wide range of areas from production technology to day-to-day operations. Also, it would be highly difficult to upgrade the skill level of workers without any formal educational background.

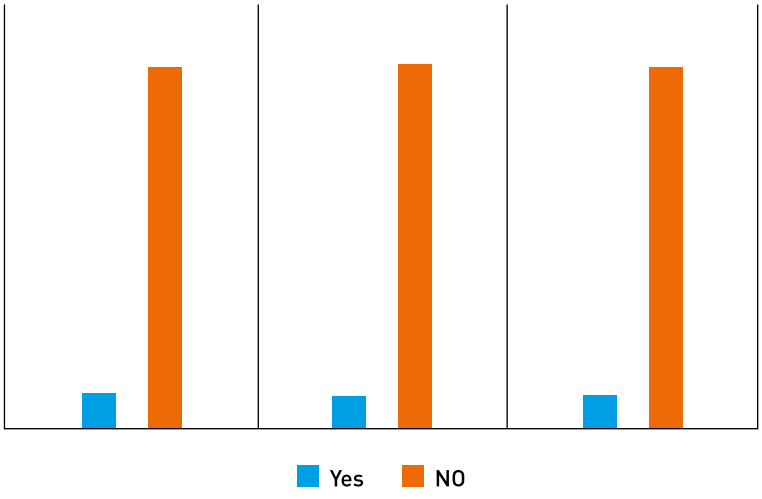
figure 2: attended school as % of the working-age population



source: Labour Force Survey, 2016-17

Not only in terms of formal education, the share of the working-age population who has received any form of training is also dismally low at 1.7% (Figure 3). It is, therefore, quite evident that there is serious inadequacy in institutional arrangements to expand the enrolment base of the training programs. Although government and non-government organizations have been active in addressing the skill level of the labour force, these initiatives need to be upscaled in a manner so that a significant share of the working-age population can be brought in formal training and provided with the skills demanded by domestic industries and services.

figure 3: received training as % of working age population

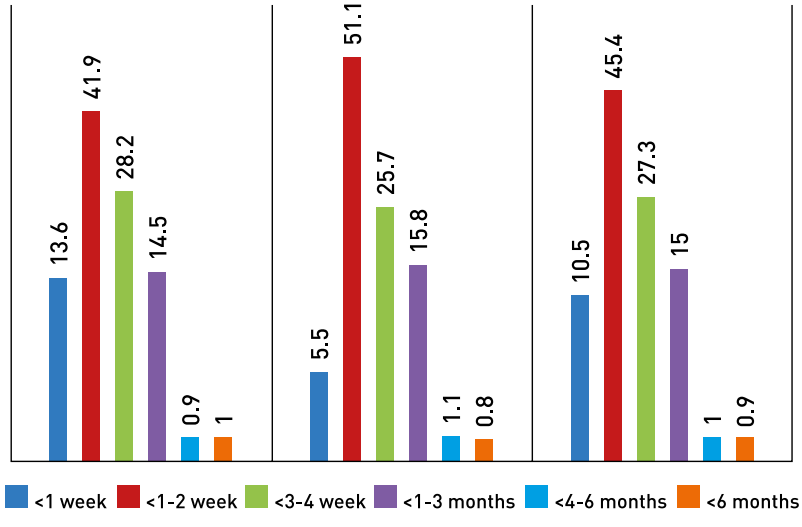


source: Labour Force Survey, 2016-17

There are also concerns regarding the meagre share of the workforce who have received some form of training. The quality of this training must be taken into consideration. Training programs need to be carefully designed and implemented. In the case of implementation, several factors, including the learning capacity of the participants, the qualification of trainers, and training facilities need to be taken into consideration. Hastily executed training programs may bear no effect on the overall skill level of the participants and accrue unnecessary costs.

It has been found that the duration of the majority of the training programs attended by workers is only one month (Figure 4). While the duration alone does not provide any insight into the effectiveness of the training, the effectiveness of longer-term and intensive programs can hardly be denied. Nevertheless, in both cases, there need to be mechanisms for monitoring and evaluation.

figure 4: population aged 15 or older who has received training, by the duration of the training, and sex



source: Labour Force Survey, 2016-17

Table 5 provides a glimpse into the conventional training programs in the country. It is quite encouraging that a significant number of the working-age population have opted for computer training. However, there is scope for further diversifying the programs and introducing more contemporary subjects.

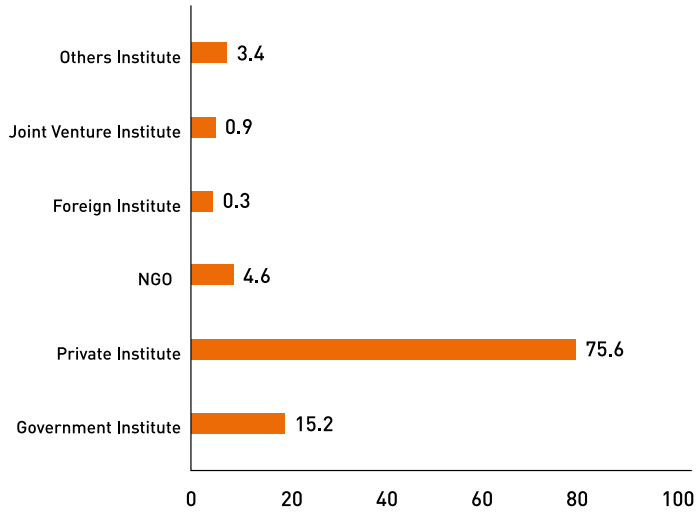
table 5: percentage of the population aged 15 or older who has received training, by trade, and sex

Trade of training	Male	Female	Total
Mechanical/civil engineering	0.3	0.3	0.3
Electrical and electronic engineering	2.8	0.6	2
Computer	52.1	44.8	49.3
Leather and Textile	0.5	1.4	0.9
Catering, hotel, and restaurant	0.5	0.2	0.4
Craftsman/handicraft and cottage work	6.5	9.7	7.7
Creative arts/artists/photography	0.2	0.1	0.2
Agriculture crop production and preserve	1.5	1.4	1.5
Non-crop agricultural activities	1.9	2.1	2
Health and paramedical services	2.6	4.1	3.2
Office management	18.9	18.2	18.6
Driving and motor mechanic	2.5	0.1	1.6
Beautician & hairdressing	0	3.6	1.4
Tourism	0	0	0
Journalism, mass communication	0.3	0	0.2
Foreign language	0.8	0.4	0.6
Construction related works	0.5	0	0.3
Furniture	0.6	0	0.4
Welding	0.8	0.1	0.6
Poultry	0.8	0.2	0.6
Plumbing / Pipe Fitting	0.2	0	0.1
RMG	3.5	10.2	6
Other	2.1	2.7	2.3

source: Labour Force Survey, 2016-17

Notably, private institutes are the source of training for the majority (Figure 5). While it is commendable that there are private sector-led initiatives to improve the skill level of the workforce, the government and non-government entities need to widen the scope of collaboration in this regard. It is only through multilateral collaborations that the participation base of these training programs can be expanded. Also, the government is in a better position to mobilize more resources and provide policy guidance to these institutions. In this regard, the implementation of long-term policy plans can be achieved.

figure 5: sources of training



source: Labour Force Survey, 2016-17

Nevertheless, private institutions have dominated the skill development sector. Across almost all types of institutes, the share of private institutes is higher than that of public institutes (Table 6). The high share of private institutes highlights the scope and significance of public-private partnerships in this sector.

table 6: number of institutions, by type and management

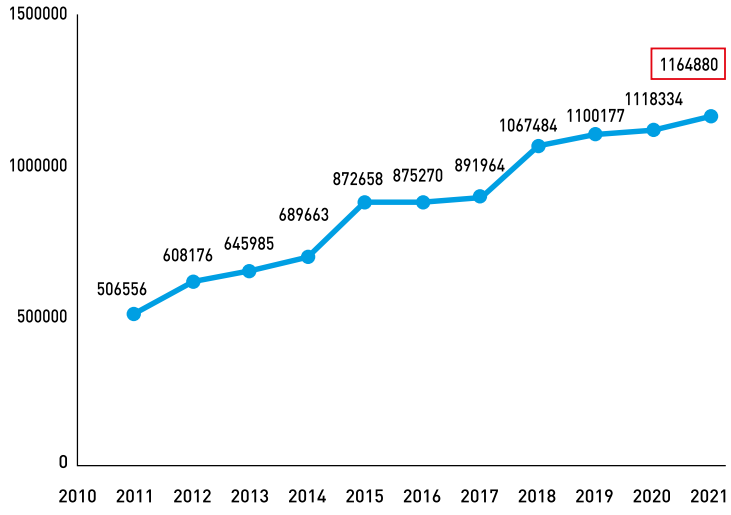
Type of Institute	Management	No. of Inst.
Polytechnic Institute	Public	52
	Private	387
	Total	439
Technical School & College	Public	73
	Private	152
	Total	225
Glass & Ceramic Institute	Public	1
	Private	
	Total	1
Graphic Arts Institute	Public	1
	Private	
	Total	1
Survey Institute	Public	2
	Private	2
	Total	4

Technical Training Centre	Public	68
	Private	98
	Total	166
Textile Institute	Public	10
	Private	23
	Total	33
Textile Vocational	Public	41
	Private	10
	Total	51
Agriculture Training Institute	Public	13
	Private	170
	Total	183
Marine Technology	Public	1
	Private	
	Total	1
S.S.C Vocational (Independent)	Public	11
	Private	211
	Total	222
HSC Voc/B. Management (Independent)	Public	10
	Private	830
	Total	840
Medical Technology	Public	15
	Private	97
	Total	112
Medical Assistant Training School	Public	11
	Private	200
	Total	211
S.S.C Vocational (Attached)	Public	197
	Private	2556
	Total	2753
HSC Voc/B. Management (Attached)	Public	172
	Private	2347
	Total	2519
Total (Technical Education)	Public	678
	Private	7083
	Total	7761

source: Bangladesh education statistics, 2021 (BANBEIS)

However, it is encouraging that over the last decade, there has been an upward trend in enrolment in TVET (Figure 6). This trend reflects the growing appeal of TVET to the general population. With a proper mechanism for quality maintenance and a focused policy approach, this upward trend in TVET enrolment can be leveraged to upskill the labour force and address challenges related to productivity.

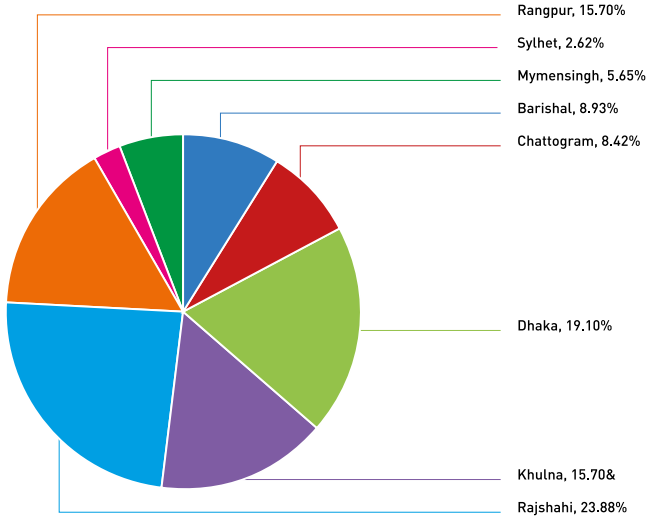
figure 6: enrolment trend in TVET from 2010 to 2021



source: authors' compilation based on data from Bangladesh education statistics, 2021 (BANBEIS)

Surprisingly, the major share of TVET institutions is in Rajshahi (Figure 7). While the Dhaka division is the prime hub of industry and urbanization, it falls second in terms of the share of TVET institutions. Interestingly, the Chattogram division, another major industrial hub, has only a share of 8.42% of TVET institutions, placing it behind Khulna. Whether there exists a geography-wise inequality in access to TVET, is a matter of further investigation. Also, it must be kept in mind that the concentration of institutions does not necessarily reflect the quality.

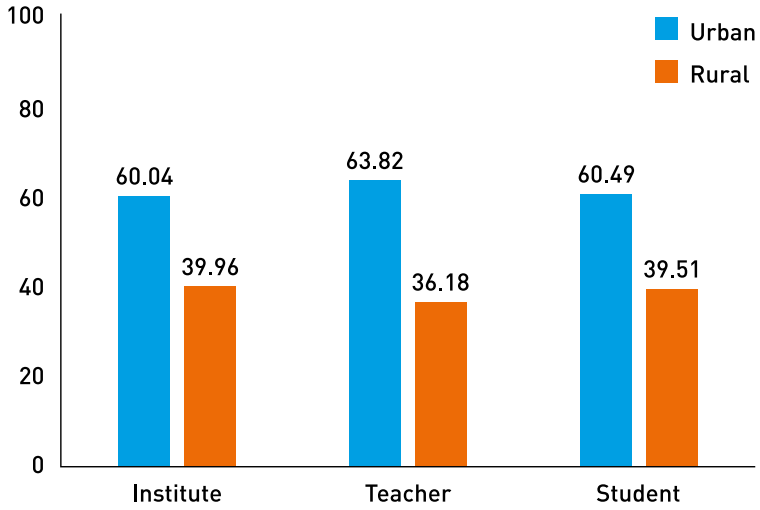
figure 7: share of institutions by division (2021)



source: authors' compilation based on data from Bangladesh education statistics, 2021 (BANBEIS)

There is a clear rural-urban divide in terms of access to TVET. The share of TVET institutions, teachers, and students—all are higher for urban areas. This divide is to some extent understandable as urban areas are traditionally the centres for industrial activities. However, this may have some implications for agricultural labour as well.

figure 8: share of institution, teacher, and enrolment by location 2021



source: authors' compilation based on data from Bangladesh education statistics, 2021 (BANBEIS)

The teacher-to-student ratio is an important indicator of the quality of education and training. A comparatively low teacher-student ratio indicates a manageable class and presumably, greater scope for each student to receive the attention and focus of a teacher. The teacher-student ratio in public institutions is higher than that of independent private institutions (Table 7), indicating a disparity in capacity.

table 7: teacher-student ratio in independent TVET institutes (2021)

Type of Institute	Teacher-Student Ratio		
	Public	Private	Total
Polytechnic Institute	1:50	1:13	1:21
Technical School & College	1:36	1:17	1:25
Glass & Ceramic Institute	1:25	-	1:25
Graphic Arts Institute	1:33	-	1:33
Survey Institute	1:22	1:14	1:19
Technical Training Centre	1:15	1:41	1:19
Textile Institute	1:19	1:22	1:21
Textile Vocational	1:21	1:15	1:20
Agriculture Training Institute	1:39	1:15	1:20
Marine Technology	1:04	-	1:04
S.S.C Vocational (Independent)	1:03	1:20	1:18
HSC Voc/B. Management (Independent)	1:21	1:16	1:16
Medical Technology	0.224306	0.104861	0.122222
Medical Assistant Training School (MATS)	0.097917	0.083333	0.084028
SSC Vocational (attached)	1:25	1:25	1:25
HSC Voc/B. Management (attached)	1:26	1:18	1:19
Total	1:32	1:19	1:21

source: Bangladesh education statistics, 2021 (BANBEIS)

Another measure of the capacity of the TVET institutions is the various facilities they offer. Notably, 77.22% of the independent institutions have computer labs, but only 42.99% have computers for pedagogical purposes, and a lower share of 30.46% have internet for pedagogical purpose (Table 8). This discrepancy raises the question of underutilized capacity—in the case of which due interventions need to be undertaken.

table 8:facilities by share of institutions (independent) in 2021

Facilities	Share of institutions
% of Institute Preparing Annual Plan	78.62
% of Institute with Co-Curricular Activities	78.44
% of Institute with Having Science Lab	39.32
% of Institute with Globe Map	80.42
% of Institute Having PTA	53.76
% of Institute with Creative Questions Prepared	78.78
% of Institute Having Boundary Wall	38.14
% of Institute Having Pure Drinking Water	73.52
% of Institute Having Hand Wash Facility	65.34
% of Institute Having Water Purifier Machine	38.49
% of Institute Having Running Water	51.74
% of Institute Having Computer Lab	77.22
% of Institute Having Digital Attendance Students	6.28
% of Institute Having Digital Attendance Teachers	13.24
% of Institute Having Ramp Access	7.84
% of Institute Having Closed Circuit Camera	15.92
% of Institute Having Computers for Pedagogical Purposes	42.99
% of Institute Having Internet for Pedagogical Purpose	30.46
% of Institute Having Website	28.8
% of Institute Having Store Room	62.28

source: Bangladesh education statistics, 2021 (BANBEIS)

Another notable aspect of the TVET in Bangladesh is gender parity. The BANBEIS reports in the Bangladesh Education Statistics (2021) that *"the gender parity index was 0.37 (37%), much behind the national target of Equal or 100%. Both percentages of girls and gender parity index were found to vary over long range among types of institutions"*.

The National Skill Development Policy (NSDP), developed by the Government of Bangladesh (GoB) in 2011, has been serving as the guiding document for the government's various interventions addressing the issue of the skill gap. In the succession of the NSDP (2011), the GoB has drafted the National Skills Development Policy 2020 (NSDP 2020)—which is yet to be adopted formally. However, the draft NSDP (2020) identifies four actors as the main components of the country's skill development system (Table 9).

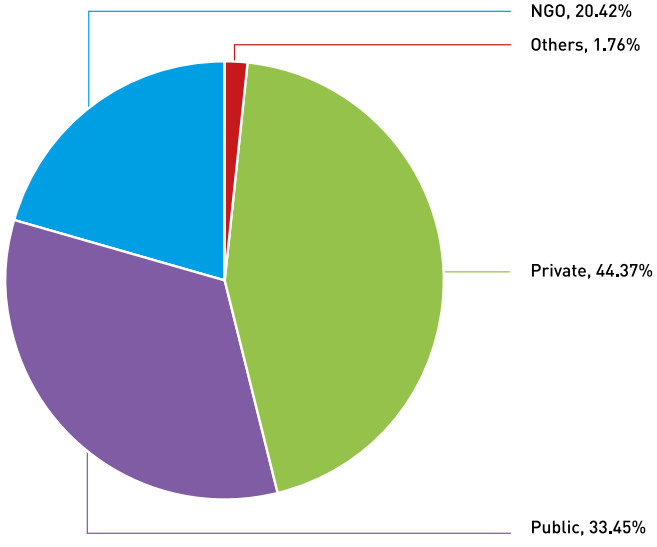
table 9: skill development system of Bangladesh

Sl.	Actors	Defining characteristics
1	Public	Skill development programs delivered by the Government ministries and departments
2	Private	Skill development programs delivered by commercial training organizations
3	NGOs and Non-Profit Organizations	Skill development programs delivered by donor-funded local/international non-governmental/non-profit organizations
4	Industry-based	Organizations managed by industry and training delivered in the workplace including apprenticeships

source: draft NSDP (2020)

Both the NSDP (2011) and the NSDP (2020) emphasize the need for collaboration among government, private, NGOs, and industry-based organizations providing skill development training. As the LFS 2016-17 illustrates, the majority share of training is being sourced from private institutes (Figure 5)—evidence of which can also be found in data from the National Skills Portal (NSP). The NSP was developed by the National Skills Development Authority (NSDA), which was formed under the National Skills Development Authority (NSDA) act 2018. The NSP provides information on registered Skills Training Providers (STPs). Among the registered STPs, the share of private institutes is the highest, followed respectively by the public, NGO-run, and other organizations (Figure 9).

figure 9: share of registered STPs by type



source: National Skills Portal, 2022

Bangladesh's skill development system, as materialized through Technical and Vocational Education and Training, is comprised of a formal and a non-formal system (Table 10). The formal TVET system is managed by relevant ministries and departments and is affiliated with the Bangladesh Technical Education Board (BTEB). Students completing formal training receive a national certificate. On the other hand, non-formal training, although structured, is not affiliated with the BTEB. The non-formal programs are mostly developed based

on the needs of target groups and according to industry needs. The nonformal TVET or short skills training courses last 1–12 months. Diploma institutes and Technical Training Centres (TTCs) also offer 360-hour courses for students who wish to start their careers either at home or abroad.

table 10: formal and non-formal TVET in Bangladesh

Formal TVET			
Training Level	**Duration**	**Trades**	**Minimum Requirement**
Basic Training Program	360-hour skills training course	61 trade areas	➢ The minimum educational requirement for entry is the completion of grade 8, but 1 year of trade-specific work experience qualifies students for the basic trade test even when they did not pass grade 8
Certificate Training Program	➢ One year of SSC Vocational (grade 9) ➢ 2-year HSC Voc	SSC Voc and HSC Voc courses at the secondary level	➢ The entry qualification for SSC Voc is grade 8 passed. After completing the SSC Voc program (grade 10), students may enter the 2-year HSC Voc program, after which they receive two qualifications: (i) entry to higher education and (ii) a National Skills Standard I certification if they wish to seek work.
Diploma Courses	4-year postsecondary diploma courses in engineering and 3-month industrial attachment training	42 technological areas but excluding textiles and agriculture	➢ Students enter polytechnic institutes from SSC general, Dakhil General, Dakhil Voc, and SSC Voc.

