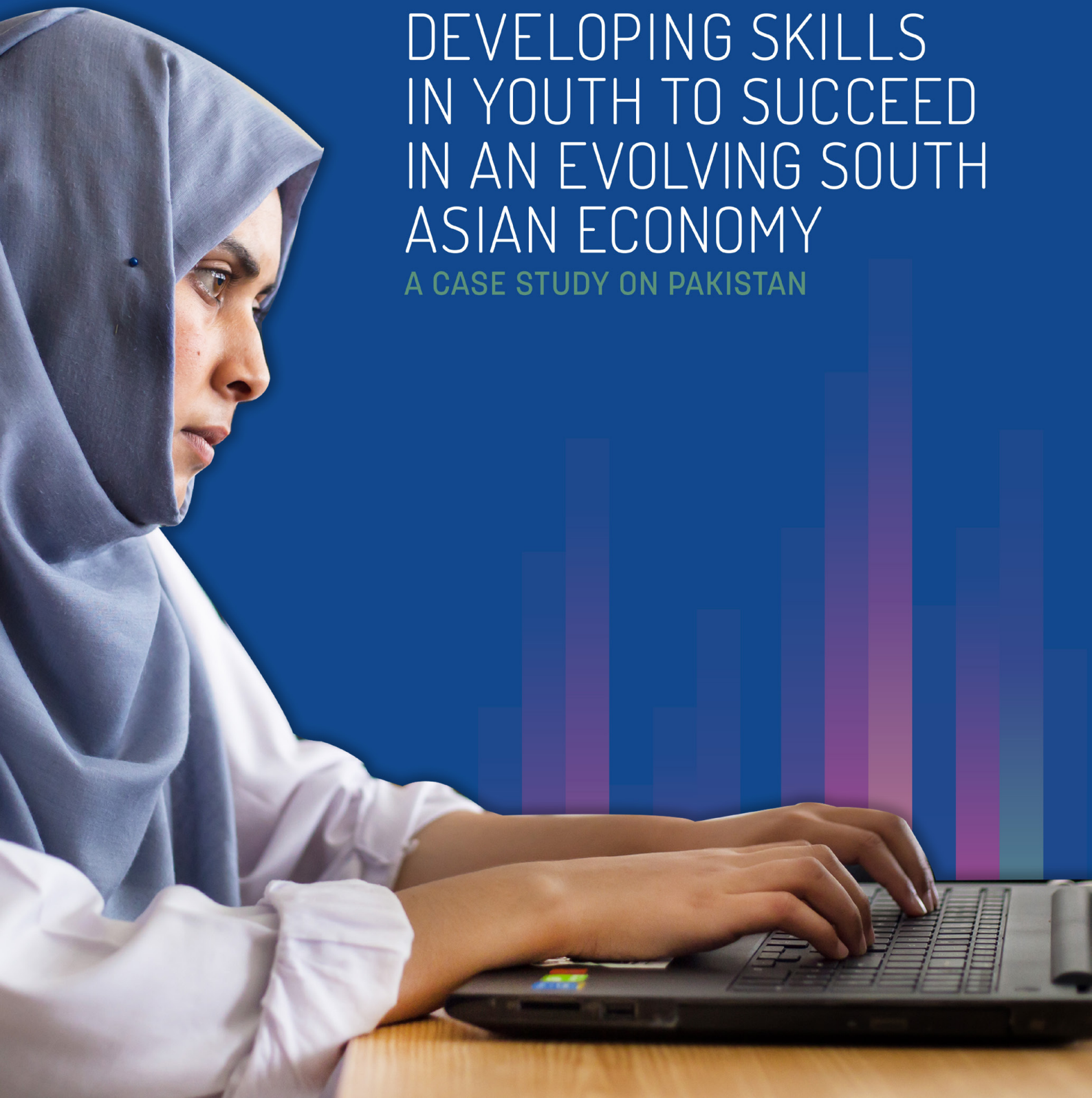




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DEVELOPING SKILLS IN YOUTH TO SUCCEED IN AN EVOLVING SOUTH ASIAN ECONOMY

A CASE STUDY ON PAKISTAN



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FOREWORD

A third of Pakistan's population is between 15 and 29 years old and this age group is a key part of the country's workforce. A fundamental accelerator of the transitions from adolescence to youth to adulthood is economic security, which means socially approved gainful employment in the job market to sustain oneself and a family.