Non-formal TVET		
Functions	**Duration**	**Example**
Cater to the capacity-building needs of target groups Develop their curricula Keep linkages with the prospective employers	1–12 months	➢ Ministry of Women's and Children's Affairs offers short courses on poultry, dairy, livestock, food processing, plumbing, and electronics. ➢ Department of Youth Development operates 1–6 months training programs in various trades and 3 months residential courses on livestock, poultry, and fish culture ➢ Also, other NGOs and private organizations provide non-formal training in various areas

source: authors' compilation based on information from BTEB

The National Skills Development Council (NSDC) is the main coordinating and policymaking body in the skill development sector of Bangladesh. The other key government agencies include the Ministry of Education, Bangladesh Technical Education Board, Directorate for Technical Education, Ministry of Expatriate Welfare and Overseas Employment, and Bureau of Manpower, Employment, and Training.

table 11: key government agencies and their functions

Agency	Function
National Skills Development Council	• Monitoring the implementation of the skills development action plan, • Initiating and coordinating various agencies, • Monitoring new agency initiatives for skills development, • Managing the national skills data system, • Developing an NSDC work plan, and • Administering duties associated with council meetings.
Ministry of Education	• Formulates policies, procedures, rules, and regulations for post-primary to higher education, including technical and vocational education and madrasahs, • Manage, supervise, and control the secondary schools, colleges, madrasahs, TSCs, polytechnic institutes, engineering universities, and other universities,
Bangladesh Technical Education Board	• Inspection, monitoring, and evaluation of educational institutions; • Development of demand-led technical and vocational training programs that meet international standards and fulfil domestic and international requirements; • Development of teaching/learning materials; and • Registration of institutions and accreditation of courses.
Directorate for Technical Education	• Technical education; • Distance education including educational media and technology; • Educational research and training; • Educational policy and reforms; • Curriculum development; • Policy directives on public examinations above primary school; • External examinations, the equivalence of degrees, diplomas, and certificates; and • Exchange of degrees, diplomas, and certificates with foreign countries.
Ministry of Expatriate Welfare and Overseas Employment	• Contributing to the socioeconomic development of the country through overseas employment; • Ensuring the overall welfare of expatriates and protecting their rights; • Expanding existing and exploring new labour markets; • Assessing the demand of overseas labour markets and accordingly implement training schemes to create a skilled labour force; • Issuing/renewing recruiting agency licenses and conducting all activities related to overseas employment; • Providing financial and administrative assistance from the Wage Earner's Welfare Fund to deceased and endangered expatriates; and • Signing contracts and memorandums of understanding on training and employment with international organizations concerned with migration, governments of other countries, and other organizations.
Bureau of Manpower, Employment, and Training	• Processing foreign demand for Bangladeshi workers, • Control and regulation of recruiting agents and the legal process of manpower export, • Overseeing the welfare of migrant workers, • Provide institution-based TVET in different trades, • Planning and implementing development programs for training activities, • Conducting informal and special training courses, • Registering job seekers for the overseas market in the Computer Database Network, and • Collecting and disseminating labour market information.

source: adapted from the innovative strategies in technical and vocational education and training, ADB

Acknowledging the systemic barrier to technical education and training for people with a low level of education (dropped out at or before Grade 8), the NSDP (2011) outlined special interventions (Table 12). These provisions pay special attention to the cognitive abilities of the participants with low levels and education and aim to ensure an effective training mechanism with robust quality assurance. In the same spirit, the draft NSDP (2020) mentions in its section 4.6.3(c) that *"Reasonable accommodations will be made to cater to those who are illiterate, have a disability or low education levels, provided that they demonstrate their skills at the required levels"*.

table 12: provisions for people with low levels of education

a. The Grade 8 prerequisites are removed from formal courses and replaced by course-specific entry requirements and challenge tests that are more closely aligned to the level of training being delivered.
b. The NTVQF (National Technical and Vocational Qualifications Framework) incorporates qualifications and pathways that allow those with limited education to undertake formal courses that lead to nationally recognized qualifications.
c. Courses are specifically designed to cater to the needs of the lowly educated to gain meaningful employment.
d. Institutional instructors, trainers, and managers receive professional development on how to deliver and assess training courses for students with low levels of general education.
e. Assessment procedures allow for reasonable accommodation (i.e., theory assessments may be read to students with reading problems and answers written word for word by a scribe when the ability to read and write does not affect the performance of the competency being assessed).
f. New pre-vocational course pathways are established for the lowly educated to enter into formal courses, including apprenticeships, to address any basic skills gaps.

source: NSDP 2011

4.2 some notable skill development initiatives

There are quite a few skill development initiatives launched by the government, the private sector and the development partners. However, some draw special attention, considering the innovative approaches these projects adopted. Learnings from these projects can be utilized to devise new programs and address some of the existing challenges in the sector. Box 1 provides a glimpse into such initiatives.

some notable skill development initiatives

Skills for Employment Investment Program (SEIP)

Palli Karma Sahayak Foundation (PKSF) and the Finance Division, Ministry of Finance, Government of Bangladesh (GoB) signed a Memorandum of Understanding (MoU) on May 7, 2015, to implement the "Skills for Employment Investment Program (SEIP)" project. To implement the project, the Finance Division created a "Skill Development Coordination and Monitoring Unit (SDCMU)". After completing their training under this program, trainees' households (HHs) are expected to see a 20% increase in income. SEIP is currently supporting 10 priority sectors: (i) readymade garment and textile; (ii) construction; (iii) Information Technology; (iv) light engineering; (v) leather and footwear; (vi) shipbuilding; (vii) tourism and hospitality management; (viii) agro-processing; (ix) transport (motor driving), and (x) nursing and caregiving. Renewable Energy is also another sub-sector the SEIP project will be working with.

Skills and Training Enhancement Project (STEP)

The Skills and Training Enhancement Project (STEP), a six-year initiative by the Ministry of Education, was launched as part of the reform programs in the Technical & Vocational Education & Training (TVET) sector. The specific objectives of the project are: (i) achieving the strategic goals of the government's poverty reduction program, improving the quality and relevance of TVET; (ii) improving the TVET system as a whole by providing operational support to the National Skills Development Council (NSDC), the Industry Skills Council (ISC), and SSC (vocational) Schools; (iii) strengthening the capabilities of primary organizations including the Bureau of Manpower Employment & Training, Bangladesh Technical Education Board, and Directorate of Technical Education (BMET), and (iv) create a structure for project management and execution, devise a communication plan for the implementation, and carry out monitoring and assessment.

Bangladesh Skills for Employment and Productivity (B-SEP)

The Bangladesh Skills for Employment and Productivity (B-SEP) project is implemented by the International Labor Organization (ILO) with assistance from the GoB. It is financed by the Government of Canada. The project's goal is to fasten the current initiatives taken by various groups, partners, and the GoB to make skills nationally recognized, available to everyone, of a higher calibre, and directly related to jobs. The B-SEP project is focused on five sectors: agro-food processing, tourism, pharmaceuticals, ceramics, and furniture manufacturing. The project works through four interrelated components: (i) Institutional capacity development; (ii) Standard, training, assessment, and certification; (iii) Industry skills development, and (iv) Equitable access to skills.

Sudokkho

The five-year initiative is being implemented by the GoB's Directorate of Technical Education with financial assistance from the DFID and SDC. Through improved training and work prospects for the impoverished, it seeks to eliminate poverty. It aimed to employ 65,000 low-income individuals, including women and disadvantaged populations, through partnerships with private Training Service Providers (PTPs) and industry-based vocational training. Since the program's start in 2015, 1,735 men and 15,324 women have graduated from the Sudokkho funded industry-led training system. The training is provided in the readymade garment and textile sector and the construction sector.

Uttoron phase II

Since 2016, Swisscontact has been carrying out a workforce development initiative named Uttoron-Skills for a better life, funded by Chevron under the Bangladesh Partnership Initiative's (BPI) "Workforce Development" section. The three-year project, which ran from August 2016 to July 2019, aimed to increase employment opportunities for 1,400 community youths (aged 18 to 35) in the Sylhet, Moulavibazar, and Habiganj districts. It gives them access to the skills that employers are looking for. The Uttoron project made use of the pertinent training curricula, policies, and communication materials created by these programs. One of the most notable aspects of Uttoron is its app on skill development which is available in android.

4.3 identification of emerging sectors of Bangladesh

The Industrial Policy 2016 designated 7 sectors as high-priority sectors. These are:

1. Agro and food processing and agro-machineries manufacturing industry
2. RMG
3. ICT/Software Industry
4. Pharmaceutical Industry
5. Leather and leathergoods industry
6. Light engineering industry
7. Jute and Jute products industry

The above-listed sectors were chosen considering their existing and potential contribution to overall GDP growth, employment and export earnings. In line with the Industrial Policy 2016, this study focuses on the skill demand in these seven (7) sectors.

5. sectorial overview

table 13: sectoral overview with areas of concern

Sector	Overview	Areas of concern
1. Agro and food processing	Bangladesh is an agricultural nation with a tropical environment ideal for growing a wide range of crops, fruits and vegetables, livestock, fisheries, and a burgeoning agro and food-processing sector. A total of 70 million metric tons of agricultural products were produced in 2019–20, with rice, potatoes, and sugar crops accounting for about 80% of that amount, and fruits, vegetables, and spices for 17%. About 40.6% of the workforce is employed in the agriculture industry, which also makes up 14.23% of the GDP. Currently, the GDP-contributing agro-food processing sector employs about 250,000 people and accounts for 1.7% of total employment. Its percentage of global exports is currently around 3.5%. More than 140 countries receive Bangladesh's exports of more than 700 products, including 63 basic agro-processed goods, the majority of which are cereal grains, frozen fish, processed meat, tea, vegetables, tobacco, cut flowers, fruits, and spices. Bangladesh also exports other processed agricultural goods, such as livestock, poultry, and fish feed. Currently, the nation has 486 agro-processing manufacturers, of which 241 export and 235 serve the domestic markets. The European Union (EU), the United States, the Middle East, and the Gulf are the main export markets. In 2018, there were roughly 5.2 billion packaged foods sold domestically. By 2023, that number is expected to rise to 7.3 billion. In terms of sales value, snacks, dairy goods, and edible oils rule the packaged food sector. Up until 2023, these products are anticipated to rise gradually by about 6% per year.	• Market access, in terms of tariff and non-tariff measures, as well as related procedural barriers, is an issue for Bangladeshi exporters of agro-processing products. Compliance with SPS criteria remains a concern for many Bangladeshi agro-processing exporters. • Most of the processing phases in the agro-processing business are fraught with difficulties. From the cultivation of vegetables or crops until the packing stage, there are issues. Farmers use substantially too much pesticide and fertiliser at the primary level. Farmers' lack of awareness about post-harvesting practices also contributes to a high level of damage. Exporters confront hurdles during the packaging stage due to buyer variances in packaging requirements. • Lack of access to power is also a hindrance to the country's long-term agro-industrial growth. Despite recent improvements in electricity availability, many businesses, particularly SMEs, continue to confront challenges in obtaining new power connections and accessing quality power. The lack of cold storage, mills, storage facilities and equipment like scales and packing machines have made meeting health and sanitation requirements challenging. Poor air cargo management, insufficient cold storage and cold chain transportation facilities for vegetables, and a lack of processing units near the airport are all issues.

Sector	Overview	Areas of concern
	Processed fruits and vegetables, fish, and meat are among the products that are predicted to develop quickly, with annual growth rates of 8%, 13%, and 13%, respectively. For the past five years, Bangladesh's agricultural exports, particularly the exports of processed snacks, have grown at a CAGR of 18%. Between 2019 and 2028, the demand for agricultural products on a global scale is predicted to increase by 15%, which presents a significant export growth opportunity for the processed food sector in Bangladesh (BIDA, 2020).	• BSTI and other standard assessment agencies' capacities are far from optimal, as certificates issued by these organisations are not recognised by many export destination nations. BSTI and other standard-setting organisations face a lack of trained people resources, financial resources, testing facilities, and essential infrastructure (Raihan, 2022).[4]
2. Ready-made garments (RMG)	RMG sector is well-known for its robust manufacturing capabilities, and the dynamic ecosystem has grown steadily and is now a major worldwide hub for clothing sourcing. Currently, there are more than 4,000 factories in the sector. A wide range of knitwear and woven garment products, including shirts, pants, T-shirts, jeans, jackets, and sweaters, are included in RMG exports from Bangladesh. RMG exports from Bangladesh more than doubled between 2011 and 2019, growing at a 7% yearly rate. As of December 2020, total exports were valued at USD 27.4 billion, accounting for 6.30% of the $435 billion worldwide garment export industry. Although covid19 temporarily hurt the business, demand has begun to bounce back and return to normal.	• Automation-related technological advancements create concerns that new technologies would result in significant job losses in industrial industries in nations such as Bangladesh. What is probably different now is that new, networked digital technologies will almost certainly have a broader and more far-reaching set of capabilities, and therefore the prospect of new types of occupations developing may be lessened or limited to increasingly complex sectors. Furthermore, new technologies are not just replacing jobs but also allowing for the disruption and restructuring of entire industries (Hamann, 2018)[5]. • If the country chooses to move up the fashion sector value chain, raising overall productivity will be challenging due to the value chain's segmented character. Thus, it will be much easier for Bangladesh to produce things related to clothing, such as footwear or small appliances, than it will be to begin to grasp and master the different facets of creating and marketing textiles (Raihan, 2020)[6].

4 Raihan, S. (2022). Challenges of the agro-processing industry in Bangladesh. The Business Standathe record hogh of rd. https://www.tbsnews.net/supplement/challenges-agro-processing-industry-bangladesh-366286

5 Hamann, R. (2018) 'Developing countries need to wake up to the risks of new technologies', University of Cape Town, https://theconversation.com/developing-countries-need-towake-up-to-the-risks-of-new-technologies-87213

6 Raihan S., with discussion by de Melo J. (2020) Thematic Paper: Informal institutions, the RMG sector, and the present challenge of export diversification in Bangladesh, Chap. 5 in The Bangladesh Institutional Diagnostic released, EDI.

Sector	Overview	Areas of concern
	In Bangladesh, there are over 1,430 textile mills, including 796 producers of woven fabrics, with an annual production capacity of 3,850 million meters. Additionally, Bangladesh has 240 mills for dying, printing, and finishing textiles, producing 3,170 million meters of cloth annually. Moreover, 52 nations, including the EU, Australia, New Zealand, Norway, Switzerland, Japan, Iceland, South Korea, Canada, Chile, India (46 RMG products), Turkey, and China, offer duty-free access to Bangladeshi goods.	• There are worries about compliance and workplace safety in Bangladesh's RMG business, and in recent years, particularly following the catastrophic Rana Plaza tragedy in 2013, these concerns have become important for the industry's future (Raihan, 2020). • Raihan (2019) using a global dynamic general equilibrium model argues that due to the loss of preferences after graduation from LDC status, Bangladesh may witness a significant decline in RMG exports in the EU, Canada, Australia, Japan, India, and China compared to the business-as-usual scenario (Raihan, 2020).
3. Information technology	The IT industry in Bangladesh is highly represented by software development and IT-enabled services (ITES), such as business process outsourcing (BPO) services and e-commerce. Even though the industry's revenue is primarily driven by software and application development products and services like AMD, IT help desk, and web development, there has been a noticeable expansion of product offerings including big BPO, data analytics, Internet of Things (IoT), 3D imaging, virtual reality/augmented reality (VR/AR), and robotic process automation (RPA), with e-commerce business soaring since the pandemic. Over 750,000 ICT specialists are employed by over 4,500 IT/ITES businesses in Bangladesh. Since 2013, export revenue has increased by 21% annually, surpassing USD 1 billion in 2019. There is a sizable pool of online workers, which further boosts wages. With 650,000 registered freelancers, Bangladesh has the second-largest pool of online workers in the world in 2017 and held a market share of 16%, trailing only India with 24% of the market. Among them, 500,000 are employed full-time, earning an estimated $100 million annually (BIDA, 2019).	• There is a growing proportion of the population having access to and using internet services. In 2005, only 0.242% of the total population had internet access, compared to 31.5% in 2021. • the government is advancing toward the digitization of processes and is investing heavily in such initiatives. Among the peer countries, Bangladesh has one of the most affordable sites for the operation of IT services. Compared to nearby countries, operating costs are 16–30% cheaper. In comparison to Cebu and Bangalore, Dhaka's total operating costs are 16–20% and 30% cheaper, respectively. Even more affordable places to operate are Jessore, Rajshahi, and Kaliakor. Since 1.5 to 2 million talented young people are continually entering the workforce, Bangladesh, where 67.61% of the population is between 15 and 65 years old and 27.21% is under 14, is blessed in this regard, making the nation available with a young tech-savvy population. Furthermore, several fully funded training initiatives have been launched, with a heavy emphasis on educating experts in cutting-edge technologies like the Internet of Things, blockchain, artificial intelligence, big data analytics, etc.

Sector	Overview	Areas of concern
	As part of the Digital Bangladesh vision, 28 IT & software parks have been approved, with plans to create IT parks in all 64 districts of the nation. The government has been modifying rules to make conducting business easier for potential investors and partners to ensure an investment-friendly climate (BIDA, 2019). Bangladesh's IT sector, which includes software development, ITES, and BPO, is an attractive location for investment. This is demonstrated by the expanding industry, recent investments made by international corporations in offshore development hubs, a youthful, tech-savvy workforce, and the government's steadfast commitment to the sector's promotion (BIDA, 2019).	• Through private investments in vocational and training institutes with a focus on IT engineering, business management, and graphic design, opportunities for Bangladeshi youth to learn advanced and fundamental IT skills can be expanded. Such investments are thought to be worthwhile because there may be a large number of students interested in working in the IT industry and computer engineers planning to acquire more specialized knowledge.
4. Pharmaceuticals	The pharmaceutical sector in Bangladesh has grown rapidly in both domestic and international markets. It is one of the most technologically advanced sectors of the country. The pharmaceutical industry has gradually succeeded in meeting the demands of the local market; at present, the industry is reported to meet 98% of the domestic demands. Over the previous decade, exports have steadily increased at an increasing rate, demonstrating the industry's ability to make headway into the global marketplace. Bangladesh currently exports pharmaceutical items to 151 countries (Export Promotion Bureau, 2021). South Asian, African, and North American countries are among the biggest export destinations. Bangladesh exported the most USD 24.95 million to Myanmar in 2020, followed by the Philippines, Sri Lanka, the United States, and Kenya.	• There are also well-established facilities for tablets, capsules, liquid preparations, dry suspension, injection, ointment/ cream, nasal spray, granules, etc. in the sector. The nation also produces specialised delivery products such as dry-powder inhalers, pre-filled syringes, and lyophilized injections. • The male-to-female ratio in the pharmaceutical industry is around 3:1. The gender distribution of the industry shows women's low labour-force participation, particularly in technologically intensive areas. The LFS 2016-17 reported that 83.62% of labours working in the industry are male, and the rest are female. According to SMI (2019), production and related workers account for the majority of this sector's workforce (28, 561), followed by clerical and sales workers, administrative and managerial workers, and temporary labourers. A minor proportion is categorised as family helpers.

Sector	Overview	Areas of concern
	Patent exemption, institutional assistance, and rising demand in Asian and African markets have all contributed to an increase in pharmaceutical export revenues. On the other hand, because local manufacturers meet 98% of domestic demand, the import bracket of pharmaceutical products is quite limited. As a result, local producers have likewise dominated the domestic market. Bangladesh's pharmaceutical market is dominated by branded generic medications, which account for over 80% of all drugs produced locally, with patented drugs accounting for the remainder.	• The "Pharmacy Faculties" of public and private colleges are the principal source of workforce for the pharmaceutical business. In comparison to other rising sectors, the pharmaceutical industry pays a higher average income due to the required degree of ability and knowledge (SMI, 2019). There is a severe shortage of training among those working in the pharmaceutical industry. This deficiency highlights the industry's need to prioritise capacity expansion.
5. Leather and leather goods	Leather is one of the industries with significant development potential, owing to Bangladesh's abundant availability of low-cost labour and raw materials. The industry has the opportunity to participate in global value chains, expand into new markets, and meet rising domestic demand (ADB, 2018). The industry has four segments of products which are tannery output (hides and skins), finished leather, leather goods, and leather footwear. The major products that are manufactured in Bangladesh are Bags, purses, luggage, belts, wallets, jackets, and footwear. Footwear has always been a popular commodity in Bangladesh, as the sector produced over 460 million pairs in 2018. There are roughly 3,500 small businesses, 90 medium businesses, and 15 large businesses. According to the leather goods organisation, there are 220 tanneries and manufacturers present. Bangladesh's leather industry is concentrated mostly in the Hazaribagh District in Dhaka, followed by Bhariab and Chattogram.	• This very labour-intensive industry employs approximately 200,000 people directly and approximately 850,000 indirectly (BIDA, 2021). The leather sector has been one of the best at absorbing unskilled labour, with workers beginning as unskilled trainees and progressing to semi-skilled and skilled workers through on-the-job training (BIDA, 2021). • Some of the major areas of the leather industry that need to be addressed are- insufficient use of adequate technology and appropriate production method, there are lacking training programs for the labour force, the industry's highly depended on expensive imported raw materials and insufficient raw material procurement, firms in the industry lacks market knowledge and proper marketing strategies, and the firms usually face difficulties at obtaining loans (ADB, 2018). • Looking forward to the LDC graduation, there will be stricter International standards, higher competition from other Asian countries, preferential trade benefits being lifted in the near future, and a high cost of doing business.

Sector	Overview	Areas of concern
6. Light engineering	The light engineering (LE) industry is regarded as a thrust sector, with a current GDP contribution of approximately 2% and the potential to become one of the key sources of export earnings while also meeting domestic demand. Light engineering is primarily concerned with the production of light (less capital-intensive) goods that meet the needs of end users and other manufacturing entities. It is a major supplier of spare parts to a variety of industries, including agriculture (rice, jute, flour, lentil, sugar, spices, feed & bakery), gas transmission & distribution, construction machinery, kitchenware & bathroom fittings, metal products, mould & dies, transportation (road & water), pharmaceutical, paper & pulp, printing & packaging, RMG & textile, and others (IDLC, 2021). In Bangladesh, over 40,000 light engineering workshops/enterprises operate, employing approximately 10 million people. The cottage and micro category account for the lion's share of LE companies. This industry's market size is around 25,000 crore per year, and before the pandemic, the growth rate was 20 to 25% per year. The majority of light engineering businesses cater to the needs of indigenous industries. This industry obtains approximately 90% of its raw materials from the shipbreaking sector. It has been discovered that the export performance of LE items has declined by 14% during the fiscal year 2019-20, which policymakers should consider.	• One of the major challenges is the price fluctuation of raw materials. The price of imported raw materials such as pig iron, hard coke, limestone, and ferroalloys has risen dramatically, making it difficult for this industry to sustain predicted bottom-line profitability. • The industry lacks a skilled workforce; however, LE is labour-intensive and manual process-oriented as skilled labour is critical for precisely finished goods. Proper training and the use of new technology may help to close this gap. • The imported light engineering products are cheaper than that domestically produced products. Chinese low-cost spares are widely available in the local market, posing yet another barrier to the expansion of indigenous LE firms. • The majority of the workshops fall into the "small" category. These workshops just have one or two lathes. They do not have the potential to grow because of the lack of access to funding, even though the government has set up a lending programme for light engineering firms at a lower interest rate (IDLC, 2021).