Each year, hundreds of thousands of Pakistani young people enter the labor market hoping to secure decent jobs and generate income for themselves and their families. However, young people are finding it difficult to access decent jobs.

Many argue that youth have poor educational outcomes, limited skills and a lack of confidence to enter the job market and succeed. Media stories about an "enormous skills gap" have stirred a debate within the country about the future of skills and the future of youth. Furthermore, the current macroeconomic environment is affecting the private sector, which creates 90 per cent of jobs in the country.

Given the size of the youth cohort in Pakistan, there is an urgent need to find paths for skill development at scale, to harness the potential demographic dividend. The Government of Pakistan has prioritized action for youth, particularly youth employment and skilling, including through the National "Skills for All" Strategy, and the Kamyab Jawan Program launched in 2019.

This study on developing skills in Pakistan's youth to succeed in an evolving South Asian economy is therefore timely. It aims to contribute to the evidence base on the skills ecosystem of Pakistan by asking three research questions: What is the demand for skilled workers? How is skills development organized? How can skills development efforts be sustained?

The Pakistan case study further feeds into a larger regional initiative led by UNICEF South Asia in collaboration with the Global Business Coalition for Education to identify youth skills solutions which can be taken to scale by governments in partnership with the private sector and frontline implementation partners.

The study will also contribute towards the adaptation and implementation of Generation Unlimited (GenU) in Pakistan. GenU aims to bring young people together with the private sector, governments, international and local organizations; it aims to connect secondary-age education and training to a complex and fast-changing world of work, matching young people with job opportunities, fostering entrepreneurship and empowering a generation to fully engage with their societies as active citizens.

I would like to thank the Overseas Development Institute (ODI) and its in-country research team from the Lahore University of Management Sciences (LUMS) and Sustainable Development Policy Institute (SDPI) for authoring this study. I gratefully acknowledge the work of the Reference Group members (including from the National and Vocational Technical Training Commission (NAVTTTC), the Office of the Special Advisor to the Prime Minister on Youth Affairs, European Union, ILO, UNDP, and GIZ) whose inputs have been invaluable to informing the final study.

Young people in Pakistan require skills responsive to market needs from a range of sectors, including manufacturing and services, and that will allow them to thrive in an increasingly competitive global economy. Equally needed are skills that enable Pakistan's youth to live to their full potential, to innovate, and create new knowledge.

Let us join hands in a partnership approach to engage Pakistan's young people, to rally resources and to coordinate efforts so that every young person will be in learning, training or employment.

Aida Girma

Representative
UNICEF Pakistan

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ACRONYMS

CAGR	compound annual growth rate
CBT	competency-based training
CBT-A	competency-based training and assessment
CPEC	China Pakistan Economic Corridor
EU	European Union
FTA	free trade agreement
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
ICT	information and communications technology
KII	key informant interview
KP	Khyber Pakhtunkhwa
LFPR	labour force participation rate
NAVTC	National Vocational and Technical Training Commission
NSIS	National Skills Information System
NTB	National Training Bureau
NVQF	National Vocational Qualification Framework
OJT	on-the-job training
PKR	Pakistan rupees
PSDF	Punjab Skills Development Fund
PSDP	Punjab Skills Development Project
SEZ	Special Economic Zone
SME	small or medium-sized enterprise
TEVTA	Technical Education and Vocational Training Authority
TVET	technical and vocational education and training
UNDP	United Nations Development Programme
YEP	Youth Employment Project (UNDP)

EXECUTIVE SUMMARY

A third of Pakistan's population is between 15 and 29 years old (United Nations Development Programme, 2017) but the youth have poor educational outcomes, limited skills and lack the confidence to enter the job market and succeed (Cheema, 2017; BR Research, 2019). Skills development therefore represents a key development agenda in Pakistan. This study aims to build a key part of the evidence base on the skills ecosystem by asking three research questions: What is the demand for skilled workers? How is skills development organized? How can skills development efforts be sustained?

WHAT IS THE DEMAND FOR SKILLED WORKERS?

An in-depth literature review and key informant interviews with 75 stakeholders pointed to several key sources of demand for skilled workers.

DEMAND IN SPECIFIC OCCUPATIONS: Workers have seen demand rise in specific skilled occupations. Between 2015 and 2018, employment grew by 14 per cent for plant/machine operators, 10.6 per cent for technicians and associate professionals, and 5 per cent for professionals and for craft/trade-related workers (Labour Force Survey, 2018). As for skilled graduates of technical and vocational education and training (TVET), three sectors generate the most demand annually: manufacturing, services and construction.

AREA-SPECIFIC DEMAND FOR SKILLS: Industrial clusters in specific parts of Pakistan demand skills to facilitate the development of related value chains (Burki et al., 2010). The areas where clusters are located represent higher density of employment demand where youth can go to explore job opportunities. Moreover, getting youth from local areas to respond to area-specific demand is one way to ensure their access to jobs and training. For instance, Lahore's ready-made garments sector requires 26,000 skilled workers annually, including stitchers, designers and export officers (National Vocational and Technical Training Commission and GIZ, 2017).

DEMAND FROM CHINA–PAKISTAN ECONOMIC RELATIONS: The Pakistan Government has identified nine priority Special Economic Zones (SEZs) under the China Pakistan Economic Corridor (CPEC) and anticipated job creation exceeding 800,000 (Government of Pakistan, 2018). The establishment, design and operation of SEZs will require several design engineers, construction workers, maintenance staff and security guards. CPEC and allied projects are also expected to create jobs for skilled female workers (National Vocational and Technical Training Commission, 2019).

DEMAND FROM THE INTERNATIONAL MARKET: In 2018, an estimated 382,000 skilled and unskilled workers found jobs overseas (Bureau of Emigration and Overseas Employment, 2018). Of the various categories of workers that went abroad to work between 2014 and 2018, the sum of the shares of highly qualified, highly skilled, skilled, and semi-skilled workers exceeded the share of unskilled workers. A higher number of engineers, doctors, teachers and pharmacists migrated for work in 2018 than in previous years. Countries of the Gulf Cooperation Council continue to import a large amount of the country's construction workers, engineers, customer service staff, drivers and workers in other elementary occupations (Bureau of Emigration and Overseas Employment, 2018).

DEMAND FOR SKILLS FROM THE ICT SECTOR: Pakistan's information communications technology (ICT) sector has grown significantly over the last 10 years and is carving a differentiated position as the preferred source for software developers and programmers. Its formal IT exports have exceeded the value of US\$1 billion (of the total US\$24 billion) and are expected to grow. A survey of over 300 IT firms located in 10 cities of Pakistan (Pakistan IT & ITES Industry Survey, 2014) has identified mobile and web application development skills as key requirements for the future.

URBANIZATION-RELATED DEMAND: Pakistan has one of the highest urbanization rates in South Asia – 38.8 per cent in 2015 (United Nations, 2017). This has significantly increased the demand for skilled workers, including construction workers, drivers, cleaners, electricians, plumbers and service providers. Increasing patches of urban pockets also boosted demand for commercial centres, banks and insurance facilities, creating further demand for skills (National Vocational and Technical Training Commission and GIZ, 2017). In addition to Karachi and Lahore, there are six more cities that have a population of more than a million people. This urban transition significantly impacts the demand for skills.

CHALLENGES AND OPPORTUNITIES IN SKILLS DEMAND

CHALLENGE 1. LOW-SKILLS TRAP: Pakistan is stuck in a low-skills trap where employers settle for the kind of low skills readily available in the market. Its failure to break away from its dependence on low-skills, low-technology manufactured exports has been because of its low level of human resource development (Amjad, 2005; United Nations Development Programme, 2017). In 2018, the illiteracy rate of the working-age population (10 years or older) was 48.2 per cent (Labour Force Survey, 2018).