Sector	Overview	Areas of concern
7. Jute and jute products	According to FAO's report, Bangladesh is the world's second-largest producer of jute, with an expected annual production of 1.6 million tonnes in 2019. The average domestic use of raw jute is 1.16 million tonnes per year. Furthermore, Bangladesh is the world's leading exporter of jute and jute-based products, with annual exports of around USD 1 billion (BIDA, 2021). Raw jute is mostly used to make yarn, fabric, twine, hessian, sacks, and carpet backing material (CBC). Although jute is primarily used as a packing material in the form of gunny bags, jute fibre is used for a wide range of applications, including automotive, construction, medical, and agricultural applications, as well as a wide range of home décor products such as carpet, curtain, mat, and outdoor furniture (BIDA, 2021). Due to the growing demand for eco-friendly products, Bangladesh exports jute products to over a hundred countries each year, with main destinations including Turkey, China, Pakistan, India, the EU, and the United States. In fiscal 2020-21, export revenues from jute and jute products increased by 41% over the previous year to USD 1.2 billion. While jute yarn remains the most important export commodity (accounting for more than 64% of total exports), sacks/hessian export has been growing at an annual pace of more than 15% since July 2016, showing increased global demand for alternatives to plastic packaging. In the fiscal year 2019-20, exports of value-added products (i.e. diversified items) totalled USD 82.6 million (BIDA, 2021).	• Though Bangladesh was formerly the leading producer, stagnant production was caused by a lack of technological breakthroughs in agricultural techniques. Bangladeshi jute fibre is widely regarded as having the highest quality. However, the jute industry has suffered a blow, with 79 of the 397 jute mills closing in recent years. • For several decades, the worldwide market has seen a shifting pattern in demand for jute and jute commodities. Bangladesh supplies the majority of jute products to the worldwide market, with India being its top export destination. The reduction is primarily due to India's application of anti-dumping taxes on Bangladeshi jute products. Bangladesh exports raw jute, processed jute, and jute products of wide varieties. Bangladesh also has experienced fluctuations in raw jute production. • The cost of jute goods production in Bangladesh is among the lowest in the world due to a young and competitive labour market and the government's substantial incentive system for this industry. In addition to the availability of the highest-grade raw jute, jute goods makers in Bangladesh can make use of the advantageous location with access to extensive water resources for jute processing and low-cost water/road transport.

6. analysis of the effectiveness of skill development training

This section details the effectiveness of skills development training by collecting primary data from beneficiaries. Participants who got skill training from the Uttoron Program of Swisscontact Bangladesh are considered the population of the study. 1931 beneficiaries completed the skill training program provided by Uttoron. Out of 1931 participants, 327 were surveyed using a simple random sampling technique. Although it was initially planned to conduct 321 surveys, the study ended up conducting 327 surveys.

section 1: information about the respondents

Out of the 327 surveyed respondents, 33% were from the Habiganj district. 30% of the total samples were taken from Dhaka, followed by Sylhet (25%) and Moulvibazar (12%), respectively. Of the surveyed respondents, 25% were female, and 75% were male.

section 2: education and employment status before training

Of the surveyed respondents, two-thirds of them hold either S.S.C (31.8%) or H.S.C (35.5%), whilst only 6.4% and 0.9% of respondents pursued a Bachelor's and a Master's degree, respectively. 14.4% of respondents passed Class 8 in school, whereas 5.5% passed Class 5. Classes 6, 7, and 9 passed comprised 0.3%, 1.8%, and 3.4% of the sample, respectively.

Before receiving the skills training from Uttoron, only 18.7% of the respondents (out of 327 respondents) were employed (either self or wage employed) while 81.4% were not employed. 26.23% and 42.62% of the employed respondents' income were in the range of 0-4,999 BDT and 5,000-9,999 BDT, respectively, while only 3.28% of their income was in the range of more than 20,000 BDT.

Out of 266 respondents who were not employed before receiving the skills training provided by Uttoron, 55% were seeking jobs, while 45% were not seeking any jobs at all. Reasons for not being employed in any jobs are being enrolled in education, enrolled in training, lack of skills, lack of information on job openings and opportunities, lack of information regarding the recruitment process, and employment requiring bribery, among others.

section 3: perception of training

Out of 327 surveyed respondents, the most received training type is EIM (Electrical installation and maintenance) (40%), followed by GFO/PFD (GFO/PFO: General finishing operation/Packaging finishing operation) (22%), WEL: Welding (9%). The least number of trainees were from HK (House Keeping) (2%) alongside MPS (Mobile phone servicing) (6%) and RAC (Refrigeration and air-conditioning) (6%). 'Trading on the trade will be useful in easily securing employment', 'The trade has high-income potential', 'Family/relatives/friends recommended it' and 'The training centre recommended it' among others, are the top reasons behind taking training in the particular trade.

Only 21.1% of the respondent knew about the trade before they enrolled in the training while 78.9% of respondents had no previous knowledge about this trade. Among the trainees who had previous knowledge about the trade, only 1.45% of them were highly efficient in that trade, while the highly inefficient and not efficient skill level was among 15.94% and 42.03% of the respondents, respectively. Almost 37% of the respondent was somewhat good in that particular trade.

Respondents were asked about their knowledge of soft skills. Almost 86% of the trainees weren't familiar with this terminology, while only 14% of them had heard this before. Those who heard the term 'Soft Skill' were asked to define it. Most of them were unable to define it, and they said that they could not recall it. Only a few defined it correctly. Respondents were also asked about their lessons on training on time management/ teamwork/work communication. 95% of the respondent said they worked on these skills in their training tenure, while only 5% declined it.

As the Uttoron training program provided both theoretical and practical classes to the trainees, they were asked about their preferred type of classes. 92% of the respondent preferred the practical class to the theoretical class, while only 8% of them preferred the theory class more than the practical class. Respondent's thoughts on including facilities in practical classes include demand for bigger classrooms and more trainers, increasing more materials which are used in work, demand for more advanced tools, bringing new instructors, increasing the number of classes and time, classroom and workshop need separate rooms, more equipment with safety materials, repairing broken equipment, increasing the number of new machines, including more digital equipment etc.

Respondents were asked about workplace safety knowledge. Almost every one of them (99%) replied that they know about workplace safety.

The respondents viewed several positive sides of the training program, which are listed as follows:

- The trainers were highly qualified as well as cooperative. They cleared our doubts after asking them any questions
- Practical lessons of the training have added an edge by helping the learners to gain practical skills.
- Helping poor and marginalized people to acquire skills for free. Rather we usually get paid for training sessions
- Many people with low education levels got training here.
- Guaranteed employment opportunities after the training for people participating in the training
- Providing transportation costs to the people coming from the long way for training
- Certification of training
- Classes were regular, and the overall environment was very suitable for learning
- Gaining skills regarding time management as well as helps us to cope with the competitive environment
- Giving proper knowledge about the workplace environment and negotiations about the wages
- Helping us to get acknowledged about new machines and proper instructions from the trainers to operate these machines
- Creating communication skills as well as learning to collaborate successfully with a team while working in a competitive environment
- Secured environment for the women to get training
- Those who have no prior working experience got exposure and skills to employ themselves in the jobs
- The trainers used to ask opinions and questions from all the students, which ultimately made the classes interactive and useful for learning
- Helping to get acknowledged of the techniques and methods to ensure the workplace safety

The respondents also viewed some negative sides of the training program, which are listed as follows:

- The duration of the training course was not sufficient
- One instructor used to conduct one training session that sometimes used to get monotonous
- There were not any breaks between the training periods
- It would have been better if the classrooms were bigger
- GFO/PFO training is risky for females. Sometimes outsiders used to stalk the centre creating an unfavourable training environment for the women
- Many trainees have not got the desired job opportunities promised before the training
- There was not enough practical equipment. Also, many pieces of equipment were broken and outdated
- Trainees coming from outside Dhaka find it difficult to survive in the city with the little money they get from training
- The safety gears supplied by the authorities were unhygienic and sometimes inadequate to secure the trainee from any issues. Also, safety equipment was outdated
- Load-shedding issues were there
- The number of teachers was not sufficient. Often there was a lot of administrative work need to be done by the teachers. There were irregularities in conducting classes in the later part of the session

Respondents were asked if they got any job offers from Uttoron. 92% of the trainees got a job offer from Uttoron, while 8% didn't get the opportunity. Out of 300 respondents who got a job offer from Uttoron, 74% of the respondent did not receive the job offer, while only 26% received it. Those who did not receive the job offer from Uttoron were asked, 'Why did you not get into the job offered by the training centre?'. 20.7% of respondents (out of 222 respondents) said that low wage was the reason. Only 2.3%, 1.8% and 0.9% of respondents mentioned that unsafe working conditions, inadequate skill for the job, and lack of vacation, respectively, were a few reasons, among others. However, 85.1% of respondents (out of 222) opined on other options, which include 'Offered job was far away from home', 'Respondents' health issues', 'Joined in family businesses', 'Family did not permit to work', 'Got another job', 'Got married at that time', 'Outside of hometown', 'Enrolled in education', 'Could not arrange proper accommodation', 'Wanted to move abroad, and 'Got better job opportunity' among others.

section 4: current employment status

After receiving the skill training provided by Uttoron, 59% of respondents (out of 321) mentioned that they were employed, while 41% replied that they were not employed. Of the employed respondents, 73% were wage employed while only 27% were self-employed.

To understand the extent of effectiveness of the training for the current job, the respondents were asked- "How do you think the training has been useful in your current job?". 29.2% of respondents replied that the skill training was 'Highly effective' in the current job, and 18.8% said that it was 'Effective'. 9.4% of respondents mentioned that the skill training was 'Somewhat good' for the current job, while 22.4% and 20.3% of respondents found it 'Not effective' and 'Not at all effective', respectively.

34.9% and 28.65% of the employed respondents' income were in the range of 5,000-9,999 BDT and 10,000-14,999 BDT, respectively, while 7.29% of their income was in the range of 0-4,999 BDT. 15.1% and 14.06% of the employed respondents' income were in the range of 15,000-19,999 BDT and 20,000+ BDT, respectively.

Whether the skill training helps in their current jobs, the respondents were asked "What special facilities did you get from your job due to your training?". Their responses include higher salary, promotions, easily understanding responsibilities, being appreciated by the employer, adapting to the job, better ideas and understandings of the tasks, can do work timely and efficiently, and improved communication skills, among others. 47.89% of the currently employed respondents were working during 6-12 months in their latest jobs, followed by 40% during less than six months.

Whether the skill training helps the respondents to get any promotion from the job can be an interesting finding. Out of 192 employed respondents, only 14% or 26 respondents replied that they have received promotions since joining this job. The skill training might help the respondents to get any promotion in the jobs. 62% of respondents (out of 26) said that the skill training program helped them to get promotions in the job.

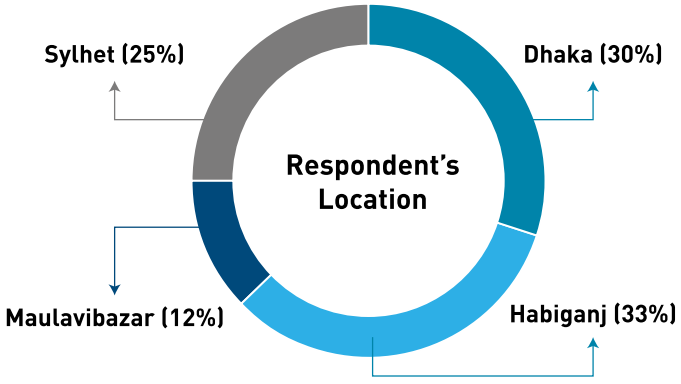
section 5: unemployment

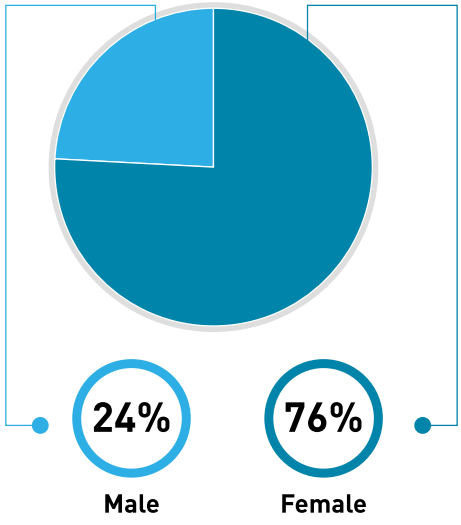
The respondents who were not employed (135 respondents) were asked, 'In the last 30 days, did you seek work in exchange for wage or profit?'. Of the 135 respondents, 47% said 'Yes'-that is, they were 'Unemployed'. In contrast, 53% replied, 'No'-that is, they were not in the labour force.

Those who were unemployed (63 respondents) were asked about their reasons for not being able to get a job yet. Out of 63 respondents, 50.8% said that lack of posting is a reason for not being able to get a job yet. Lack of information (33.3% of 63), lack of skill (15.9% of 63) and employment requiring bribery (4.8% of 63) among others were some other reasons behind their being unemployed. Interestingly, 38.1% of respondents (out of 63) viewed other options as reasons which include 'seeking a job which will be near his/her residence', 'Underaged', 'Taking a short break', 'Didn't find the desired job', 'Was enrolled in education', 'Was enrolled in training', 'Gender discrimination in the packaging sector', 'Lack of lobbying', and 'Family restrictions' among others.

Those who were not looking for jobs (not in the labour force) were asked the reasons behind it. Out of 72 respondents, 37.5% said that they enrolled in education. No need for employment now (12.5% of 72), enrolled in training (2.8% of 72) and frustrated (1.4% of 72) among others were some reasons for not seeking employment. Most importantly, 61.1% of respondents (out of 72) selected other options and viewed their opinions for not seeking employment such as 'Family didn't allow', 'Health issues', 'Want to go abroad' etc.

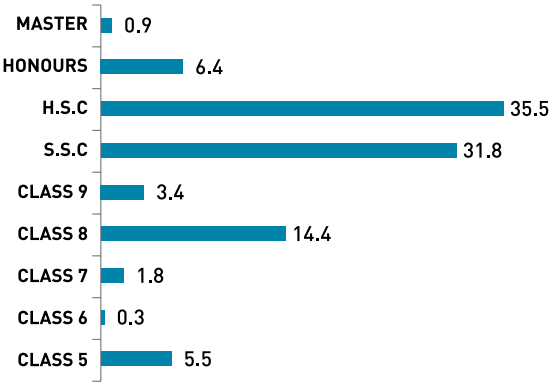
section 1: information about the respondent

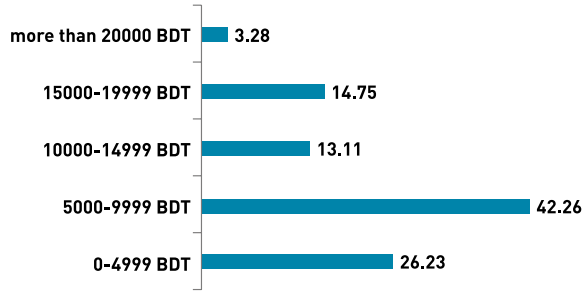




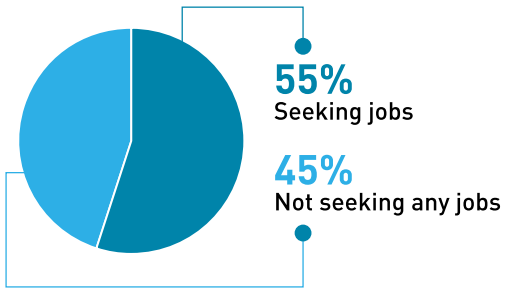
section 2: education and employment status before training

Respondent's highest level of education attainment
(in percentage)





Respondent's monthly income level from the job enrolled during Uttoron Training
(in percentage)



reasons for not being employed in any job

Enrolled in education

Enrolled in training

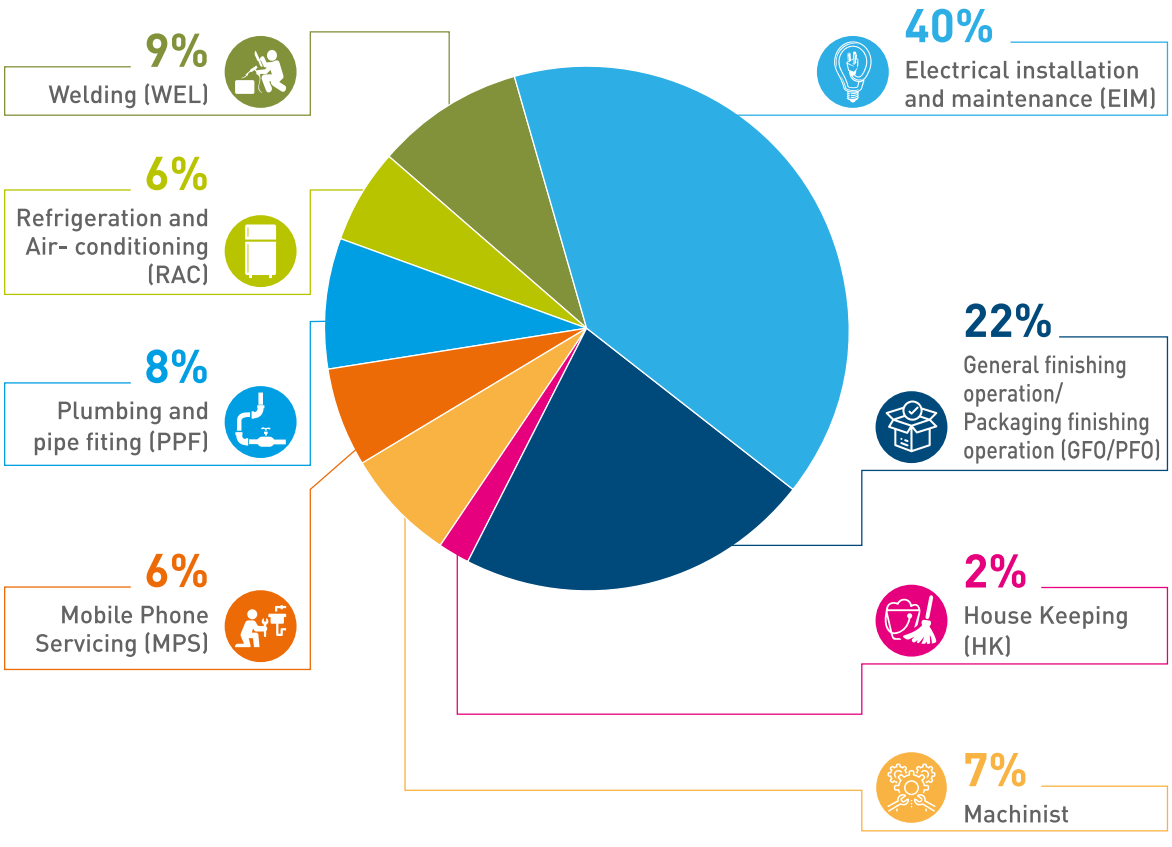
Lack of skills

Lack of information on job openings and opportunities

Lack of information regarding the recreuitment process

Employment requires bribery

section 3: perception on trainings

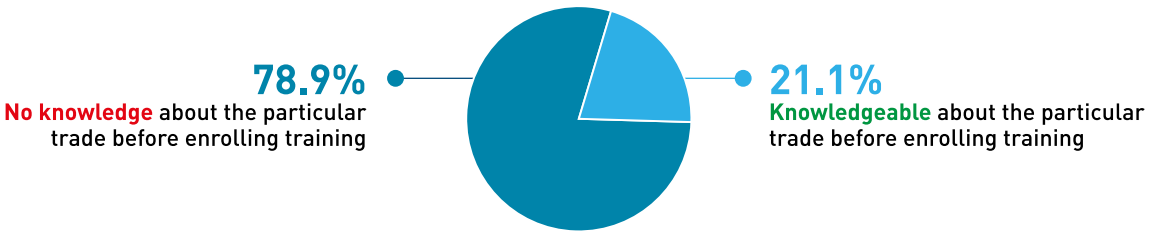


Out of 266 respondents who were not employed before receiving the skills training provided by Uttoron, 55% were seeking jobs, while 45% were not seeking any jobs at all.

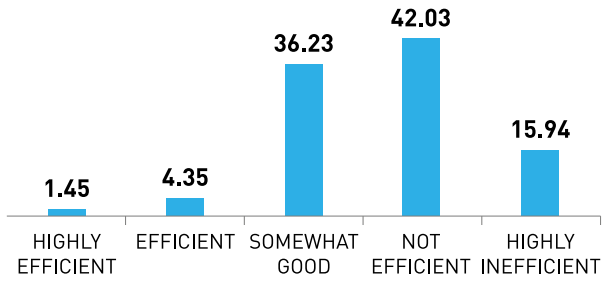
top reasons behind taking training on the particular trade

1. Trading on the trade will be useful in easily securing employment
2. The trade has high income potential
3. Family/relatives/friends recommended it
4. The training center recommended it

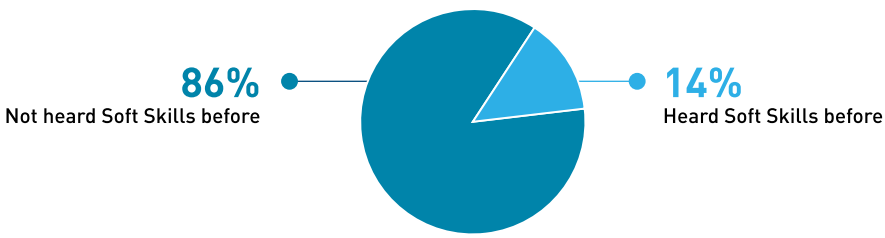
knowledge on trade before enrolled in training



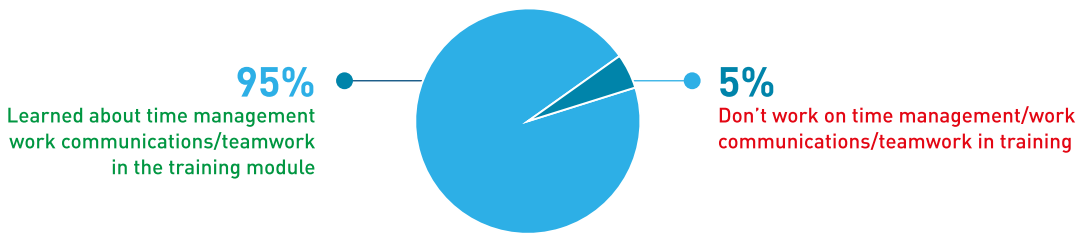
skill level before enrolled in training (in percentage)



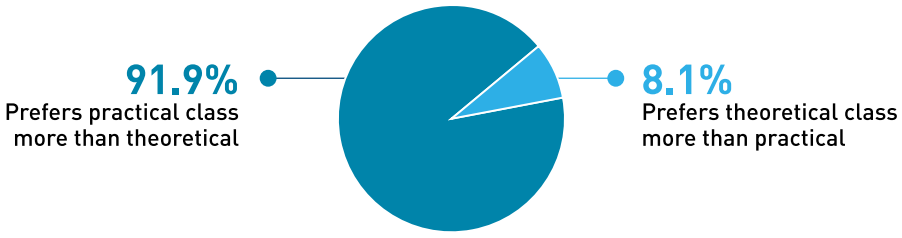
heard about soft skills



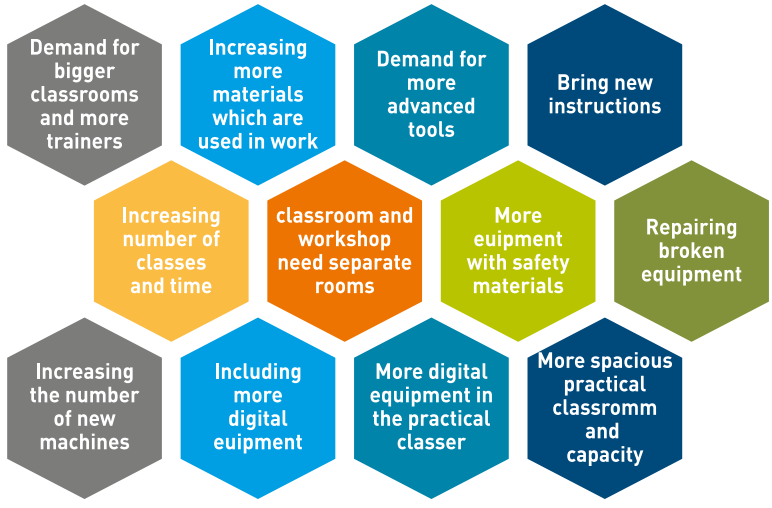
learning on time management/work communications/teamwork form training