CHALLENGE 2. INFORMATION GAPS IN THE LABOUR MARKET'S NEED FOR SKILLS: Information gaps affect skills demand in several ways. Employers' needs fail to reach potential employees and they are also unable to find relevant and timely information about skilled applicants, including TVET graduates. Online portals such as ROZEE.pk are useful in that they hold thousands of CVs, but without adequate sorting and filtering options, they make it difficult for recruiters and companies' human resource departments to identify the most relevant candidates (United States Agency for International Development, 2018b; 2018c). Employers interviewed also raised concerns about the availability of timely information.

OPPORTUNITY 1. TECHNOLOGICAL INNOVATION: Most of the employers interviewed across different sectors in Karachi, Lahore and Peshawar anticipated that technological innovation would increase the demand for highly skilled candidates. The anticipated impact on the demand for low-skilled workers was mixed. In the pharmaceuticals sector, both the large- and small-scale employers considered technological innovation would increase the demand for high-skilled candidates and reduce the demand for low-skilled workers. However, several interviewees indicated that the relationship between employment and technology would not necessarily be that simple.

OPPORTUNITY 2. LABOUR MARKET RECOGNITION OF THE RELEVANCE OF EDUCATIONAL ATTAINMENT IN THE CONTEXT OF SKILLS ACQUISITION: Employers and industry associations interviewed across sectors attached varying levels of importance to education in skills development. Many employers highlighted the importance of basic education in terms of literacy as well as the development of

soft skills such as computer literacy and communication skills. Whereas employers within sectors dependent on more traditional skill sets value technical skills over formal education, even within these industries (e.g., gemstones) the introduction of technology will require workers with formal higher education qualifications and IT skills.

HOW IS SKILLS DEVELOPMENT ORGANIZED?

Many actors engage in skills development in various capacities, including within contexts of policy and skills delivery.

SKILLS DEVELOPMENT IN A POLICY CONTEXT: Governments – at both federal and provincial levels – play a vital role in skills development. At the federal level, the Ministry of Federal Education & Professional Training and the Ministry of Overseas Pakistanis and Human Resources Development play a key role. The National Vocational and Technical Training Commission (National Vocational and Technical Training Commission), and the National Training Bureau (NTB) have been set up as bodies to steer the development of skills. NAVTCC has developed the ‘National Skills for All’ Strategy. Starting from 2019, it has guided interventions in skills development in Pakistan and speaks to a wider skills development agenda, including making the National Vocational Qualification Framework (NVQF) effective and implementing competency-based training and assessment (CBT-A). At the provincial level, Training and Vocational Education Authorities (TEVTAs) are responsible for technical and vocational skills delivery and are also tasked to register private sector training institutes and regulate them. Additionally, private providers are limited by the courses designed and approved by TEVTAs. Across the provinces, certification agencies are generally separate for the two streams (United States Agency for International Development, 2018a).

SKILLS DEVELOPMENT IN A DELIVERY CONTEXT: Skills development in a delivery context includes TVET, work-based learning, and informal training. There are over 3,500 TVET providers throughout the country’s provinces and regions. In 2018, they enrolled just over 433,000 students (Skilling Pakistan, 2019). The delivery for the technical and vocational streams is managed through polytechnics, vocational training centres and apprenticeship schemes under the Apprenticeship Act, which makes it mandatory for industries to induct youth for on-the-job training (OJT). However, this has been largely ineffective. Public sector providers outweigh private providers in technical education. The reverse runs true for vocational training. Female enrolment in TVET is low in comparison to male enrolment (United States Agency for International Development, 2018a; 2018b) and informal systems of apprenticeship, in comparison to TVET, tend to be more common in Pakistan (United Nations Development Programme, 2017).

Challenges and opportunities in skills development

CHALLENGE 1. MISMATCH BETWEEN DEMAND FOR AND SUPPLY OF SKILLED WORKERS: There is a strong disconnect between the demand from industries for specific types of skilled TVET graduates and their supply. For example, in 2018, the demand for skilled graduates across Pakistan was highest for machine operators, stitchers and electricians (National Skills Information System, n.d.). But their supply

was insufficient to meet this demand, and the deficit was sizeable. The supply of skilled TVET graduates was highest for computer application and office professionals, tailors, beauticians, and electrical and civil engineering diploma holders but demand for their skills was low (National Skills Information System, n.d.).

CHALLENGE 2. THE LACK OF SOFT SKILLS DEVELOPMENT: Employers find the lack of soft skills to be a major issue in Pakistan and argue increasingly that these are more important than technical skills at entry level (United States Agency for International Development, 2018b). Employers look more closely at employability skills than academic qualifications received or academic institutions attended (Higher Education Commission, 2016). The most important employability skills, in their view, are analytical, problem-solving, self-discipline and people skills. All employers interviewed for this study agreed that, in general, neither public- nor private-sector providers focus on soft skills.

CHALLENGE 3. THE RELEVANCE, QUALITY AND OUTCOMES OF TRAINING: Key informants across the various stakeholder categories explained that training providers do not conduct meaningful market research to inform course designs; they teach outdated and less market-relevant curricula, not suited to employers' needs. The training content does not expose trainees to entrepreneurship to the extent that it should, so TVET graduates end up looking for jobs rather than moving into self-employment. The certification system is non-uniform and does not provide credible signals to the labour market (United States Agency for International Development, 2018a).

OPPORTUNITIES FOR FURTHER SKILLS DEVELOPMENT

OPPORTUNITY 1. A GREATER EMPHASIS ON ENTREPRENEURSHIP: In recent years, the investment in cultivating entrepreneurship has risen, especially in urban centres (United Nations Development Programme, 2017). Top-ranking higher education institutions have established incubation centres. The government, private sector and international development partners also facilitate start-ups and help convert ideas into business models. Training providers have a vital role in encouraging entrepreneurship. Some are: embedding an 'entrepreneurship' approach in their curriculum; mentoring students; hosting teacher-led workshops; offering networking opportunities with the business community; and acting as intermediaries between donor agencies and government departments that have loan schemes available for their students.

OPPORTUNITY 2. A GREATER ROLE FOR EDUCATION IN SKILLS DEVELOPMENT: There is a greater need and role for education in skills development and for producing quality young students who are fit to meet labour-market demands and who can improve their development outcomes. Pakistan's education system needs to focus on skills that enhance cognitive development and analytical and critical thinking (United Nations Development Programme, 2017). And unless Pakistan develops closer collaboration between the various systems – primary, secondary, higher level, vocational and skills training – there is a risk that the youth will not be fit for the future world of work. Greater linkages between the education system and industry are also needed.

OPPORTUNITY 3. A CONCENTRATED EFFORT TO CREATE MORE SKILLED FEMALE WORKERS: Skills development focused on women can help them become more independent intellectually as well as financially. Multifaceted approaches to professional training can help women overcome traditional barriers

to career growth. Such approaches would include vocational programmes and awareness campaigns about women's legal rights at work, and how to access markets for quality employment and form interpersonal relations that encourage greater empowerment (United Nations Development Programme, 2017).

HOW CAN SKILLS DEVELOPMENT EFFORTS BE SUSTAINED?

Public sector initiatives in youth skills development are largely undertaken in collaboration with international development partners. This study discusses three examples: the TVET reforms launched by the European Union (EU); the Youth Employment Project (YEP) of the United Nations Development Programme (UNDP); and the Punjab Skills Development Project (PSDP), a provincial government initiative with loan assistance from the World Bank. The cases highlight variations across TVET outreach and service delivery. Whereas the EU-funded TVET phases have nationwide outreach, the UNDP project is limited to one city (Karachi) and the World Bank project focuses on skills development in Punjab. Relative strengths pertain to phased development in the case of the EU-funded project, with an opportunity to reflect on lessons learned during each stage of TVET design and service delivery including the development of relevant skills-related policies and strategies. The UNDP project addresses location-specific youth employment challenges with an emphasis on gaining sector-related skills. The ongoing World Bank project emphasizes institutional strengthening in Punjab to encourage competition among, and growth of, training providers.