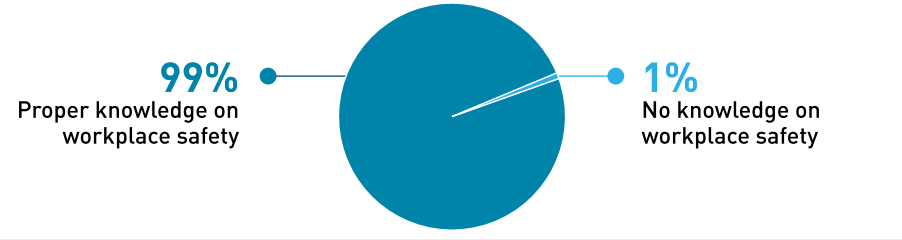
class preference and practical class facilities



respondent's thought on including facilities on practical classes



knowledge on workplace safety



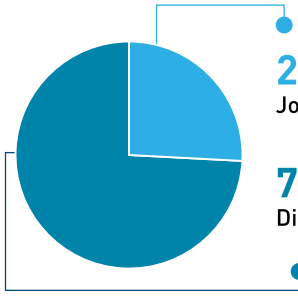
top positive sides of the training program

- The trainers were highly qualified as well as cooperative
- Practical lessons of the training have added an edge by helping the learners to gain practical skills
- Helping poor and marginalized people to acquire skills for free
- Guaranteed employment opportunities after the training for people participating in the training
- Guaranteed employment opportunities after the training for people participating in the training

top negative sides of the training program

- The duration of the training course was not sufficient
- There were not any breaks between the training periods
- It would have been better if the classrooms were bigger
- GFO/PFO training is risky for females
- There was not enough practical equipment and many pleces of equipment were broken and utdated

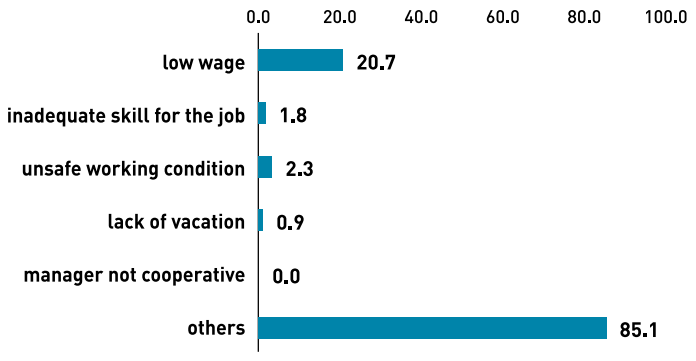
post-training employment



26%
Job availed from Uttorn's Job office

74%
Didn't avail job from Uttoron's Office

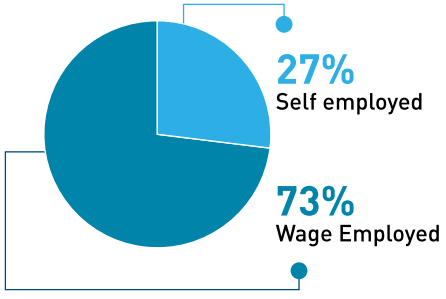
reasons for not availing the job offered by Uttoron



other reasons

- offered job was far away from home
- respondents' health issues
- joined family businesses
- family did not permit to work
- got another job
- got married at that time
- outside of hometown
- enrolled in education
- could not arrange proper accommodation
- wanted to move aboroad
- got better job opportunity

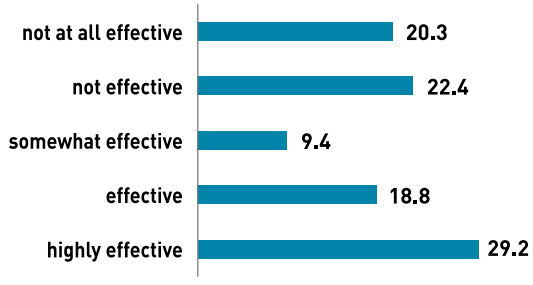
section 4: current employment status



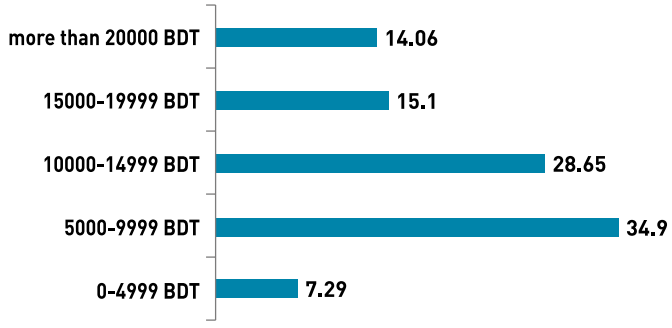
27%
Self employed

73%
Wage Employed

training effectiveness in current job



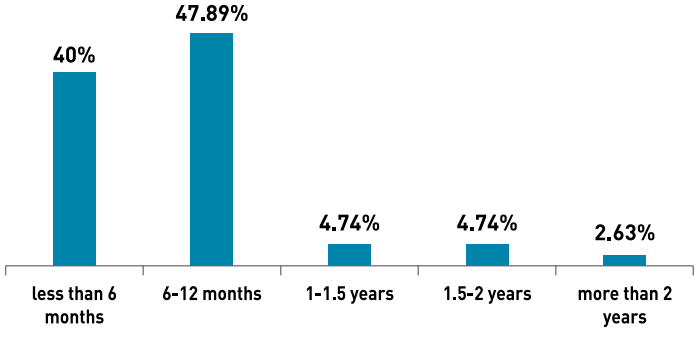
respondent's monthly income level from current job after training (in percentage)



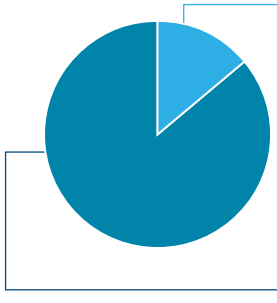
facilities received from job due to training

- Higher salary
- Promotions
- Easily understand responsibilities
- Appreciated by the employer
- Easily adapt to the job
- Better ideas and understanding of the tasks
- Getting more orders/works
- Can do work timely and efficiently
- Improved communication skill

current job period duration

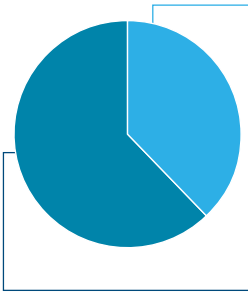


job promotions and training impact



14%
Got any kind of promotion

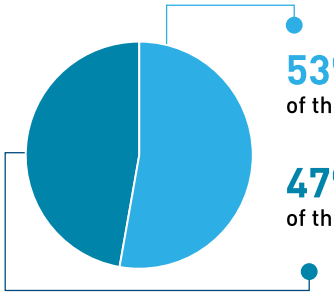
86%
Didn't get any promotion



38%
Of the responent don't think training has created impact on their fast promotion

62%
Of the respondent thinks training has created impact on their fast promotion

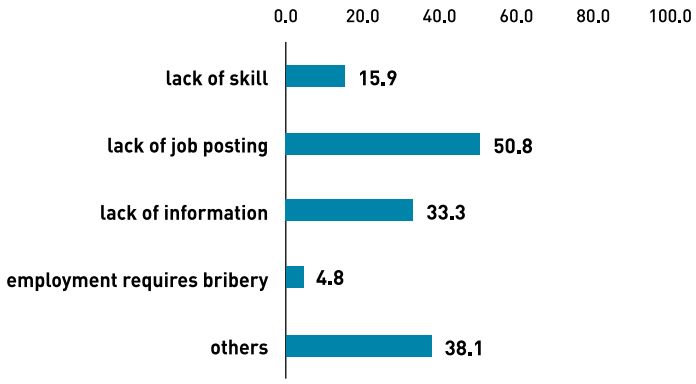
section 5: unemployment



53%
of the respondent in not in labour force

47%
of the respondent are unemployed

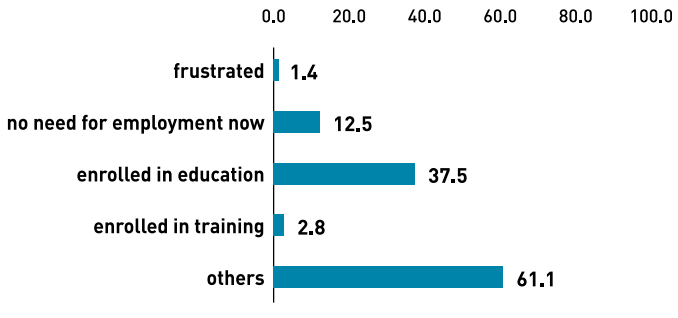
reasons for not been able to get a job



other reasons

- Seeking a job which will be near his/her residence
- Underaged
- Taking a short break (Voluntarily unemployed)
- Didn't find the desired job
- Was enrolled in education
- Was enrolled in training
- Gender discrimination in the packaging sector
- Lack of lobbing
- Family restrictions (the family did not allow himher to work outside)

reasons for not looking for employment



other reasons

- Family doesn't allow
- Health issues
- want to go abroad

7. private sector's perspective regarding skill training

The study has taken a qualitative approach to understand the perception of the private sector regarding the skill development sector. In this regard, the study conducted KIIs with HR officials and mid-level executives in charge of recruitment to gain insights into the factors driving the skill demands of the seven (7) sectors (Agro and food processing and agro-machineries manufacturing industry, RMG, ICT/Software Industry, Pharmaceutical Industry, Leather and leather goods industry, Light engineering industry, and Jute and Jute products industry) selected for this study.

Along with the general concerns of the private sector, which have been presented here, the study has also identified some sector-specific issues pertaining to the skill gap. However, some of the enquiries into the general employment situation were not responded to by the informants due to their sensitive nature. For example, the study asked the informants to provide some information on the size of the workforce, retention and turnover rates across departments and whether the companies are planning any downsizing. Almost all the informants declined to respond to these queries. Also, no substantial estimation of wages could be gathered.

The informants, however, shared their insights into the recruitment process, the skill level of the workers, entry requirements and the processes to implement those standards, experience with on-job training, and their expectations from the skill development sector. The major areas of weakness in the skill development sector can be inferred from the interviews. Taken together, the key messages of the interviews primarily reflect the wide gap between the purview of the skill development programs and the demand of the industry.

Another highly significant aspect of the interviews is the future concerns of the private sector. The informants pointed out the challenges facing the sectors in the mid to long term and highlighted how the issue of the skill gap can complicate the efforts to address those challenges. The advent of the fourth industrial revolution and its implication for a low-skilled workforce was discussed in detail in this regard.

Following are the general findings from the KIIs:

informality in the recruitment process and probational period

The recruitment process across all the sectors selected for this study is marked by a high level of informality. Although all companies have on paper certain rules and regulations regarding recruitment, those are rarely followed in the case of entry-level jobs. It was found from the interviews that in many cases recruiters do not post recruitment notices on websites or newspapers. Rather, they rely on the internal network of employees and hire on the basis of recommendations from those employees.

The rationale behind the informality in recruitment flows from the informational asymmetry in the labour market. The informants pointed out that the target audience or potential recruiters are not used to reading newspapers regularly or surfing job sites. Therefore, it is to some extent challenging for the recruiter to reach the potential candidates. Hence, they ask their existing employees in the mid to senior levels to recommend someone or pass the word among their peer groups.

Another crucial aspect of entry-level recruitment is the probational period. Although entry-level workers are often hired through the reference of the existing employees, they are put through a probational period. If the worker does not prove to be as skilled as required, then they are let go. The duration of the probational period differs from sector to sector. During the probational period, the entry-level workers also participate in on-job training.

perception of the skill level of existing entry-level workers

Across all the sectors selected for the study, there has been found a general level of satisfaction regarding the skill level of the existing workers at the entry/primary level. However, it would be wrong to interpret the HR executives' satisfaction as a signal of competency of the incoming workforce. Rather, the apparent complacency is due to the in-built structural arrangement of upskilling that companies have adopted over the years. It was pointed out by the informants that the newly hired entry-level workers are subjected to quite a rigorous process of training and are sensitized to the routine of daily work. Through this process, which lasts between 6-12 months and in cases more than that, the entry-level workers gain the knowledge and skills required to perform their job at a satisfactory level. It is noteworthy that the completion of on-job training does not lead to immediate promotion. Hence, entry-level workers continue to be engaged at the primary level. As a result, the production management becomes able to maintain their operation at an optimal level.

flexibility with the required educational level

While the official regulations mandate the specific level of education for entry-level workers—which is never mostly above H.S.C (Higher Secondary Certificate)—it has been found that in practice there is some form of flexibility. Except for the ICT and Pharmaceutical sectors, both of which are highly technical, other sectors are not too much concerned about the officially set minimum requirement of education. The HR Executives point out the gap between academic training and practical work in this regard. Building on their experience, recruiters have come to believe that while a candidate may satisfy the minimum required level of education, they may not be suitable for the job they are being hired for. To avoid misjudgment and associated costs in recruitment, companies are more focused on assessing a candidate on the skill and expertise they offer. The informants emphasized ensuring effective recruitment in line with the operational requirements.

low expectations regarding the skill and experience of entry-level workers

Generally, recruiters do not hold high expectations regarding skill and experience from entry-level workers. There are mostly two reasons behind the low expectation. Firstly, the labour market situation is as such that workers with skills and experience do not apply for entry-level jobs, rather they aim to opt for mid to senior-level jobs. As a result, there are hardly any candidates for entry-level jobs who have prior experience with standard skills. Secondly, workers who received some training prior to the job application are often found to have inadequate knowledge regarding the trade they are hired for. Therefore, the companies have to resort to on-job training and daily supervision anyway to upskill the workers. Based on this experience, the HR departments do not presume any entry-level workers to have the necessary skill level. Although the formal job postings mention specific criteria for experience and skill level, in practice, the recruiters do not expect new candidates to meet those criteria.

high reliance on the job training

As mentioned earlier, recruiters rely heavily on on-job training for upskilling the workers. Across all sectors, on-job training is regarded as essential. Regardless of the educational qualification, prior training and experience, it is mandatory for all entry-level workers to participate in the on-job training.

The on-job training primarily serves as a yardstick for permanent recruitment. Notably, the companies hire entry-level workers on a condition of the probational period, which lasts between 6-12 months and, in some cases, more than that. During this probational period, the companies organize a series of on-job training and closely monitor the performance of the newly recruited worker in those training. If the worker's performance is satisfactory and the supervisors conducting the training recommend the worker, then they are recruited on a permanent basis (subject to the standard conditions and regulations of the organization).

It can be argued that on-job training is the driving force for productivity in each production unit. Throughout the interviews, the significance of the on-job training was stressed repeatedly by the informants. The informants pointed out that the on-job training was the key to ensuring the entry-level worker have command over the trade they are assigned to. Apart from training the worker in the nitty-gritty details of the assigned trade, the on-job training is also key to ensuring that the worker is sensitized to the standard protocols of the companies. These standard protocols include, but are not limited to, company-specific production routines, quality management and rules and regulations of the company. The on-job training function as a tool for ensuring that an entry-level worker fits into the company structure.

Across all the sectors, the frequency of on-job training is more or less high. However, apart from the ICT and the pharmaceutical sectors, the basic modules of the training are not changed frequently. One of the reasons for the high frequency of the on-job training is that entry-level workers are enrolled in this training in batches, and companies recruit new batches of entry-level workers periodically. On the other hand, highly technical sectors, such as ICT and pharmaceuticals, are regularly faced with new technical issues and have to stay abridged with the changing dynamics of the sectors. Therefore, these sectors have to change the modules of their on-job training regularly as well.

There is, however, one thing to keep in mind: ongoing training programs are costly. This puts small and medium-sized businesses in a tough situation since they must choose between higher costs and more qualified workers. Additionally, there is a chance that a trained employee would leave a small or medium-sized business for a better opportunity, endangering the strategic goal of the company.

the gap between the TVET curriculum and the industry demand

While it is generally expected that TVET graduates would be more desirable for their prior training, it was found that recruiters are not content with their skill level. HR executives voiced their concerns regarding the capacity of the TVET graduates who are hired at the entry level. They pointed out that, more than often, TVET graduates do not have the skills required for the assigned trade. Reflecting on their experience, the informants pointed out that in many cases TVET graduates have failed to deliver as expected because they are not familiar with the practical work of the industry.

The reason behind the low appreciation of the TVET graduates lies in the fact that there is a huge gap between the TVET curriculum and the industry. Most of the TVET institutions follow an old-fashioned curriculum that is, in most cases, not tailored in line with the specific needs of the industries. Although the TVET programs offer extensive practical classes, the machinery and equipment used in these practical classes are outdated and no longer in use in industries. Consequently, TVET graduates do not gain the expertise necessary for practical work.

The lacking the TVET curriculum, the informants argued is also to some extent counterproductive as upon entering the job, the workers do not only have to learn the trade anew from scratch but also unlearn certain know-how they picked in their training. This creates confusion among the workers and hinders their learning process on the job.

lack of collaboration among TVET institutions and industry

As the shortcomings of the TVET curriculum indicate, there is a lack of collaboration among TVET institutions and industries. The TVET curriculum, therefore, does not reflect the requirements of the industry. With regard to crucial aspects of the training, such as the practical classes, the insights and ideas of the industry stakeholder could have proved valuable. More importantly, industry stakeholders could have also benefitted from a deeper understanding of the TVET system, which could be the key to an effective recruitment process.

It must be noted that while there has not been any effective initiative for collaboration on the part of the TVET institutions, there has also been a certain reluctance on the part of the private sector. As much as the industry stakeholders realize the significance of collaboration with the TVET institutions, they have so far failed to take an effective initiative on their part.

challenges of the 4IR

The fourth industrial revolution poses significant challenges to the existing workforce of Bangladesh. With the introduction of automation in production processes, the scope of entry-level jobs is threatened to be significantly reduced. The use of artificial intelligence can, in theory, replace physical labour along the production line, leaving little opportunity for the employment of low and semi-skilled workers. While the use of automation and artificial intelligence is still limited, it is just a matter of time before these new technologies become widely available across all sectors. The seven (7) high-priority sectors selected for this study are, therefore, no exception.

The interviewees indicated that they are fully aware of the potential of automation and artificial intelligence. They pointed out that while the fourth industrial revolution can greatly scale up production and ensure efficiency, it will also entail a higher demand for a skilled workforce. Hence, while the scope for low and semi-skilled labour may contract, the scope for highly skilled labour will widen. However, judging from the existing situation, it is difficult to see how the demand for highly skilled labour will be met in the future.

In this regard, there is no alternative but to prepare for the fourth industrial revolution in advance. The interviewees emphasized the need for concerted policy efforts to ensure that the TVET system of Bangladesh incorporates a forward-looking approach and focuses on preparing the youth in line with the technological changes that the 4IR will bring.

increased significance of occupational safety and health

It is highly encouraging that across all seven sectors, recruiters acknowledged the significance of occupational health and safety. Most of the interviewees reported that they provide in-house training on occupational safety and health. Some employers rely on third parties to conduct this training. However, in sectors with a comparatively higher level of informality, such as jute, light engineering and leather, occupational safety is often not the subject of separate formal training; rather, it is integrated with regular skills training. On the other hand, in more formal sectors such as RMG, ICT, pharmaceuticals and agro-processing, separate training on occupational safety and health is conducted on a regular basis.

Nevertheless, the interviewees highlighted the awareness of industry stakeholders regarding the occupational safety and health of the workers. They also pointed out that as health and safety issues are related to the productivity of the workers, these issues are being prioritized by employers.

7.1 skill requirements in each sector

The sector-specific requirements of skills (Table 14) highlight the areas which need to be prioritized in the skill development sector. Across all the sectors, except for ICT, entry-level jobs can be categorized into three general occupations: helper, operator and supervisor. However, the titles of these occupations differ across industries.

It has been found that there are some commonalities in skill demand for entry-level jobs across all sectors. For example, the recruiters expect the new employees to have a basic understanding of the industry and

the particular trade they are hired for. A certain level of cognitive abilities is also expected from entry-level workers. The basic idea of machinery, industrial production, ability to understand basic working English—are the qualities preferred by the recruiters.

table 14: skill requirements in each sector

Sector	Basic Trades	Helper	Operator	Supervisor
RMG	Doffer, Production Operator, Mixer man, Maintenance worker, Cutting men, Technicians, Electricians, etc.	Basic operational skills	Should have the ability and skill to operate a knitting/ weaving machine	Coordinating specific production line(s), and monitoring the overall production process.
pharmaceuticals	Machine maintenance operator, Pellet worker, Production (chepha) worker, Quality assistant worker, etc.	Basic operational skills and technical understanding	Capacity to operate specific machines, understanding manuals and production directions	Coordinating the various departments and monitoring
agro and food processing	Grading man, Processing worker, Machine maintenance operator, Technicians, Production workers, etc.	Collection and processing of the raw materials.	Capacity to operate specific machines	Coordinating the various departments and monitoring
jute and jute products	Batching, Softening, Pilling, Carding, Drawing, Spinning, Winding, Beaming, Weaving, Damping, Lapping, etc.	Assisting the operators	Understanding of the quality of products and capacity to operate specific machines	Coordinating the various departments and monitoring
leather and leather products	Sewing worker, Leather cutting worker, Machine maintenance operator, etc.	Processing raw materials	Processing raw materials and producing specific parts of a product	Coordinating the various departments and monitoring
light engineering	Lathe Machine Operator, Welder, Milling Machine Operator, Industrial Electrician, CNG Engineer/Operator, AC Technician, etc.	Assist the mechanics in their day-to-day trade, learn the trade in the process	The mechanic or operator conducts the main operations of the trade.	The supervisor monitors the quality of the work done by the mechanics. Most of these interviewed organizations are engaged in the servicing of various products like-stabilizers, IPS etc.