While public sector entities have a wide outreach with respect to skills development training, much remains to be done in terms of bringing about long-term changes. Key informants from the public sector draw attention to inter-departmental as well as cross-sectoral cooperation along with political will to enable effective skills development among youth. The government's critical role is underscored, especially for replicating and/or scaling up projects. It is acknowledged that, while donors can design and implement pilot measures, they cannot cover an entire sector. Necessary funding from the government 'with full ownership' is integral to achieving sustainable solutions.

RECOMMENDATIONS

STRENGTHEN LINKAGES ACROSS KEY ACTORS

- Develop greater linkages between skills providers, academia and industries to help bridge the gap between the kind of skills employers want and the training both public and private sector institutes are able to provide.
- Integrate TVET in secondary schools and add subjects that will equip students with more employable skills from an early age, prior to them entering the workforce.
- Improve communication among key actors. This will enable TVET providers to train youth for jobs where skills requirements change quickly. This will also allow employers to inform the curriculum of TVET.
- Address information failures in the labour market to improve links between employers and skilled workers (including career counselling services), as well as increasing the use of ICT-based job portals.

FAST-TRACK POLICY IMPLEMENTATION

- Pursue implementation of the ‘Skills for All’ road map for skills development, notified by the Government of Pakistan and presented in the Cabinet, which explicitly lays down measures for sustainability.
- Address coordination failures within and across institutions engaged in skills development, from both policy and delivery contexts. Reviewing Punjab’s model of separating regulatory, training and assessment functions of the various public agencies engaged in skills development would be a useful start.
- Build a positive image of TVET and consolidate scattered training institutions, to encourage investments in TVET.
- Integrate skills development within all major economic growth and industrial policies, so that this feeds into the broader growth agenda.

IMPROVE QUALITY AND RELEVANCE OF SKILLS TRAINING

- Support the creation of a unified and accredited qualification-awarding system. This system should ensure timely issuance of credible and authentic national certificates and be accepted nationally and internationally. Similarly, support the promotion of a quality assurance culture in training delivery and assessment.
- Expand industry engagement in the skills sector to address the issues of training relevance and quality. Public-private partnerships are critical in the development of high-quality TVET because they enable regular communication between employers and TVET providers. It is equally important for industries to develop skills within their workforces.
- Invest in research to assess the demand for skills and to help inform the design of relevant trainings to meet the demand.

LEAVE NO ONE BEHIND IN THE SKILLS DEVELOPMENT AGENDA

- Lay greater emphasis on a skills development agenda for women to increase their prospects to apply and secure potentially higher-paying jobs.
- Address disparities in access to training among social groups such as those from rural areas and those susceptible to exclusion from the training and broader education systems.
- Reduce informality in the training structure and in the composition of employment, as it is associated with poor working conditions, low wages and a low-level skills trap young people may find increasingly hard to escape.
- Create a skilled workforce able to seize employment opportunities abroad and send remittances that could improve Pakistan’s economic situation, and ensure their rights as migrants are protected in destination countries.

Section 1

INTRODUCTION

Section 1

INTRODUCTION

A third of Pakistan's population is between 15 and 29 years old (United Nations Development Programme, 2017), and this age group is a key part of the workforce. Each year, hundreds of thousands hope to secure decent jobs and generate income for themselves and their families. But the current macroeconomic environment is affecting the private sector, which creates 90 per cent of jobs in the country (Government of the Punjab, 2019), and young people are finding it difficult to access decent jobs.

Many argue that youth have poor educational outcomes, limited skills and a lack of confidence to enter the job market and succeed (Cheema, 2017; BR Research, 2019). The lack of skills especially "handicaps the youth in terms of equitable access to quality job markets and reduces the chances of breaking cycles of low development" (United Nations Development Programme, 2017: 87). Media stories about an "enormous skills gap" (Jamal, 2015) and a "national emergency on skills development in Pakistan" (BR Research, 2019) have stirred a debate within the country about the future of skills and the future of youth.