Sector	Basic Trades	Helper	Operator	Supervisor
				They need to have proper knowledge regarding the functions of these instruments.
information and communications technology.	Software Engineer, Database Administrator, Hardware/system/ networking, web development, graphic designer, etc.	Most of the time, people with higher education are recruited in this sector. There are very limited opportunities for people with secondary or higher secondary education.		

source: authors' compilation from the KIIs

7.2 sector-specific challenges

Each of the seven (7) high-priority sectors has its specific challenges related to the skill gap. The interviews offered a general overview of those challenges, as summarized in Table 15.

table 15: industry-specific challenges

Sector	Challenges
RMG	Due to the high competitiveness in the RMG sector, retention of skilled workers is quite difficult. Experienced workers frequently switch jobs in the hope of a better salary and working conditions.
	Completing orders in a short time often becomes difficult due to the lack of professionalism and cooperation from the workers. Often at critical times, their lack of sincerity causes a serious loss for the companies.
	Workers in Bangladesh are significantly less skilled than those in China and Vietnam. The lack of skills is one of the reasons Bangladesh lost its competitive edge against its competitors.
	The RMG sector is increasingly incorporating automation technologies and will be requiring highly skilled labour in the mid to long term. Helpers and operators will be expected to multitask.
	Workers significantly lack soft skills.

Sector	Challenges
pharmaceuticals	The pharmaceutical sector is already technology-intensive and will grow to be more so in the near future. Accordingly, even entry-level, workers will be required to have a higher level of technical skills.
	The workers are often not aware of infectious diseases and health safety protocols.
	The salary structure of the employees needs to be reformed. Many employees quit their jobs in the industry as they deem their wages to be insufficient in comparison to their expertise and experience. In comparison to other industries, the probation period is longer, which dissuades many potential workers.
agro and food processing	Often many employees quit jobs without informing officially, creating hindrances in production.
	There is a serious lack of workers skilled in processing techniques and packaging.
	There is a lack of discipline and soft skills as well as a lack of enthusiasm to learn new skills among the workers.
leather and leather products	Workers lack the willingness to acquire the required skills.
	In order to adopt new technologies, workers need to have a higher level of education.
	Catering to the demand of foreign customers requires a higher level of creativity which both the workers and the management often lack.
IT and software	The IT sector has a sustained supply of highly skilled workers. The qualifications of the candidates are often higher than required for entry-level jobs.
	A significant share of the IT workforce aims to move to more developed countries in the hope of a better standard of living and work. As a result, firms are finding it increasingly difficult to retain employees. Also, recruiting new candidates has become challenging.
	Digital banking and mobile financial services are two expanding horizons in the ICT sector. Expertise in blockchain, AI, advanced machine learning and security system will be in higher demand in this sector.
light Engineering	The light engineering sector relies heavily on on-job training. The high informality in the sector is one of the reasons that TVET institutions are not connected to the sector.
	Workers switch jobs frequently, resulting in frequent recruitment by employers. This also creates pressure on the industry as it is constantly required to train new employees.
	The wage situation of the sector is one of the major reasons that TVET graduates do not find it attractive.
jute and Jute products	It is not necessary for workers involved in production (batching, softening, pilling, carding, drawing, spinning, beaming, weaving, damping, lapping, etc.) to undertake difficult duties or operate complex machinery. Most of the time, employees are required to adhere to the predetermined schedules for their specific divisions.
	Only a small percentage of the workers engaged by private mills are considered permanent employees. Thus, workers have an increasing tendency to move to other sectors.

source: authors' compilation from the KIIs

8. policy recommendations and conclusion

8.1 policy recommendations

Based on the interviews with private sector stakeholders and experts on skill development, this study has developed a set of recommendations. The recommendations reflect the common concerns of the stakeholders of the private sector as well as challenges to policymaking.

1. **update TVET curriculum**

   The TVET curriculum needs to be updated in accordance with the needs of the industry. In this regard, the board in charge of designing the curriculum should consult industry stakeholders and experts. Both the theoretical and practical classes need to be reoriented so that trainees are sensitized about the modern techniques practised in the industrial sectors. The TVET curriculum should also put special emphasis on soft skills, aiming to train workers in time management, teamwork, etc. More importantly, the curriculum needs to address the coming fourth industrial revolution so that trainees can develop the capacity to adapt to changes brought by automation and artificial intelligence in the workplace.

2. **strengthen collaboration between TVET institutions and the private sector**

   There needs to be a mechanism for collaboration among the TVET institutions and the private sector. The scope for collaboration in this regard is huge. The informational asymmetry that exists in the labour market can be addressed through such collaborations. Among the many areas of collaboration, there are some which need to be prioritized: design of curriculum, arrangements of internships for TVET trainees, facilitation of on-job training by TVET institutions, management level consultations to identify skills gap and mid- to long-term policymaking.

3. **upgrade the quality of the trainers in TVET institutions**

   Ensuring the quality of trainers for the TVET institutions is of paramount importance for the skill development sector of Bangladesh. The trainers need to go through regular training to gain a better understanding of the trades they teach. This training can make the trainers aware of new technologies and procedures. On the other hand, trainers also need to develop communication and class management skills. It is high time that TVET institutions looked into the effective intra-class relationship between the trainer and the trainees. Another essential aspect that needs attention is the ICT skills of the trainers. It must be looked into that, regardless of their trades/expertise, trainers develop some basic ICT skills.

4. **incorporate training on soft skills in TVET**

   It is highly recommended that the TVET institutions pay special attention to developing the soft skills of the trainees. In this regard, the TVET institutions first need to update the curriculum accordingly. However, updating the curriculum alone would not be sufficient as the training on soft skills differs in many ways from the training on hard skills. Therefore, the TVETs should take the initiatives to understand the cultural and social values of the trainees and tailor the training on soft skills accordingly.

5. **expanding the scope of on-job training**

   On-job training is a crucial tool for any enterprise that aims to ensure a skilled workforce. While it is commendable that most enterprises employ on-job training for their existing employees, the scope of this training can and should be expanded. Currently, most on-job training sessions are focused on hard skills that will be immediately required for the employees. However, this training should

be forward-looking and aim to arm the employees with skills which they will require in the future. Along with the training on hard skills required for their trade, other skills such as ICT should be included in the on-job training. Also, the on-job training should put special emphasis on soft skills and occupational health and safety.

6. facilitating cutting-edge technologies for practical classes in TVETs

The practical classes in TVET institutions often lack the latest, cutting-edge technologies that are in use in the industry. Therefore, these practical classes need to be modernized. It must be ensured that trainees have access to modern technologies. It must be noted that it is not enough to furnish the practical classes with new technologies, the capacity of the TVET institution needs to be developed as well. Capacity development, in this regard, means enforcing safety protocols, making sure all trainees have access to updated manuals for the practical classes, upgrading the capacity of the trainers in charge of the practical classes and most importantly, creating an environment conducive to practical learning.

7. TVETs need to adopt changes associated with the 4IR

The realities of the fourth industrial revolution need to be realized by the TVET institutions. While it may appear that changing the curriculum would suffice in this regard, there is in fact, more to be done. All components of the TVET education system need to be assessed in light of the changing industrial dynamics introduced by the fourth industrial revolution. From administration, management, and curriculum to the capacity and mindset of trainers and trainees alike—all need to be taken into consideration for policy formulation. It is highly recommended that a mid to long-term plan for the 4IR be adopted by the TVET institutions.

8. ensuring access to TVET education for people with education in grades 5-12

The government and the TVET institutions must collaborate in ensuring access to TVET for people who have completed grades 5-12. A considerably significant share of people with a primary, secondary and higher secondary level of education joins the labour force without receiving any training. There is a wide range of reasons for these people not to avail any training. To ensure their access to training, there needs to be a comprehensive assessment of the challenges these people face in enrolling in training programs. There should also be policies in accordance with the identified challenges. If need be, the scope of stipends and scholarships should be expanded. Amenities like transportation, daycare facilities, etc., can also be included.

9. efficient coordination among government agencies affiliated with the TVET system

Inter-agency coordination is highly important for the skill development sector. There should be a high-level official body coordinating the various ministries, agencies and directorates affiliated with the TVET system. This body should also act as a medium of collaboration among the TVET institutions and the private sector. It needs to be ensured that all responsible agencies are acting in unison and in line with the nationally set targets. Allocation and utilization of budgetary funds should be in the purview of this coordinating body. Confusions regarding certification, administrative responsibilities and agency roles need to be clarified.

10. need to understand trainee demand

It is not enough to reflect the demand of the industries in the curriculum and overall structure of the TVET system. The TVET system must also pay special attention to the demands of the trainees. It must be ensured that the trainees are equipped with the skills that they want to acquire. The TVET institutions should also try to provide the amenities and facilities demanded by the trainees.

11. a government-led initiative is required to assess skill demand in the private sector

To devise an effective policy for the skill development sector of Bangladesh, the government should undertake an initiative to assess the skill demand of the private sector. A comprehensive evaluation of the existing skill gap is quintessential for further progress. Such an evaluation will allow the government and the stakeholders to identify the major challenges in the skill development sector and the future pathway.

8.2 conclusion

The study aimed to explore and analyze the national skill development sectors, identifying emerging industries and addressing the sector-specific challenges related to the demand for skills in each industry. Specifically, the study focuses on young workers seeking entry-level employment. The study applies both qualitative and quantitative methods in this regard. Firstly, a survey was carried out on the trainees who enrolled in the training program of "Uttoron- Skills for a better life", a skill development project by Swisscontact. The second part of the study draws on the insights of industry stakeholders to build a nuanced understanding of the private sector's perception of the skill development sector.

Findings from the beneficiaries' perceptions can be divided into two parts—perception regarding the effectiveness of the skill training and the impact of the skill training. In the case of the effectiveness of the skill training, 99.69% of the respondents experienced an improvement in their skill level after the training they received from Uttoron. Around 96% of the respondents attained at least a 'good' level of improvement. 92% of the respondents were satisfied with the skill training program. Understanding the impact of skill training is quite complex and difficult, as no baseline surveys and control groups were available. Nonetheless, the impact might be assessed with some comparative statistics. Before receiving the skills training from Uttoron, only 18.7% of the respondents (out of 321 respondents) were employed (either self or wage employed), while 81.4% were not employed. After receiving the skill training provided by Uttoron, 59% of respondents (out of 321) mentioned that they found employment, while 41% replied that they were not employed. Before receiving the skill training, on average, the employed respondents earned Tk 8,385 per month, whereas on average, the employed respondents earned TK 12,310 per month after receiving the training. Moreover, the skill training helped the respondents to participate in the labour market, develop soft skills, and become aware of occupational safety and health issues.

The KIIs conducted with the stakeholders of the private sector suggested that there is a high level of informality in the recruitment process. The probation period for newly hired workers serves as a management tool in this regard. Mostly, recruiters do not have high expectations of skills from entry-level workers, as the dominant trend is that low-skilled workers apply for entry-level jobs. However, across all the seven sectors considered for this study, there is a demand for skilled workers at entry-level jobs. In this connection, recruiters feel a lack of collaboration between the TVET system and the private sector. In the absence of an effective mechanism for industry-TVET collaboration, it has been found that the curriculum followed by TVET is not in line with the industry's demands. This situation has led employers to increasingly rely on on-job training.

The fourth industrial revolution is a major concern for stakeholders across all sectors. While automation and artificial intelligence can significantly reduce the scope of low and semi-skilled workers, recruiters believe highly skilled workers be in higher demand in the mid to long-term due to the introduction of new technologies.

It was also found that the private sector is becoming increasingly aware of the importance of occupational safety and health (OSH). Accordingly, more emphasis on OSH has been given by recruiters in this regard.

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Annex 1: questionnaire for the SANEM survey on skills training

Over the last decade, Bangladesh has consistently registered an annual average gross domestic product (GDP) growth rate of more than 6.5%. Strong export performance and steady remittance inflow have boosted the country's growth and supported its macroeconomic stability. There has been great progress in key areas of human development, such as health, education, and child and maternal mortality.

However, there are some longstanding issues which remain a concern for the country's long-term growth and development path. The issue of skill gap and skill mismatch is a prime concern in this regard. To sustain productivity, boost domestic industry and ensure Bangladesh's competitive edge in the global value chain, there is no alternative to upskilling the workforce of the country.

The significance of the issue of skill development becomes all the more pertinent when the current demography is taken into consideration. Almost 65% of the country's population is now in the working age bracket of 15 to 64 years. The window of the demographic dividend that Bangladesh now enjoys will close around 2040. There is scope to argue that the demographic dividend has already peaked and from this point onward it will continue to decline.

As a developing country and an aspirant middle-income country, there needs to be greater government and non-government collaboration in formulating action plans which would reflect the specific needs of private and public stakeholders. Yet, such action plans cannot be contrived without a comprehensive assessment of the existing situation.

This research assessed the skills development sector and, in the process identified its areas of weakness and strength.

As a former participant of a training program on specific trade-related skills, your opinion and views on the effectiveness of the training program you attended are of paramount importance to us. Your perception of the training program will be extremely valuable in evaluating the skill development sector of Bangladesh and analyzing the areas requiring further policy actions.

It will take a maximum of 10-15 minutes to complete this survey. We are most grateful to you for making this time amidst your busy schedules. Your valuable insights are essential in this endeavour.

We assure you that all your responses, including your personal and employment details, will be kept strictly confidential. All your responses will only be used for research.

গত এক দশকে ধারাবাহিকভাবে বাংলাদেশের মোট দেশজ উৎপাদন (গ্রস ডোমেস্টিক প্রোডাক্ট বা জিডিপি) ৬.৫% এরও বেশি হারে বৃদ্ধি পেয়েছে। রপ্তানি সাফল্য এবং রেমিট্যান্সের স্থির প্রবাহ দেশের উচ্চ অর্থনৈতিক প্রবৃদ্ধির ধারা বজায় রাখতে এবং সামষ্টিক অর্থনীতিকে স্থিতিশীল রাখতে সাহায্য করেছে। একই সাথে মানব উন্নয়নের অত্যন্ত গুরুত্বপূর্ণ কয়েকটি সূচকে, যেমন- স্বাস্থ্য, শিক্ষা এবং শিশু ও মাতৃমৃত্যু হ্রাসের ক্ষেত্রে প্রভূত অগ্রগতি অর্জিত হয়েছে।

তবে, দেশের দীর্ঘমেয়াদী প্রবৃদ্ধি এবং উন্নয়নের পথে অনেকদিন ধরেই কয়েকটি চ্যালেঞ্জ বিদ্যমান। দক্ষ মানবসম্পদের অভাব এর মধ্যে অন্যতম। উৎপাদনশীলতা বৃদ্ধি করতে, অভ্যন্তরীণ শিল্পকে চাঙ্গা করতে এবং বৈশ্বিক ভ্যালু চেইনের সাথে বাংলাদেশের সংযোগ জোরদার করতে দেশের শ্রমশক্তির দক্ষতা উন্নয়নের কোন বিকল্প নেই।

বর্তমান জনমিতির বিবেচনায় দক্ষতা উন্নয়ন আরো বেশি প্রাসঙ্গিক হয়ে উঠেছে। বর্তমানে জনসংখ্যার প্রায় ৬৫% এর বয়সসীমা ১৫ থেকে ৬৪ বছরের মধ্যে। এই জনমিতিক লভ্যাংশ ২০৪০ সাল নাগাদ শেষ হয়ে যাবে। এমনও বলা যেতে পারে যে, দেশের জনমিতিক লভ্যাংশ ইতিমধ্যেই শীর্ষে পৌঁছেছে এবং এই পর্যায় থেকে এটি ক্রমাগত হ্রাস পেতে থাকবে।

একটি উন্নয়নশীল দেশের ভবিষ্যতে মধ্যম-আয়ের অর্থনীতিতে রূপান্তরিত হওয়ার জন্য, কর্মপরিকল্পনা প্রণয়নের ক্ষেত্রে সরকারি ও বেসরকারি খাতের মধ্যে নিবিড় সহযোগিতা থাকা প্রয়োজন যা বেসরকারি ও সরকারি অংশীদারদের সুনির্দিষ্ট চাহিদার প্রতিফলন ঘটাবে। এ জন্য বিদ্যমান পরিস্থিতির সার্বিক মূল্যায়ন আবশ্যক।

এই প্রেক্ষাপটে, সুইসকন্ট্যাক্ট বাংলাদেশ এবং সাউথ এশিয়ান নেটওয়ার্ক অন ইকোনমিক মডেলিং (সানেম) যৌথভাবে বাংলাদেশের দক্ষতা উন্নয়ন খাতের মূল্যায়নের জন্য একটি গবেষণা প্রকল্প পরিচালনা করছে। এই প্রকল্পের লক্ষ্য হচ্ছে দক্ষতা উন্নয়ন খাতের দুর্বলতা ও শক্তির জায়গাগুলোকে চিহ্নিত করা। ১৯৫৯ সালে প্রতিষ্ঠিত এবং সুইস আইনের অধীনে নিবন্ধিত, সুইসকন্টাক্ট একটি স্বাধীন অলাভজনক সংস্থা। সাউথ এশিয়ান নেটওয়ার্ক অন ইকোনমিক মডেলিং (সানেম), একটি অলাভজনক গবেষণা প্রতিষ্ঠান। এটি ২০০৭ সালের জানুয়ারিতে প্রতিষ্ঠিত হয় এবং বাংলাদেশে জয়েন্ট স্টক কোম্পানি ও ফার্ম আইনে নিবন্ধিত।

কারিগরি জ্ঞানের ওপরে একটি প্রশিক্ষণ কর্মসূচীর পূর্ব অভিজ্ঞতা থাকায়, প্রশিক্ষণের কার্যকারিতা সম্পর্কে আপনার মতামত এবং দৃষ্টিভঙ্গি আমাদের কাছে অত্যন্ত গুরুত্বপূর্ণ। প্রশিক্ষণ কর্মসূচী সম্পর্কে আপনার মতামত বাংলাদেশের দক্ষতা উন্নয়ন খাতের মূল্যায়ন করতে এবং এ সংক্রান্ত নীতি প্রণয়ন করতে সাহায্য করবে।

এই জরিপটি সম্পূর্ণ করতে সর্বোচ্চ ১৫-২০ মিনিট সময় লাগবে। আপনার ব্যস্ততার মধ্যে এই সময়টুকু দিয়ে জরিপে অংশগ্রহণ করার জন্য আমরা আপনার প্রতি কৃতজ্ঞ। আমাদের এই প্রচেষ্টায় আপনার মূল্যবান মতামত গুরুত্বপূর্ণ অবদান রাখবে।

আমরা নিশ্চয়তা দিচ্ছি যে, আপনার ব্যক্তিগত এবং প্রতিষ্ঠানের সব তথ্য সম্পূর্ণ গোপন রাখা হবে। আপনার উত্তরসমূহ শুধু গবেষণার উদ্দেশ্যে ব্যবহার করা হবে।

section 1: general information about the respondent

[উত্তরদাতা সম্পর্কিত সাধারণ তথ্যাবলী]

Q.1.1 **RespondentÕs ID: [SANEM will provide a unique ID for each respondent] [উত্তরদাতার আইডি] [সানেম কর্তৃক প্রত্যেক উত্তরদাতার জন্য একটি নির্দিষ্ট আইডি প্রদান করা হবে]**

Q.1.2 Respondent's name: [উত্তরদাতার নাম]

Q.1.3 Respondent's district: [উত্তরদাতার জেলা]

- ❑ Dhaka [ঢাকা]
- ❑ Sylhet [সিলেট]
- ❑ Habiganj [হবিগঞ্জ]
- ❑ Moulvibazar [মৌলভীবাজার]

Q.1.4 Respondent's gender: [উত্তরদাতার লিঙ্গ]

- ❑ Male [পুরুষ]
- ❑ Female [নারী]

Q.1.5 Respondent's age: [উত্তরদাতার বয়স]

Q.1.6 Respondent's ethnicity: [উত্তরদাতার জাতিসত্তা]

- ❑ Bengali [বাঙালী]
- ❑ Other (please specify): _____ [অন্যান্য (উল্লেখ করুন)]

Q.1.7 Respondent's religion: [উত্তরদাতার ধর্ম]

- ❑ Islam [ইসলাম]
- ❑ Hindu [হিন্দু]
- ❑ Christian [খ্রিষ্টান]
- ❑ Buddhist [বৌদ্ধ]
- ❑ Other (please specify): _____ [অন্যান্য (উল্লেখ করুন)]

Q.1.8 Disabilitz status: [প্রতিবন্ধিতা]

- ❑ Yes [হ্যাঁ]
- ❑ No [না]

Q.1.9 Marital status: [বৈবাহিক অবস্থা]

- ❑ Married [বিবাহিত]
- ❑ Unmarried [অবিবাহিত]
- ❑ Widowed [বিধবা/বিপত্নীক]
- ❑ Divorced [তালাকপ্রাপ্ত]

Q.1.10 Mobile number of the respondent: [উত্তরদাতার মোবাইল নম্বর]

Q.1.11 Alternative mobile number of the respondent: [উত্তরদাতার বিকল্প মোবাইল নম্বর]

section-2: education and employment status before training

[প্রশিক্ষণের পূর্বে শিক্ষা ও কর্মসংস্থানের অবস্থা]

Q.2.1 **Respondent's highest level of educational attainment:** [উত্তরদাতার সর্বোচ্চ শিক্ষাগত যোগ্যতা]

- ❑ Class 5
- ❑ Class 6
- ❑ Class 7
- ❑ Class 8
- ❑ Class 9
- ❑ S.S.C/ Equivalent [পঞ্চম শ্রেণী থেকে মাধ্যমিক/সমমান]
- ❑ H.S.C./ Equivalent [উচ্চমাধ্যমিক/সমমান]
- ❑ Honours [স্নাতক]
- ❑ Master's [স্নাতকোত্তর]
- ❑ Other (please specify): _____ [অন্যান্য (উল্লেখ করুন)]

Q.2.2 What were you doing when you decided to enroll in the Uttoron training? [উত্তরণ প্রশিক্ষণে অংশগ্রহণের সিদ্ধান্ত যখন নেন, ঐ সময়ে আপনি কী করছিলেন?]

- ❑ Wage-emplozed [মজুরী প্রাপ্ত কর্মী]
- ❑ Self-emplozed [আত্মকর্মসংস্থানে নিযুক্ত]
- ❑ Was not emplozed in anz job [কোনো কাজে নিয়োজিত ছিলেন না]

[If the respondent is employed (self or wage), ask questions Q.2.3-Q.2.8; if the respondent "Was not employed in any job", ask questions Q.2.9-Q.2.10] [উত্তরদাতা যদি মজুরী প্রাপ্ত কর্মী/ আত্মকর্মসংস্থানে নিযুক্ত কর্মী হয়ে থাকেন, ২.৩-২.৮ প্রশ্নগুলো জিজ্ঞেস করুন। উত্তরদাতা যদি কোনো কাজে নিযুক্ত না হয়ে থাকেন, তাহলে সরাসরি ২.৯-২.১০ জিজ্ঞেস করুন]

Q.2.3 What was the occupation? [আপনার পেশা কী ছিল?]

Q.2.4 Was the job part-time or full-time? [আপনার কাজটি কি খন্ডকালীন না পূর্ণকালীন ছিল?]

- ❑ Part-time [খন্ডকালীন]
- ❑ Full time [পূর্ণকালীন]

Q.2.5 To what extent do zou think zou were skilled for the job? [উক্ত কাজের জন্য আপনি কতটা দক্ষ ছিলেন বলে মনে করেন?]

- ❑ Highly efficient [অত্যন্ত দক্ষ]
- ❑ Efficient [দক্ষ]
- ❑ Somewhat good [মোটামুটি ভালো]
- ❑ Not good [ভাল না]
- ❑ Not at all skilled [একদমই দক্ষ না]

Q.2.6 How manz hours on average did zou have to work dailz in zour job? [Number of hours] [উক্ত পেশায় আপনাকে দৈনিক গড়ে কয় ঘণ্টা কাজ করতে হত?]

Q.2.7 What was the monthlz income from zour job? [BDT] [ঐ পেশায় মাসিক আয় কত ছিল?] [বাংলাদেশি টাকায়]

Q.2.8 How long had zou been emplozed in that job? [আপনি ঐ পেশায় কতদিন কাজ করেছেন?]

- ❑ Less than 6 months [৬ মাসের কম]
- ❑ 6-12 months [৬ থেকে ১২ মাস]
- ❑ 1-2 years [১-২ বছর]
- ❑ More than 2 years [২ বছরের বেশি]

Q.2.9 Were you seeking employment then? [আপনি কি ঐ সময়ে কোনো কাজ খুঁজছিলেন?]

- ❑ Yes [হ্যা]
- ❑ No [না]

Q.2.10 Which of the following were the reasons that you were not employed in any job? [Multiple selections] [নিচের কোন কারণে আপনি কোনো কাজে নিয়োজিত ছিলেন না?] [একাধিক উত্তর গ্রহণযোগ্য]

- ❑ Was enrolled in education [শিক্ষা গ্রহণে নিয়োজিত ছিলেন]
- ❑ Was enrolled in training [প্রশিক্ষণ গ্রহণে নিয়োজিত ছিলেন]
- ❑ Lack of skills [দক্ষতার অভাব ছিল]
- ❑ Lack of information on job opening and opportunities [কোথায় চাকুরীর সুযোগ আছে সে সমন্ধে যথেষ্ট তথ্য না থাকা]
- ❑ Lack of information regarding the recruitment process [চাকরিতে নিয়োগদানের প্রক্রিয়া সম্পর্কে তথ্য ছিল না]
- ❑ Employment requires bribery [চাকরি পেতে ঘুষের দরকার হয়]
- ❑ Other (please specify): _____ [অন্যান্য (উল্লেখ করুন)]

section 3: perception on training
[প্রশিক্ষণ সম্পর্কে মতামত]

Q.3.1 General Questions: [সাধারণ প্রশ্নাবলী]

Q.3.1.1 How did you come to know about the Uttoron training program? [Multiple selections] [উত্তরণ ট্রেনিং সম্পর্কে আপনি কীভাবে জানতে পেরেছেন?] [একাধিক উত্তর গ্রহণযোগ্য]

- ❑ Miking [মাইকিং এর মাধ্যমে]
- ❑ Poster [পোস্টারের মাধ্যমে]
- ❑ Leaflet [লিফলেট এর মাধ্যমে]
- ❑ Banner [ব্যানার এর মাধ্যমে]
- ❑ Word of mouth [লোকজনের কাছ থেকে শুনে]
- ❑ Social media [সামাজিক যোগাযোগ মাধ্যমে]
- ❑ Other (please specify): _____ [অন্যান্য (উল্লেখ করুন)]

Q.3.1.2 What type of training did you receive from Uttoron? [উত্তরণ থেকে আপনি কোন ট্রেনিংটি গ্রহণ করেছেন?]

- ❑ EIM: Electrical installation and maintenance [ইলেকট্রিক যন্ত্রপাতির কাজ]
- ❑ GFO/PFO: General finishing operation/ Packaging finishing operation [প্যাকেজিং/ফিনিশিং এর কাজ]
- ❑ HK: House-keeping [গৃহস্থালীর কাজ]
- ❑ MAC: Machinist [মেশিনিস্ট]
- ❑ MPS: Mobile phone servicing [মোবাইল ফোন সার্ভিসিং]
- ❑ PPF: Plumbing and pipefitting [পাইপের কাজ]
- ❑ RAC: Refrigeration and air-conditioning [রেফ্রিজারেশন ও এসির কাজ]
- ❑ WEL: Welding [ওয়েল্ডিং]

Q.3.1.3 How long did it take for you to commute to the training centre from home? [Number of minutes] [বাড়ি থেকে ট্রেনিং সেন্টারে যেতে আপনার কত সময় লাগতো?] [মিনিট]

Q.3.1.4 How did you commute to the training center? [Multiple selections] [বাড়ি থেকে ট্রেনিং সেন্টারে কীভাবে যাতায়াত করতেন?] [একাধিক উত্তর গ্রহণযোগ্য]

- ❑ On foot [পায়ে হেঁটে]
- ❑ Rickshaw/Van [রিক্সা/ভ্যান]
- ❑ Auto/CNG [অটো/সিএনজি]
- ❑ Bus [বাস]
- ❑ Other (please specify): _____ [অন্যান্য (উল্লেখ করুন)]

Q.3.1.5 How much did it cost daily to commute to the training center? [যাতায়াতে আপনার দৈনিক কত টাকা খরচ হতো?] [ইউঞ]

Q.3.1.6 Did you face any of the following during the commute to the training center? [Multiple selections] [ট্রেনিং সেন্টারে যাতায়াতের সময় আপনি কোনো সমস্যার সম্মুখীন হয়েছেন কি?] [একাধিক নির্বাচন গ্রহণযোগ্য]

- ❑ Harassment [হয়রানির শিকার]
- ❑ Traffic jam [যানজট সমস্যা]
- ❑ Long commuting hour [ট্রেনিং সেন্টারে যেতে দীর্ঘ সময় ব্যয়]
- ❑ Lack of transport [উপযুক্ত যাতায়াত ব্যবস্থার অভাব]
- ❑ Others (Please specify) _____ [অন্যান্য (উল্লেখ করুন)]

Q.3.1.7 Did you face any obstacles from your family in availing the training? [ট্রেনিং করতে গিয়ে আপনি কি পরিবার থেকে কোনো বাধার সম্মুখীন হয়েছিলেন?]

- ❑ Yes [হ্যা]
- ❑ No [না]

[If the response is "Yes", ask questions Q.3.1.8; if the response is "No", move to section 3.2] [উত্তর যদি "হ্যাঁ" হয়ে থাকে, তাহলে ৩.১.৮ জিজ্ঞেস করুন; উত্তর "না" হয়ে থাকলে সেকশন ৩.২ এ যান]

Q.3.1.8 Which of the following familial obstacles did you face? [Multiple selections] [পরিবার থেকে কোন ধরনের বাধার সম্মুখীন হয়েছেন?] [একাধিক নির্বাচন গ্রহণযোগ্য]

- ❑ Physical obstruction [ট্রেনিংয়ে আসতে বাধা]
- ❑ Verbal discouragement [মৌখিকভাবে নিরুৎসাহ]
- ❑ Withdrawing financial support [আর্থিক সহায়তা বন্ধ করে দেয়া]
- ❑ Others (Please specify) _____ [অন্যান্য (উল্লেখ করুন)]

Q.3.2 Perception of training effectiveness [ট্রেনিংয়ের কার্যকারিতা সম্পর্কিত মতামত]

Q.3.2.1 Which of the following influenced you to take training on the trade you selected particularly? [Multiple selections] [যে কারিগরি কাজের ওপরে ট্রেনিং নিলেন সেটি নির্বাচন করার পেছনে কারণগুলো কী?] [একাধিক নির্বাচন গ্রহণযোগ্য]

- ❑ The trade has high income potential [এই কাজে উচ্চ আয় করা সম্ভব]
- ❑ Training on the trade will be useful in easily securing employment [সহজে কাজ পাওয়া যায়]
- ❑ The training center recommended it [ট্রেনিং সেন্টারের পরামর্শে]
- ❑ Family/relatives/friends recommended it [পরিবার/আত্মীয়-স্বজন/বন্ধুদের পরামর্শে]
- ❑ Others (Please specify) _____ [অন্যান্য (উল্লেখ করুন)]

Q.3.2.2 Did you know about this trade before you enrolled in the training? [যে বিষয়ে ট্রেনিং নিয়েছেন সে বিষয়ে ট্রেনিংর পূর্বে কি আপনার কোনো দক্ষতা ছিল ?]

- ❑ Yes [হ্যা]
- ❑ No [না]

[If the response is "Yes", ask questions Q.3.2.3; if the response is "No", move to Q.3.2.4] [উত্তর যদি "হ্যাঁ" হয়ে থাকে, তাহলে ৩.২.৩ জিজ্ঞেস করুন; উত্তর "না" হয়ে থাকলে ৩.২.৪ এ যান]

Q.3.2.3 Before enrolling in the training, how would you describe your skill of the trade you received training on? [ট্রেনিংয়ে অংশগ্রহণ করার আগে, আপনি ঐ বিষয়ে আপনার কারিগরি দক্ষতা ও জ্ঞান কীভাবে মূল্যায়ন করবেন?]

- ❑ Highly efficient (has complete command over the trade and the ability to improvise if needed) [অত্যন্ত দক্ষ (ঐ কাজে পুরোপুরি দক্ষ এবং নতুন নতুন সমস্যা সমাধানেও সক্ষম)]
- ❑ Efficient (has complete command over the trade) [দক্ষ (ঐ কাজ সম্পূর্ণভাবে জানা আছে)]
- ❑ Somewhat good (has an overall good understanding of the trade but lacks in some areas) [মোটামুটি ভালো (ঐ কাজ মোটামুটি ভালোভাবে বুঝলেও বেশ কিছু জায়গায় ঘাটতি আছে)]
- ❑ Not efficient (does not have a good understanding of the trade) [দক্ষ না (ঐ কাজ সম্পর্কে খুব ভালো মতো ধারণা নেই)]
- ❑ Highly inefficient (does not have much or any understanding of the trade) [একদমই দক্ষ না (ঐ কাজ সম্পর্কে তেমন কিছু জানা নেই)]

Q.3.2.4 Do you think that the training improved your skill level? [আপনি কি মনে করেন ট্রেনিং পাওয়ার ফলে আপনার দক্ষতা বৃদ্ধি হয়েছে?]

- ❑ Yes [হ্যা]
- ❑ No [না]

[If the response is "Yes", ask questions Q.3.2.5; if the response is "No", move to Q.3.2.6] [উত্তর যদি "হ্যাঁ" হয়ে থাকে, তাহলে ৩.২.৫ জিজ্ঞেস করুন; উত্তর "না" হয়ে থাকলে ৩.২.৬ এ যান]

Q.3.2.5 To what extent do you believe the training improved your skill level? [ট্রেনিংয়ের ফলে আপনার দক্ষতা আগের তুলনায় কতটুকু বৃদ্ধি হয়েছে বলে মনে করেন?]

- ❑ Great [অনেকখানি বৃদ্ধি হয়েছে]
- ❑ Good [মোটামুটি বৃদ্ধি হয়েছে]
- ❑ Not that much [খুব একটা বৃদ্ধি হয়নি]
- ❑ Not at all [একেবারেই বৃদ্ধি হয়নি]

[If the response is "Not at all", ask questions Q.3.2.6] [উত্তর যদি "একেবারেই বৃদ্ধি হয়নি" হয়ে থাকে, তাহলে ৩.২.৬ জিজ্ঞেস করুন]

Q.3.2.6 Why do you think the training wasn't useful for improving your skill sets? [Multiple selection] [আপনার মতে ট্রেনিং কেন আপনার দক্ষতা বৃদ্ধিতে কার্যকরী ভূমিকা রাখতে পারেনি?] [একাধিক উত্তর গ্রহণযোগ্য]

- ❑ Poor training facilities [ট্রেনিংয়ের সুযোগ-সুবিধা অপর্যাপ্ত ছিল]
- ❑ Poor curriculum [নিম্নমানের পাঠ্যক্রম]
- ❑ Incapable trainers [অদক্ষ প্রশিক্ষক]
- ❑ Exclusionary environment [ট্রেনিংয়ের পরিবেশে স্বাচ্ছন্দ্য বোধ করেননি]
- ❑ Others (Please specify) _____ [অন্যান্য (উল্লেখ করুন)]

Q.3.2.7 What is the respondent's level of satisfaction regarding the conducting of the training program? [ট্রেনিং কার্যক্রম যে ভাবে পরিচালনা করা হয়েছে, সেটি নিয়ে সার্বিকভাবে আপনি কতটুকু সন্তুষ্ট?]

- ❑ Very satisfied [খুব সন্তুষ্ট]
- ❑ Satisfied [সন্তুষ্ট]
- ❑ Neither satisfied nor unsatisfied [সন্তুষ্টও না অসন্তুষ্টও না]
- ❑ Not much satisfied [তেমন সন্তুষ্ট নই]
- ❑ Not at all satisfied [মোটেও সন্তুষ্ট নই]

Q.3.2.8 Have you heard the term "soft skills" before? [?] "সফট স্কিল" এই শব্দটা কি আপনি আগে শুনেছেন?

- ❑ Yes [হ্যা]
- ❑ No [না]

[If the response is "Yes", ask Q.3.2.9; If "No", ask Q.3.2.10. উত্তর "হ্যাঁ" হলে, ৩.২.৯ জিজ্ঞেস করুন; "না" হলে ৩.২.১০ থেকে জিজ্ঞেস করুন]

Q.3.2.9 In your opinion what are "soft skills"? [আপনার মতে "সফট স্কিল" কী?]

- ❑ Please explain [উত্তরদাতার উত্তর বিস্তারিত লিপিবদ্ধ করুন] _____

Q.3.2.10 Did you get any lessons from the training on time management/teamwork/work communication? [ট্রেনিংয়ের ক্লাসে সময় ব্যাবস্থাপনা, দলগত ভাবে কাজ করা, কর্মক্ষেত্রে সহকর্মী/সুপারভাইজারের সাথে যোগাযোগ , সমস্যা সমাধানের উপায়--এই সকল বিষয় নিয়ে কি কথা বলা হয়েছে ?]

- ❑ Yes [হ্যা]
- ❑ No [না]

[If "Yes", ask Q.3.2.11; If "No", move to Q.3.2.12] [উত্তর "হ্যাঁ" হলে, ৩.২.১১ জিজ্ঞেস করুন, উত্তর "না" হলে ৩.২.১২ জিজ্ঞেস করুন]

Q.3.2.11 Which of the following was more focused on? [নিচের কোনটি নিয়ে ট্রেইনার বেশি কথা বলেছেন?]

- ❑ Time management [সময় ব্যবস্থাপনা]
- ❑ Work communication [যোগাযোগ]
- ❑ Teamwork [দলবদ্ধভাবে কাজ করার দক্ষতা]

Q.3.2.12 Do you think time management/work communication/teamwork are important in workplace? [আপনি কি মনে করেন করেন সময় ব্যবস্থাপনা/যোগাযোগ/দলবদ্ধভাবে কাজ করার দক্ষতা কর্মক্ষেত্রে গুরুত্বপূর্ণ?]

- ❑ Yes [হ্যা]
- ❑ No [না]

Q.3.3 Perception about training facilities [ট্রেনিংয়ের সুযোগ-সুবিধা নিয়ে মতামত]

Q.3.3.1 Were the classes congested? [ক্লাসে কি গাদাগাদি করে বসতে হত?]

- ❑ Yes [হ্যা]
- ❑ No [না]

Q.3.3.2 Do you agree with the statement that, "The training program was inclusive in welcoming trainees from different ethnic/ social/ religious backgrounds"? ["আপনি যে প্রশিক্ষণে অংশ গ্রহণ করেছেন সেখানে কি সমাজের সব ধরনের মানুষের-যেমন নারী/পুরুষ বা বিভিন্ন জাতি/ গোষ্ঠি /ধর্মের মানুষেরা সকলেই অংশ নিতে পারতো"?]

- ❑ Yes [হ্যা]
- ❑ No [না]

Q.3.3.3 Do you agree with the statement that, "The training program provided a safe and encouraging learning environment for female trainees"? ["আপনার কি মনে হয় ট্রেনিং সেন্টারের পরিবেশ নারীদের জন্য নিরাপদ এবং নারীরা সমানভাবে কার্যক্রমে অংশগ্রহণের সুযোগ পেয়েছিলেন?]

- ❑ Yes [হ্যা]
- ❑ No [না]

Q.3.3.4 What is your opinion about the quality of the trainers? [প্রশিক্ষকদের মান সম্পর্কে আপনার মতামত কী?]

- ❑ Please explain [উত্তরদাতার উত্তর বিস্তারিত লিপিবদ্ধ করুন] _____

Q.3.3.5 In your opinion, in which areas do you think trainers' capacity need to be improved? [আপনার মতে, কোন কোন ক্ষেত্রে প্রশিক্ষকদের আরো ভালো করা প্রয়োজন?]

- ❑ Please explain [উত্তরদাতার উত্তর বিস্তারিত লিপিবদ্ধ করুন] _____

Q.3.3.6 Which of the following did you prefer more? [নিচের কোনটি আপনার কাছে বেশি ভালো লাগত?]

- ❑ Theory classes [থিওরী ক্লাস]
- ❑ Practical classes [প্র্যাকটিকাল ক্লাস]

Q.3.3.7 What is your level of satisfaction regarding the practical classes? [ট্রেনিংয়ের প্র্যাকটিকাল ক্লাস নিয়ে আপনি কতটুকু সন্তুষ্ট?]

- ❑ Very satisfied [খুব সন্তুষ্ট]
- ❑ Satisfied [সন্তুষ্ট]
- ❑ Neither satisfied nor unsatisfied [সন্তুষ্টও না অসন্তুষ্টও না]
- ❑ Not satisfied [সন্তুষ্ট না]
- ❑ Very unsatisfied [খুব অসন্তুষ্ট]

Q.3.3.8 To what extent do you agree that the proportion of the practical classes is adequate? [যে পরিমাণে প্র্যাকটিকাল ক্লাস হয়েছে সেটি যথেষ্ট এ ব্যাপারে আপনি কতটা একমত হবেন?]

- ❑ Strongly agree [সম্পূর্ণ একমত]
- ❑ Agree [একমত]
- ❑ Neutral [নিরপেক্ষ]
- ❑ Disagree [একমত নয়]
- ❑ Strongly disagree [দৃঢ়ভাবে দ্বিমত]

Q.3.3.9 Do you agree that practical classes offered adequate facilities (i.e. equipments, manuals, etc.)? [আপনি কি একমত যে প্র্যাকটিকাল ক্লাসে পর্যাপ্ত সুযোগ-সুবিধার (সরঞ্জাম, ম্যানুয়াল, ইত্যাদি) ব্যবস্থা ছিল?]

- ❑ Yes [হ্যা]
- ❑ No [না]

Q.3.3.10 What else do you think should have been included in the practical classes? [প্র্যাকটিকাল ক্লাসে আর কী কী সুযোগ-সুবিধা থাকা দরকার ছিল বলে মনে করেন?]

- ❑ Please explain [উত্তরদাতার উত্তর বিস্তারিত লিপিবদ্ধ করুন] _____

Q.3.3.11 Do you know about workplace safety? [আপনি কি কর্মস্থলের নিরাপত্তা সম্পর্কে জানেন?]

- ❑ Yes [হ্যা]
- ❑ No [না]

Q.3.3.12 Was there enough safety equipment for practical classes in the training program? [প্র্যাকটিকাল ক্লাস করার সময় যথেষ্ট নিরাপত্তা সরঞ্জাম ছিল কি?]

- ❑ Yes [হ্যা]
- ❑ No [না]

Q.3.3.13 Did you properly practice with the safety equipment provided by the training program? [আপনি কি নিরাপত্তা/সুরক্ষা সরঞ্জাম ঠিকমত ব্যবহার করেছেন কি না?]

- ❑ Yes [হ্যা]
- ❑ No [না]

Q.3.3.14 Please tell us in your own words, what kind of accidents can happen if the safety equipment are not used properly in workplace [কর্মস্থলে নিরাপত্তা সরঞ্জামাদি ঠিকমত ব্যবহার না করা হলে কী ধরণের দুর্ঘটনা ঘটতে পারে বলে মনে করেন, নিজের ভাষায় বলুন]

- ❑ Please explain [উত্তরদাতার উত্তর বিস্তারিত লিপিবদ্ধ করুন] _____

Q.3.3.15 What do you think about the infrastructure (i.e. classroom accommodation, electricity, sanitation, other utilities) of the Uttoron training program? [উত্তরণ প্রশিক্ষণের অবকাঠামো, যেমন ক্লাসরুমের ব্যবস্থা, বিদ্যুৎ সংযোগ, পরিষ্কার-পরিচ্ছন্নতা ও অন্যান্য সুযোগ-সুবিধা নিয়ে আপনার মতামত কী?]

- ❑ Very good [খুব ভালো]
- ❑ Good [ভালো]
- ❑ Average [মোটামুটি]
- ❑ Bad [খারাপ]
- ❑ Very bad [খুব খারাপ]

Q.3.3.16 Did you find the management/authority of the training course to be supportive? [ট্রেনিংয়ের ব্যবস্থাপনা/কর্তৃপক্ষ যথেষ্ট সহায়ক এ ব্যাপারে আপনি কতটা একমত হবেন?]

- ❑ Strongly agree [সম্পূর্ণ একমত]
- ❑ Agree [একমত]
- ❑ Neutral [নিরপেক্ষ]
- ❑ Disagree [একমত নয়]
- ❑ Strongly disagree [দৃঢ়ভাবে দ্বিমত]

Q.3.3.17 Do you agree with any of the following regarding the training program? [Multiple selection] [প্রশিক্ষণের কর্মসূচীর ব্যাপারে নিম্নলিখিত কোনটির সাথে আপনি একমত হবেন?] [একাধিক উত্তর গ্রহণযোগ্য]

- ❑ The training you received will be irrelevant in the future [ভবিষ্যতে এই ট্রেনিং খুব একটা কাজে লাগবে না]
- ❑ Demand for the skill gained is declining [যে কাজে দক্ষতা অর্জন করেছেন সে কাজের চাহিদা কমে যাচ্ছে]
- ❑ Skill improvement is inadequate for gaining new employment [যথেষ্ট উন্নতি হয়নি]
- ❑ Further training is needed [দক্ষতার আরও উন্নতি প্রয়োজন]
- ❑ Do not agree with any of the above [উপরের কোনোটির সাথেই একমত নই]

Q,3.3.19 In your opinion, what are the positive sides of the training program? [আপনার মতে ট্রেনিংটির ইতিবাচক দিকগুলো কী?]

Q.3.3.20 In your opinion, what are the negative sides of the training program? [আপনার মতে ট্রেনিংটির নেতিবাচক দিকগুলো কী?]

Q.3.3.21 What are your suggestions for improving the training program? [ট্রেনিংটি আরো ভালো করার জন্য আপনার পরামর্শগুলো কী?]

Q.3.4 Post-Training Employment [ট্রেনিং পরবর্তী কর্মসংস্থান]

Q.3.4.1 Did the training center offer you any job after completing the training? [ট্রেনিং শেষে আপনাকে কি কোনো চাকরির অফার দেয়া হয়েছিল?]

- ❑ Yes [হ্যা]
- ❑ No [না]

Q.3.4.2 Did you avail that offer? [আপনি কি ঐ অফার গ্রহণ করেছিলেন?]

- ❑ Yes [হ্যা]
- ❑ No [না]

[If "Yes", go to Q.3.4.3; if "No", go to Q.3.4.6] [উত্তর "হ্যাঁ" হলে ৩.৪.৩ জিজ্ঞেস করুন; "না" হলে ৩.৪.৬ এ যান]

Q.3.4.3 Are you still employed in that job? [আপনি কি এখনো ঐ চাকরিতে কর্মরত আছেন?]

- ❑ Yes [হ্যা]
- ❑ No [না]

[If "Yes", go to Section 4; if "No", go to Q.3.4.4] [উত্তর "হ্যাঁ" হলে সেকশন ৪ এ যান; "না" হলে ৩.৪.৪৪ এ যান]

Q.3.4.4 How long were you employed in that job? [আপনি কতদিন ঐ চাকরিতে ছিলেন?]

- ❑ Number of months:_____ [মাসের সংখ্যা]

Q.3.4.5 Why did you decide to leave that job? [Multiple Selections] [ঐ চাকরি ছাড়লেন কেন?] [একাধিক নির্বাচন গ্রহণযোগ্য]

- ❑ Low Wage [কম মজুরি]
- ❑ Inadequate skill for the job [ঐ কাজের জন্য যথেষ্ট দক্ষতা নেই]
- ❑ Unsafe working condition [কাজের পরিবেশ নিরাপদ না]
- ❑ Lack of vacation [ছুটি কম]
- ❑ Manager/supervisor not cooperative [ম্যানেজার/সুপারভাইজারের সাথে খারাপ সম্পর্ক]
- ❑ Others (Please Specify) [অন্যান্য (উল্লেখ করুন)] _____

Q.3.4.6 Why did you not get into the job offered by the training center? [Multiple Selections] [কি কারণে আপনি ট্রেনিং সেন্টারের অফার করা চাকরি গ্রহণ করেননি?] [একাধিক নির্বাচন গ্রহণযোগ্য]

- ❑ Low Wage [কম মজুরি]
- ❑ Inadequate skill for the job [ঐ কাজের জন্য যথেষ্ট দক্ষতা নেই]
- ❑ Unsafe working condition [কাজের পরিবেশ নিরাপদ না]
- ❑ Lack of vacation [ছুটি কম]
- ❑ Manager/supervisor not cooperative [ম্যানেজার/সুপারভাইজার ভালো না]
- ❑ Others (Please Specify) [অন্যান্য (উল্লেখ করুন)] _____

Q.3.4.7 Is the respondent currently employed? [আপনি কি বর্তমানে চাকরী করছেন?]

- ❑ Yes [হ্যা]
- ❑ No [না]

[If "Yes", go to Section 4; if "No", go to Section 5] [উত্তর "হ্যাঁ" হলে সেকশন ৪ এ যান; "না" হলে সেকশন ৫ এ যান]

section 4: current employment status
(বর্তমান চাকরির অবস্থা)

Q.4.1 Are you self-employed or wage employed? [আপনি কি আত্মকর্মসংস্থানে নিযুক্ত না মজুরির বিনিময়ে কাজে নিযুক্ত?]

- ❑ Self-employed [আত্মকর্মসংস্থানে নিযুক্ত]
- ❑ Wage employed [মজুরিপ্রাপ্ত কর্মী]

Q.4.2 What is your current occupation? [আপনার বর্তমান পেশা কী]

Q.4.3 What type of skills are required for this job? [আপনার বর্তমান চাকরির জন্য কী ধরনের দক্ষতা প্রয়োজন?]

Q.4.4 To what extent do you think you are skilled for your job? [আপনার মতে এই চাকরির জন্য আপনি কতটুকু দক্ষ?]

- ❑ Highly efficient [অত্যন্ত দক্ষ]
- ❑ Efficient [দক্ষ]
- ❑ Somewhat efficient [কিছুটা দক্ষ]
- ❑ Not good [ভাল না]
- ❑ Not at all skilled [তেমন দক্ষ না]

Q.4.5 How will you evaluate your own performance in your current job? [বর্তমান চাকরিতে আপনি নিজের কর্মদক্ষতাকে কিভাবে মূল্যায়ন করবেন?]

- ❑ Excellent [খুব ভাল]
- ❑ Very good [ভাল]
- ❑ Moderate [মোটামুটি]
- ❑ Not good [তেমন ভাল নয়]
- ❑ Bad [খারাপ]

Q.4.6 How do you think the training has been useful in your current job? [ট্রেনিং আপনার বর্তমান চাকরির জন্য কতটুকু কার্যকর হয়েছে বলে মনে করেন?]

- ❑ Highly effective [অত্যন্ত কার্যকর]
- ❑ Effective [কার্যকর]
- ❑ Somewhat effective [কিছুটা কার্যকর]
- ❑ Not effective [কার্যকর না]
- ❑ Not at all effective [তেমন কার্যকর না]

Q.4.7 What is the daily working hour of your job now? [আপনার বর্তমান চাকরির দৈনিক কর্ম ঘণ্টা কত?]

Q.4.8 What is the current monthly income from this job? [আপনার বর্তমান চাকরির মাসিক বেতন কত?]

Q.4.9 What special facilities did you get from your job due to your training? [ট্রেনিং করার ফলে আপনার চাকরিতে আপনি কী কী বিশেষ সুবিধা পান?]

- ❑ Please explain [দয়া করে ব্যাখ্যা করুন] ___
  _____

Q.4.10 How long have you been employed in this job? [আপনি এই চাকরিতে কতদিন যাবত কর্মরত আছেন?]

- ❑ Months [মাস] _____

Q.4.11 Have you got any promotions since joining this job? [বর্তমান চাকরিতে যোগদান করার পর থেকে আপনার কোন পদোন্নতি হয়েছে?]

- ❑ Yes [হ্যা]
- ❑ No [না]

[If "Yes", go to Q.4.12; if "No", go to Q.4.14] [উত্তর "হ্যাঁ" হলে ৪.১২ জিজ্ঞেস করুন; "না" হলে ৪.১৪ এ যান]

Q.4.12 How many promotions did you get? [Number] [বর্তমান চাকরিতে আপনি কয়টি পদোন্নতি পেয়েছেন?] (সংখ্যায়)

Q.4.13 Did the training help you to get the promotion? [প্রশিক্ষণ কি আপনার পদোন্নতি পেতে সাহায্য করেছে?]

- ❑ Yes [হ্যা]
- ❑ No [না]

Q.4.14 How long are you planning to stay on this job? [আপনি কতদিন বর্তমান চাকরিতে থাকার পরিকল্পনা করছেন?]

- ❑ Months [মাস] _____

section 5: unemployment
(বেকারত্ব)

Q.5.1 In the last 30 days, did you seek work in exchange of wage or profit? [গত ৩০ দিনে আপনি কি বেতন/মজুরি বা মুনাফার বিনিময়ে কোনো কাজ খুঁজেছেন?]

- ❑ Yes [হ্যা]
- ❑ No [না]

[If the response is "Yes", then go to Q.5.2; if the response is "No", go to Q.5.7] [উত্তর "হ্যাঁ" হলে ৫.২ জিজ্ঞেস করুন; আর "না" হলে ৫.৭ এ যান]

Q.5.2 Why do you think that you have not been able to get a job yet? [Multiple selections] [কী কারণে আপনি এখনো চাকরি পাননি বলে মনে করেন?] [একাধিক উত্তর গ্রহণযোগ্য]

- ❑ Lack of skill [দক্ষতার অভাব]
- ❑ Lack of job posting [চাকরিতে নিয়োগের অভাব]
- ❑ Lack of information [তথ্যের অভাব]
- ❑ Employment requires bribery [চাকরির জন্য ঘুষের প্রয়োজন হয়]
- ❑ Others [অন্যান্য]

Q.5.3 To what extent would you agree that the training you received will help you to find a job? [আপনি যে প্রশিক্ষণ নিয়েছেন সেটি আপনাকে চাকরী পেতে সহায়তা করবে এ ব্যাপারে কতটা একমত হবেন?]

- ❑ Strongly agree [সম্পূর্ণ একমত]
- ❑ Agree [একমত]
- ❑ Neutral [নিরপেক্ষ]
- ❑ Disagree [দ্বিমত]
- ❑ Strongly disagree [দৃঢ়ভাবে দ্বিমত]

Q.5.4 Are you confident that potential employers will appreciate your job skill attained from the training? [আপনি কি আত্মবিশ্বাসী যে ভবিষ্যত চাকরীদাতারা আপনি যে দক্ষতা অর্জন করেছেন সেটির যথাযত মূল্যায়ন করবেন?]

- ❑ Strongly agree [সম্পূর্ণ একমত]
- ❑ Agree [একমত]
- ❑ Neutral [নিরপেক্ষ]
- ❑ Disagree [দ্বিমত]
- ❑ Strongly disagree [দৃঢ়ভাবে দ্বিমত]

Q.5.5 What type of job do you hope to get? [আপনি কী ধরণের চাকরী পাওয়ার আশা করেন?]

Q.5.6 What level of income do you expect from your next job? [আপনার পরবর্তী চাকরী থেকে আপনি কত আয় করার আশা করেন?]

Q.5.7 Why are you not looking for employment? [Multiple selections] [আপনি কেন চাকরী খুঁজছেন না?] [একাধিক নির্বাচন গ্রহণযোগ্য]

- ❑ Frustrated [হতাশ]
- ❑ No need for employment now [বর্তমানে চাকরির প্রয়োজন নেই]
- ❑ Enrolled in education [এখনো শিক্ষা কার্যক্রমে সংযুক্ত]
- ❑ Enrolled in training [ট্রেনিং গ্রহণ করছেন]
- ❑ Others (Please Specify) [অন্যান্য (উল্লেখ করুন)] _____

section 6: enumerator details

[জরিপকারীর তথ্যসমূহ]

Q.6.1 Enumerator ID : _____ [জরিপকারীর আইডি]

Q.6.2 Enumerator Name : _____ [জরিপকারীর নাম]

Q.6.3 Enumerator Comment : _____ [জরিপকারীর মন্তব্য]

annex 2: KIIs checklist for reviewing skills development sector of Bangladesh

(For Private Sectors)

[General Questions]

part-1: organizational workforce

1. Total number of employees in your factory? Do you have any plans to cut down your workforce in the next one year? Why? Do you have any plan to increase total workforce in next one year? Why? (আপনার কারখানায় মোট কর্মচারীর সংখ্যা কত? আগামী এক বছরের মধ্যে আপনার প্রতিষ্ঠানে জনবল কমানোর কোনো পরিকল্পনা আছে কি? থাকলে কেন? আগামী এক বছরে প্রতিষ্ঠানে জনবল বাড়ানোর কোনো পরিকল্পনা আছে কি? থাকলে কেন?)

2. Number of employees[7] in production, maintenance department, quality control department etc. Which department recruits/ needs the highest number of workers? Which department in your organization currently has the highest number of vacancies? Which departments and which positions have a higher turnover rate? Why do you think the turnover rate is high? Which departments/ positions have the highest retention rate? Why? (উৎপাদন, রক্ষণাবেক্ষণ বিভাগ, মান নিয়ন্ত্রণ বিভাগ ইত্যাদির মাঝে কোন বিভাগে সবচেয়ে বেশি সংখ্যক কর্মী নিয়োগ করা হয়? আপনার প্রতিষ্ঠানের কোন বিভাগে বর্তমানে সর্বাধিক সংখ্যক শূন্যপদ রয়েছে? কোন বিভাগ এবং কোন পদে চাকরী ছেড়ে দেয়ার হার বেশি? কেন চাকরী ছেড়ে দেয়ার হার বেশি বলে মনে করেন? কোন বিভাগ/পদে চাকরীতে বহাল থাকার হার সবচেয়ে বেশি? কেন?)

3. What is the male-female worker ratio in your factory/ industry group of the industry? Which positions/ departments have more female workers? Is the turnover rate higher among women? (আপনার শিল্পখাতে পুরুষ-নারী কর্মীর অনুপাত কত? কোন পদে/বিভাগে নারী কর্মী বেশি? নারীদের মধ্যে চাকরী ছেড়ে দেয়ার হার কি বেশি?)

4. Are you facing a shortage of workers? Is it shortage of skilled workers or shortage of applicants? In your opinion why are you facing this worker shortage? Average wage of basic workers and skilled workers (in BDT) (আপনি কি পর্যাপ্ত শ্রমিকের অভাব সম্মুখীন করছেন? এটা কি দক্ষ শ্রমিকের অভাব নাকি আবেদনকারীদের অভাব? আপনার মতে আপনি কেন এই শ্রমিক সংকটের সম্মুখীন হচ্ছেন? সাধারণ শ্রমিক এবং দক্ষ শ্রমিকদের গড় মজুরি কেমন (বাংলাদেশি টাকায়)?)

part-2: recruitment Process

1. What is the recruitment process for entry-level workers? (Operator, assistant operator, assistant supervisor, supervisor) How often do you recruit? Please name the top 3 criteria while selecting an applicant. (প্রাথমিক স্তরের কর্মীদের নিয়োগ প্রক্রিয়া কেমন? (অপারেটর, সহকারী অপারেটর, সহকারী সুপারভাইজার, সুপারভাইজার) আপনি কত সময় পর পর নিয়োগ করেন? একজন আবেদনকারীকে নির্বাচিত করার সময় কোন প্রধান তিনটি মানদন্ড বিবেচনা করা হয়?)

2. What is the desired level of education in your industry/ factory from helpers (minimum level) to supervisor level at entry level? What is the actual level of education in your industry/ organization from helpers (minimum level) to supervisor level at entry level? (আপনার শিল্পখাতের হেল্পার থেকে সুপারভাইজারদের শিক্ষাগত

[7] Those whose education level is between class 5 to highest class 12, or equivalent, and are looking for jobs demanding candidates with similar level of education. This classification is also applicable for all references made to "Trainees".

যোগ্যতা কতটুকু প্রত্যাশা করেন? বাস্তবে হেল্পার থেকে সুপারভাইজার পর্যন্ত কর্মচারীদের শিক্ষাগত যোগ্যতা কতটুকু?)

3. Does your industry require experience at entry-level employment? If so, what is the desired level of experience in your industry/ factory from helpers (minimum level) to supervisor level at entry level? (আপনার শিল্পখাতের প্রাথমিক স্তরের নিয়োগ পাওয়ার জন্য অভিজ্ঞতার প্রয়োজন আছে কি? যদি থাকে সে ক্ষেত্রে নিয়োগপ্রার্থীর কাছ থেকে কী ধরনের অভিজ্ঞতা প্রত্যাশা করেন?)

4. Did you ever recruit anyone who received training from the government or other training institutes? If the answer is yes, then what was your experience with these trained workers? (Are they more skilled, better behaved, more productive, and retained in the job for a longer time). If the answer is no, then was there any specific reason, why you did not recruit them? (আপনি কি কখনও এমন কাউকে নিয়োগ করেছেন যিনি সরকারী বা অন্যান্য প্রশিক্ষণ প্রতিষ্ঠান থেকে প্রশিক্ষণ নিয়েছেন? যদি উত্তর হ্যাঁ হয়, তাহলে এই প্রশিক্ষিত কর্মীদের সাথে আপনার অভিজ্ঞতা কেমন ছিল?। যদি উত্তর না হয়, তাহলে কি কোনো সুনির্দিষ্ট কারণ ছিল, যে জন্য আপনি তাদের নিয়োগ দেননি?

5. What are the challenges faced in recruiting employees? How often do you get applicants who have received any training from the government or NGO? *(শ্রমিক/কর্মচারী নিয়োগের ক্ষেত্রে কী কী বাধার সম্মুখীন হতে হয়? সরকার বা এনজিও থেকে কোনো প্রশিক্ষণ পেয়েছেন এমন আবেদনকারীদের সংখ্যা নিয়োগের সময় কেমন দেখেন?)

6. Do you know about any government or NGO training programs? If so, how do you know about the mentioned program (SEIP, Gov/ NGO-run training)? (আপনি কি কোনো সরকারি বা এনজিও প্রশিক্ষণ কর্মসূচি সম্পর্কে জানেন? জেনে থ াকলে, তাহলে আপনি কিভাবে উল্লিখিত প্রোগ্রাম সম্পর্কে জেনেছেন?)

part-3: workforce quality and demand

1. What are the main/major skill sets that are currently required in the production of your industry from helpers (minimum level) to supervisor level? What skills have high demand in recent times? (আপনার শিল্পখাতে উৎপাদনের ক্ষেত্রে হেল্পার থেকে সুপারভাইজার স্তরে কোন ধরনের মূল দক্ষতাসমূহ বর্তমানে প্রয়োজন? সাম্প্রতিক সময়ে কোন ধরনের দক্ষতাসমূহের চাহিদা সব চেয়ে বেশি?)

2. Are you satisfied with the average skills level of your existing workforce? If dissatisfied with the skills of your existing workers, does your organization have any plan for providing in-house training to your worker? (আপনি কি আপনার প্রতিষ্ঠানে বিদ্যমান কর্মশক্তির গড় দক্ষতার স্তর নিয়ে সন্তুষ্ট? আপনার বিদ্যমান কর্মীদের দক্ষতার সাথে সন্তুষ্ট না হলে, আপনার প্রতিষ্ঠানের কি আপনার কর্মীদের অভ্যন্তরীণ প্রশিক্ষণ প্রদানের কোন পরিকল্পনা আছে?)

3. What are the top three challenges that you face with your existing employees? (আপনার প্রতিষ্ঠানের বিদ্যমান কর্মীদের সাথে আপনি যে প্রধান তিনটি বাধার মুখোমুখি হন সেগুলো কী কী?)

4. Do you provide any training to your workers after recruitment? If so, what types of skill training do you provide? What percentage of workers in your factory has received any training? (নিয়োগের পর আপনি কি আপনার কর্মীদের কোন ধরনের প্রশিক্ষণ প্রদান করেন? যদি দিয়ে থাকেন, আপনি কি ধরনের দক্ষতা প্রশিক্ষণ প্রদান করেন? আপনার কারখানার কত শতাংশ শ্রমিক কোন প্রশিক্ষণ পেয়েছে?)

5. What initiatives have been taken by your organization or sector for the skills development of the workers? What do you think the skills program should do to help you get better workers? What do you think the government should do to create a better workforce? (কর্মীদের দক্ষতা বৃদ্ধির জন্য আপনার প্রতিষ্ঠান বা সেক্টর কি উদ্যোগ নিয়েছে? আপনাকে আরও ভালো কর্মী পেতে সাহায্য করার জন্য কি ধরনের প্রশিক্ষণ কর্মসূচীর আয়োজন করা উচিত বলে আপনি মনে করেন? দক্ষ জনবল তৈরি করতে সরকারের কী পদক্ষেপ নেয়া উচিত বলে আপনি মনে করেন?)

6. Are the skills of the workers in line with your demand? If not, what do you think are the reasons behind the skill mismatch? How did the skill mismatch or skill gap affect the performance of your sector/institution? What are the existing initiatives taken to cope with the skill mismatch? (কর্মীদের দক্ষতা কি আপনার চাহিদার সাথে সামঞ্জস্যপূর্ণ? যদি না হয়, তাহলে দক্ষতার অসামঞ্জস্যতার পেছনের কারণগুলো কী বলে আপনি মনে করেন? দক্ষতার অসামঞ্জস্যতা বা দক্ষতার ব্যবধান কীভাবে আপনার খাতের/প্রতিষ্ঠানের কর্মক্ষমতাকে প্রভাবিত করেছে? দক্ষতার অসামঞ্জস্যতা মোকাবেলা করার জন্য বিদ্যমান উদ্যোগগুলি কী কী?)

7. What skills will have higher demand in your sector over the next ten years? What types of skills have the future prospect in your industry in the context of 4IR? In the context of automation, what challenges will the workers face? What are the new activities or initiatives incorporated in mitigating such challenges? (আগামী দশ বছরে আপনার কর্মখাতে কোন ধরনের দক্ষতার চাহিদা বেশি থাকবে? চতুর্থ শিল্প-বিপ্লবের প্রেক্ষাপটে আপনার খাতে কোন ধরনের দক্ষতা ভবিষ্যতে বেশি মূল্যায়িত হতে পারে? স্বয়ংক্রিয়করণের প্রেক্ষাপটে, শ্রমিকরা কোন ধরনের বাধার মুখোমুখি হবে? এই ধরনের বাধা প্রশমিত করার জন্য নতুন কার্যক্রম বা উদ্যোগগুলি কী কী?)

part-4: collaboration

1. Do you have any linkage with any training institutes? Would you be interested to partner with different training institutes and programs for getting skilled workers? (কোনো প্রশিক্ষণ প্রতিষ্ঠানের সাথে আপনার কি কোন যোগসূত্র আছে? আপনি কি দক্ষ কর্মী পাওয়ার জন্য বিভিন্ন প্রশিক্ষণ প্রতিষ্ঠান এবং কর্মসূচীর সাথে অংশীদার হতে আগ্রহী?)

2. Do you think TVET institutions can be utilized for on-job trainings? চাকরীকালীন প্রশিক্ষণগুলোর জন্য কি কারিগরি শিক্ষাপ্রতিষ্ঠানগুলোকে কাজে লাগানো যেতে পারে বলে মনে করেন?

3. What is your opinion about the different vocational training programs implemented by the government and NGO sectors? Do you think your firm can collaborate with the government and NGO sectors to upgrade the skills of incoming workers? If yes then how? (সরকার এবং এনজিও সেক্টর দ্বারা বাস্তবায়িত বিভিন্ন কারিগরি প্রশিক্ষণ কর্মসূচি সম্পর্কে আপনার মতামত কী? আগত কর্মীদের দক্ষতা বাড়াতে আপনার প্রতিষ্ঠান, সরকার এবং এনজিও সেক্টর একযোগে অংশীদারীত্বের ভিত্তিতে কাজ করতে পারে বলে আপনি মনে করেন? পারলে কীভাবে?)

4. What are the obstacles to collaboration between the private sector and the government and NGO sectors? What are your feasible suggestions/recommendations for better effective collaboration? (বেসরকারী খাত এবং সরকার ও এনজিও সেক্টরের মধ্যে সহযোগিতার ক্ষেত্রে বাধাগুলি কী কী? আরও কার্যকরী সহযোগিতার জন্য আপনার সম্ভাব্য পরামর্শগুলি কী কী?)

part-5: sector-specific Questions

agro and food processing (কৃষি ও খাদ্য প্রক্রিয়াজাতকরণ)

1. What kind of processing requires the most skilled workers, and do you find any new recruits with similar skills? If not, then how do you manage? (কোন ধরনের প্রক্রিয়াজাতকরণের জন্য সবচেয়ে বেশি দক্ষ কর্মীদের প্রয়োজন? এবং আপনি কি সে ধরনের দক্ষতার সাথে নতুন নিয়োগ করতে সক্ষম হয়েছেন? যদি না হয়, তাহলে আপনি কিভাবে পরিচালনা করছেন?)

2. Which sub-sectors/sector under agro-food processing has the highest growth potential in the next five years? (এই খাতের মধ্যে কোন কোন উপখাতের আগামী পাঁচ বছরে সব চেয়ে বেশি প্রবৃদ্ধি বা সম্প্রসারণের সম্ভাবনা আছে?)

3. What skills will be most in demand to meet these potentially expanding sub-sectors? (এই খাতগুলোর দ্রুত প্রবৃদ্ধি বা সম্প্রসারণের জন্য কোন কোন পেশা বা পেশার দক্ষতা সব চেয়ে বেশি দরকার?)

4. What are the best possible ways to equip workers with these skills? On-the-job training by NGOs? (শ্রমিকদের মধ্যে এই দক্ষতাগুলো তৈরি করার জন্য সব চেয়ে ভালো উপায় কী হতে পারে? এক্ষেত্রে এনজিওদের মাধ্যমে চাকরীকালীন প্রশিক্ষণ আয়োজন করা যায় কি?)

5. Do you provide any training on Occupational Health and Safety (OHS) for your workforce? (আপনি কি কর্মপরিবেশের নিরাপত্তা ও স্বাস্থ্য সংক্রান্ত ব্যাপারে শ্রমিকদের কোনো প্রশিক্ষণ দিয়ে থাকেন?)

ready made garment (RMG) (তৈরি পোশাক খাত)

1. Which main skills are lacking among workers involved in both knitting and weaving? (নিটিং এবং ওয়েভিং উভয় ক্ষেত্রেই জড়িত শ্রমিকদের মধ্যে কোন প্রধান দক্ষতাগুলোর ঘাটতি রয়েছে?)

2. What do you think are the main differences among the Chinese, Vietnamese and Bangladeshi RMG workers in terms of skill levels? What are the mai n soft skills that need to be prioritized if Bangladesh wants to stay ahead in the global competition? (আপনার মতে চীনা, ভিয়েতনামী এবং বাংলাদেশী তৈরী পোশাক খাতের কর্মীদের মধ্যে দক্ষতার মাত্রার দিক থেকে প্রধান পার্থক্যগুলো কি কি ? বাংলাদেশ যদি বৈশ্বিক প্রতিযোগিতায় এগিয়ে থাকতে চায় তাহলে কোন ধরনের সফট স্কিলকে অগ্রাধিকার দিতে হবে?)

3. How is the global market of RMG products changing and how it is impacting your recruitment process or strategy? (তৈরী পোষাক খাতের পণ্যের বৈশ্বিক বাজার কীভাবে পরিবর্তিত হচ্ছে এবং কীভাবে এটি আপনার নিয়োগ প্রক্রিয়া বা কৌশলকে প্রভাবিত করছে?)

4. What type of new skills will be required to address the growing automation trend? (গার্মেন্টস খাতে যেভাবে স্বয়ংক্রিয় প্রক্রিয়াকরণ বা স্বয়ংক্রিয় যন্ত্রপাতির ব্যবহার বৃদ্ধি পাচ্ছে, সেটির জন্য কোন ধরণের এবং কী কী দক্ষতা দরকার বলে মনে করেন?)

5. Do you provide any training on Occupational Health and Safety (OHS) for your workforce? (আপনি কি কর্মপরিবেশের নিরাপত্তা ও স্বাস্থ্য সংক্রান্ত ব্যাপারে শ্রমিকদের কোনো প্রশিক্ষণ দিয়ে থাকেন?)

ICT/Software (আইসিটি/সফটওয়্যার)

1. Do you think that effectiveness of training on ICT changes over the course of age? I.E. is it harder for older people to be skilled in ICT? (আপনি কি মনে করেন যে বয়সের সাথে সাথে আইসিটি প্রশিক্ষণের কার্যকারিতা পরিবর্তিত হয়? বিশেষভাবে বলতে গেলে বয়স্ক ব্যক্তিদের আইসিটিতে দক্ষ হওয়া কি কঠিন?)

2. Which ICT services in domestic and international markets have the potential for growth in the next five years? (আগামী পাঁচ বছরে দেশীয় ও আন্তর্জাতিক বাজারে কোন ধরনের আইসিটি সেবার চাহিদা সব চেয়ে বেশি বৃদ্ধির সম্ভাবনা আছে?)

3. How do we prepare our workforce to meet those demands? (আমাদের জনবলকে এই চাহিদা পূরণের জন্য আমরা কীভাবে তৈরী করতে পারি?)

4. Which are the top three expected knowledge areas from an entry-level worker in the ICT sector? (আইসিটি সেক্টরে প্রাথমিক পর্যায়ের কাজগুলোর জন্য নিয়োগ দেয়ার ক্ষেত্রে নিয়োগপ্রার্থীদের কাছে কোন তিনটি বিষয়ে বোঝাপড়া বা জ্ঞান আশা করা হয়ে থাকে?)

5. Do you provide any training on Occupational Health and Safety (OHS) for your workforce? (আপনি কি কর্মপরিবেশের নিরাপত্তা ও স্বাস্থ্য সংক্রান্ত ব্যাপারে শ্রমিকদের কোনো প্রশিক্ষণ দিয়ে থাকেন?)

pharmaceuticals (ঔষধশিল্প)

1. Does the pharmaceutical sector require any specialised skills among their worker to production, manufacturing and packaging line-up? (আপনি কি মনে করেন ঔষধ শিল্পে নিয়োজিত শ্রমিকদের উৎপাদন, প্রস্তুতকরণ বা প্যাকেজিং নিয়ে কোনো বিশেষায়িত দক্ষতার দরকার আছে?)

2. Which sub-sectors/sector under Leather and Leather goods has the highest growth potential in the next five years? (এই খাতের মধ্যে কোন কোন উপখাতের আগামী পাঁচ বছরে সব চেয়ে বেশি প্রবৃদ্ধি বা সম্প্রসারণের সম্ভাবনা আছে?)

3. What skills will be most in demand to meet these potentially expanding sub-sectors? (এই খাতগুলোর দ্রুত প্রবৃদ্ধি বা সম্প্রসারণের জন্য কোন কোন পেশা বা পেশার দক্ষতা সব চেয়ে বেশি দরকার?)

4. What are the best possible ways to equip workers with these skills? On-the-job training by NGOs? (শ্রমিকদের মধ্যে এই দক্ষতাগুলো তৈরি করার জন্য সব চেয়ে ভালো উপায় কী হতে পারে? এক্ষেত্রে এনজিওদের মাধ্যমে চাকরীকালীন প্রশিক্ষণ আয়োজন করা যায় কি?)

5. Do you provide any training on Occupational Health and Safety (OHS) for your workforce? (আপনি কি কর্মপরিবেশের নিরাপত্তা ও স্বাস্থ্য সংক্রান্ত ব্যাপারে শ্রমিকদের কোনো প্রশিক্ষণ দিয়ে থাকেন?)

leather and leather goods (চামড়া এবং চামড়াজাত পণ্য)

1. Which main skills are lacking among workers involved in Leather and Leather goods? (চামড়া এবং চামড়াজাত পণ্যের খাতের নিয়োজিত শ্রমিকদের মধ্যে কোন কোন দক্ষতার অভাব আছে বলে মনে করেন?)
2. Which sub-sectors/sector under Leather and Leather goods has the highest growth potential in the next five years? (এই খাতের মধ্যে কোন কোন উপখাতের আগামী পাঁচ বছরে সব চেয়ে বেশি প্রবৃদ্ধি বা সম্প্রসারণের সম্ভাবনা আছে?)
3. What skills will be most in demand to meet these potentially expanding sub-sectors? (এই খাতগুলোর দ্রুত প্রবৃদ্ধি বা সম্প্রসারণের জন্য কোন কোন পেশা বা পেশার দক্ষতা সব চেয়ে বেশি দরকার?)
4. What are the best possible ways to equip workers with these skills? On-the-job training by NGOs? (শ্রমিকদের মধ্যে এই দক্ষতাগুলো তৈরি করার জন্য সব চেয়ে ভালো উপায় কী হতে পারে? এক্ষেত্রে এনজিওদের মাধ্যমে চাকরীকালীন প্রশিক্ষণ আয়োজন করা যায় কি?)
5. Do you provide any training on Occupational Health and Safety (OHS) for your workforce? (আপনি কি কর্মপরিবেশের নিরাপত্তা ও স্বাস্থ্য সংক্রান্ত ব্যাপারে শ্রমিকদের কোনো প্রশিক্ষণ দিয়ে থাকেন?)

light Engineering (লাইট ইনজিনিয়ারিং)

1. Which main skills are lacking among workers involved in Light Engineering sector? (লাইট ইনিজিনিয়ারিং খাতে নিয়োজিত শ্রমিকদের মধ্যে কোন কোন দক্ষতার সব চেয়ে বেশি ঘাটতি আছে?)
2. Which sub-sectors/sector under Light Engineering has the highest growth potential in the next five years? (এই খাতের মধ্যে কোন কোন উপখাতের আগামী পাঁচ বছরে সব চেয়ে বেশি প্রবৃদ্ধি বা সম্প্রসারণের সম্ভাবনা আছে?)
3. What skills will be most in demand to meet these potentially expanding sub-sectors? (এই খাতগুলোর দ্রুত প্রবৃদ্ধি বা সম্প্রসারণের জন্য কোন কোন পেশা বা পেশার দক্ষতা সব চেয়ে বেশি দরকার?)
4. What are the best possible ways to equip workers with these skills? On-the-job training by NGOs? (শ্রমিকদের মধ্যে এই দক্ষতাগুলো তৈরি করার জন্য সব চেয়ে ভালো উপায় কী হতে পারে? এক্ষেত্রে এনজিওদের মাধ্যমে চাকরীকালীন প্রশিক্ষণ আয়োজন করা যায় কি?)
5. Do you provide any training on Occupational Health and Safety (OHS) for your workforce? (আপনি কি কর্মপরিবেশের নিরাপত্তা ও স্বাস্থ্য সংক্রান্ত ব্যাপারে শ্রমিকদের কোনো প্রশিক্ষণ দিয়ে থাকেন?

jute and jute products (পাট ও পাটজাত পণ্য)

1. Which main skills are lacking among workers involved in Jute and Jute products sector? (পাট ও পাটজাত পণ্য খাতে নিয়োজিত শ্রমিকদের মধ্যে কোন কোন দক্ষতার সব চেয়ে বেশি ঘাটতি আছে?)
2. Which sub-sectors/sector under Jute and Jute products has the highest growth potential in the next five years? (এই খাতের মধ্যে কোন কোন উপখাতের আগামী পাঁচ বছরে সব চেয়ে বেশি প্রবৃদ্ধি বা সম্প্রসারণের সম্ভাবনা আছে?)
3. What skills will be most in demand to meet these potentially expanding sub-sectors? (এই খাতগুলোর দ্রুত প্রবৃদ্ধি বা সম্প্রসারণের জন্য কোন কোন পেশা বা পেশার দক্ষতা সব চেয়ে বেশি দরকার?)
4. What are the best possible ways to equip workers with these skills? On-the-job training by NGOs? (শ্রমিকদের মধ্যে এই দক্ষতাগুলো তৈরি করার জন্য সব চেয়ে ভালো উপায় কী হতে পারে? এক্ষেত্রে এনজিওদের মাধ্যমে চাকরীকালীন প্রশিক্ষণ আয়োজন করা যায় কি?)
5. Do you provide any training on Occupational Health and Safety (OHS) for your workforce? (আপনি কি কর্মপরিবেশের নিরাপত্তা ও স্বাস্থ্য সংক্রান্ত ব্যাপারে শ্রমিকদের কোনো প্রশিক্ষণ দিয়ে থাকেন?)

[public sector and experts]

1. In terms of curriculum, what are the main challenges for government (private) run TVET programs for the youth[8] ? কারিকুলাম নির্ধারণ করার ক্ষেত্রে, তরুণ/যুবকদের জন্য গৃহীত সরকারি (বা বেসরকারি) কারিগরি প্রশিক্ষণ কর্মসূচীগুলোর প্রধান চ্যালেঞ্জগুলো কী?

8 Those whose education level is between class 5 to highest class 12, or equivalent, and are looking for jobs demanding candidates with similar level of education. This classification is also applicable for all references made to "Trainees".

2. What are the main challenges that TVET programs are facing in order to admit more young trainees? (কারিগরি প্রশিক্ষণ কর্মসূচীগুলোতে আরো বেশি তরুণ বা যুবাদের অন্তর্ভুক্তি করার ক্ষেত্রে প্রধান চ্যালেঞ্জগুলো কী?)

3. What is your view on the funding of government (private) TVET programs? (সরকারি (বেসরকারি) কারিগরি প্রশিক্ষণগুলোর অর্থায়নের অবস্থা কী রকম?)

4. What are the main learning challenges that trainees of government (private) run TVET programs face? (সরকারি (বেসরকারি) কারিগরি প্রশিক্ষণ গ্রহণ করতে গিয়ে প্রশিক্ষণার্থীরা যে সব চ্যালেঞ্জগুলোর মুখোমুখি হন, সেগুলোর মধ্যে প্রধান চ্যালেঞ্জগুলো কী?)

5. Which areas of the TVET programs need to be improved to ensure skilled workers for Agro and food processing and agro-machineries manufacturing industry, RMG, ICT/Software Industry, Pharmaceutical Industry, Leather and leathergoods industry, Light engineering industry and Jute and Jute products industry? (কৃষি ও খাদ্য প্রক্রিয়াজাতকরণ খাত, তৈরি পোশাক খাত, আইসিটি/সফটয়্যার খাত, ঔষধ শিল্প, চামড়া ও চামড়াজাত পণ্য, লাইট ইনজিনিয়ারিং, এবং পাট ও পাটজাত পণ্যের খাতের জন্য দক্ষ জনবল নিশ্চিত করতে কারিগরি প্রশিক্ষণ কর্মসূচীগুলোর কোন কোন ক্ষেত্রে আরো উন্নয়ন করা দরকার বলে মনে করেন?)

6. To what extent do you think TVET programs have been effective in terms of post training employment gain for trainees? (ট্রেনিংয়ের পরে চাকরী পাওয়ার ক্ষেত্রে শিক্ষার্থীদের জন্য কারিগরি প্রশিক্ষণ কর্মসূচীগুলো কতটুকু কার্যকরী হয়েছে বলে মনে করেন?)

7. What is your assessment of successes of trainees after completion of training programs? (প্রশিক্ষণ কর্মসূচী শেষ করার পরে শিক্ষার্থীরা কতটা সফল হয়েছেন বলে আপনি মনে করেন?)

8. In what areas do you think TVET programs need to emphasise more in order to ensure a steady supply of skilled workforce for the private sector? (বেসরকারি খাতে দক্ষ জনবলের চাহিদা পূরণের জন্য আর কোন কোন ক্ষেত্রে কারিগরি প্রশিক্ষণ কর্মসূচীগুলোর আরো বেশি জোর প্রদান করা উচিত বলে মনে করেন?)

9. What is the state of collaboration between private sector and TVET programs and how do you think this collaboration can be improved? (বেসরকারি খাত এবং কারিগরি প্রশিক্ষণ কর্মসূচীগুলোর মধ্যে পারস্পরিক যোগাযোগ ও সহযোগিতার অবস্থা কেমন এবং কীভাবে এটি আরো বৃদ্ধি করা যেতে পারে?)

10. To what extent do you think government (private) run TVET programs have been successful in catering to the demand of the trainees? (প্রশিক্ষণার্থীদের চাহিদা মোতাবেক শিক্ষা/প্রশিক্ষণ দেয়ার ক্ষেত্রে সরকারি (বা বেসরকারি) কারিগরি প্রশিক্ষণ কর্মসূচীগুলো কতটুকু সফল বলে মনে করেন?)

11. What is your assessment of the trainers employed in the government (private) TVET programs? (সরকারি (বেসরকারি) প্রশিক্ষণ কর্মসূচীগুলোতে কর্মরত প্রশিক্ষকদের ব্যাপারে আপনার মূল্যায়ন কী?)

12. What do you think are the main challenges for recruiting quality trainers? (মানসম্মত প্রশিক্ষক নিয়োগ দেয়ার ক্ষেত্রে মূল চ্যালেঞ্জগুলো কী?)

13. How do you think the quality of trainers of government (private) TVET programs can be improved? (সরকারি (বেসরকারি) প্রশিক্ষণ কর্মসূচীর প্রশিক্ষকদের মান কীভাবে উন্নত করা যেতে পারে বলে মনে করেন?)

14. What kind of gaps do you think exist in the classroom between the trainers and the trainees? 1. (প্রশিক্ষক ও প্রশিক্ষণার্থীর মধ্যে ক্লাসরুমে কী ধরণের ব্যবধান বিদ্যমান আছে বলে মনে করেন?)

15. What is the state of gender balance in classrooms and what initiatives have been taken to improve it? (ক্লাসরুমে জেন্ডার সমতার অবস্থা কী বলে মনে করেন এবং জেন্ডার সমতা নিশ্চিত করার ক্ষেত্রে কী ধরণের উদ্যোগ নেয়া হয়েছে?)

16. What is your assessment of training on soft skills in TVET programs? (কারিগরি প্রশিক্ষণ কর্মসূচীগুলোতে সফল স্কিলের প্রশিক্ষণের ব্যাপারে আপনার মূল্যায়ন কী?)

17. What is your view of the preparedness of government (private) TVET programs for 4IR and artificial intelligence? (চতুর্থ শিল্প বিপ্লব ও কৃত্তিম বুদ্ধিমত্তার জন্য সরকারি (বেসরকারি) কারিগরি প্রশিক্ষণ কর্মসূচীগুলো কতটুকু প্রস্তুত বলে মনে করেন?)

annex 3: list of key informants

Sl.	Informants name	Designation	Company	Sector
1	Mahamud Hasan Rasel	Assistant Manager, HR	Golden Harvest Group	Agro and Food Processing
2	Sayad Rashed	Human Resource	BRAC	Agro and Food Processing
3	MD TAREQ AHMED	Human Resource	Golden Harvest Group	Agro and Food Processing
4	Md Maniruzzaman Shakil	Assistant Manager [HR & Training]	Data soft system	ICT/Software
5	Md. Ariful Hasan	Deputy Manager	ACI Limited	Pharmaceutical
6	Jahangir Alam	HR Manager	Authlab	ICT/Software
7	Nabid Fakrul	Hr Admin Senior Officer	ACI Limited	Pharmaceutical
8	Sharif Ahmed	Asst Manager (Admin and Compliance)	Mohammadi Fashion and Sweaters Limited, Mohammadi Group	RMG
9	Md. Jubaer Hossen	Assistant Manager (HRM)	Pran Group	Agro and Food Processing
10	Mohammad Atikur Rahman	Senior Officer [HR]	Beacon Pharmaceuticals	Pharmaceutical
11	Rowshon Ali Khandker Liton	Company Secretary	Fashion Globe Group	RMG
12	Mohammad Ariful Islam	Manager HR & Compliance	Tropical Knitex Ltd	RMG
13	Mohammad Kamrul Islam	Deputy Manager, Hr	DBL Pharmaceuticals	Pharmaceutical
14	Topon Kranto Chandro	Managing Partner	Ureka Electronics	Light engineering industry
15	Md. Mofizul Islam	Proprietor	Renu Handicrafts	Jute and Jute products industry
16	Ahad Chowdhury	Human Resource	Hera Sweaters Limited	RMG
17	Md Jakir Hossain	Managing Director	Arnob Electronics	Light engineering industry
18	Mahbub Rahman	Managing Director	North Bengal Jute Mills Pvt Ltd	Jute and Jute products industry
19	Ziaul Islam Chowdhury	HR Manager	Reve Systems	ICT/Software
20	Zakir Hasan	Assistant HRM	Magnito Digital	ICT/Software

Sl.	Informants name	Designation	Company	Sector
21	Mahin Iqbal Chowdhury	Head of Sales	Envision Analytics	ICT/Software
22	Shadek Babu	Managing Director	Bengal Pelli Export Co. Ltd	Leather and leathergoods industry
23	Nusrat Jahan	Assistant HR Manager	Victory Footware Ltd.	Leather and leathergoods industry
24	Rubaiya Rahman	Senior Executive, HR	Healthcare Pharmaceuticals	Pharmaceutical
25	Md Rubel Hossain	Proprietor	Rubel Electronics, Rajshahi	Light engineering industry
26	Mr Engr. Farid Uddin Ahmed	Director (Curriculum)	Bangladesh Technical Education Board (BTEB)	Education Board
27	Engr. Md. Faruk Reza	Curriculum Specialist	Bangladesh Technical Education Board (BTEB)	Education Board
28	S M Shahjahan	Deputy Director (Course Accreditation)	Bangladesh Technical Education Board (BTEB)	Education Board
29	Dr Md. Sanwar Jahan Bhuiyan	Joint Secretary DEPD (Private-1)	Skills for Employment Investment Program (SEIP)	SEIP (public sector)
30	Dr. Md. Anwarul Haque	Director (Planning & Industry linkage)	National Skills Development Authority (NSDA)	NSDA (public sector)
31	Shuvra Roy	Deputy Director (Planning & Research)	National Skills Development Authority (NSDA)	NSDA (public sector)
32	Md. Shaher Ali	Proprietor	Shawkot Leather	Leather and leathergoods industry
33	Shorifuzzaman Mithu	Owner and Managing Director	Best Crafts BD Factory	Jute and Jute products industry
34	Irina Sultana Disha	HR Manager	Orbitrax-Tax Management Solutions	ICT/Software


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