This study on developing skills in Pakistani youth to succeed in an evolving South Asian economy is therefore timely. The young in Pakistan – the second most populous country in the region – need to develop skills that are responsive to market needs from a range of sectors, including manufacturing and services, and that allow them to thrive in an increasingly competitive global economy. Equally needed are skills that enable them to lead lives that they have reason to value (Sen, 1999), to innovate, and create new knowledge. Consequently, it is crucial to identify where future job opportunities for youth can come from and to take a proactive role in building their skills so that they can become more employable and seize those opportunities.

Against this backdrop, skills development represents a key development agenda in Pakistan. The agenda, or ecosystem, is generally understood to include a spectrum of skills: basic academic skills learned mostly in schools; life skills learned through socialization in schools, family, community and workplace; technical and vocational skills learned in schools, training institutes and on the job; and, for a portion of the workforce, professional skills acquired at higher-level educational institutions and in various training programmes on the job (World Bank, 2014). The ecosystem, in Pakistan's context, however is typically associated with technical and vocational education and training (TVET), and little is known about key actors' contribution to skill-building of youth and the outcomes generated from acquiring skills from schools, universities, employers and informal learning.

Federal and provincial governments as well as international development partners focus much of their energy on improving TVET. This is a particularly important area to analyse within the overall skills development agenda in Pakistan and, within this, it is crucial to explore the location of entry points for change that favour young people. There are concerns about the extent to which TVET increases employability, earnings for wage



earners and opportunities for potential entrepreneurs. Yet, if done right, it has enormous potential to provide Pakistan's youth with a better future (United Nations Development Programme, 2017).

All these elements make Pakistan an important case study and build part of the evidence base on the skills ecosystem. The information provides skills training providers (both public and private), employers, government officials and development partners an opportunity to draw lessons from the functioning of existing skills development efforts and how to sustain them. The specific research questions related to this study are:

- What is the demand for skilled workers?
- How is skills development organized?
- How can skills development efforts be sustained?

THE REPORT IS ORGANIZED AS FOLLOWS.

- Section 2 lays out the case study approach and methodology.
- Section 3 presents the major sources of existing and emerging demand for skilled workers, and identifies barriers to and opportunities for raising skills demand.
- Section 4 deals with how skills development is organized, in both policy and delivery contexts, providing a general overview of the TVET system for delivering skills training in Pakistan as well as briefly discussing the prevailing education system. It also sheds light on the main barriers to and opportunities for youth skills development.
- Section 5 focuses on how skills development efforts can be sustained.
- Section 6 follows with a conclusion and key recommendations.

Section 2

CASE STUDY
APPROACH AND
METHODOLOGY

Section 2

CASE STUDY APPROACH AND METHODOLOGY

The case study approach was based on four main steps and used a combination of research methods, beginning with an in-depth literature review. This was followed by in-country research in four sites: the three provincial capitals of Sindh (Karachi), Punjab (Lahore) and Khyber Pakhtunkhwa (KP) (Peshawar), plus Islamabad Capital Territory. The interviews targeted a range of key stakeholders for key informant interviews (KIIs), and were followed by an analysis of collected primary and secondary data. Finally, the findings were validated by a Reference Group created for the study. The Group consisted of: experts on skills development issues, federal government officials, and representatives of the major development partners.

Several competing factors – especially time and resource constraints – led the research team to adopt a methodology that would lend useful analytical insights on the research questions, given a pragmatic and defensible approach to selecting sites, key respondents and sectors. The study could be scaled up to consider all these areas in more detail in future.

2.1 LITERATURE REVIEW

The literature review formed the primary source of evidence. Researchers reviewed labour force surveys, national and provincial assessments of skills needs and gaps for different occupations, sectoral labour market studies, macroeconomic outlooks, policy documents (national skills strategies and TVET policies of recent years, as well as industrial and growth policies), academic and non-academic publications, media articles, and project documents of some key skills development efforts. The review helped to gather information on Pakistan's economic, education and employment context, and on skills demand and related constraints and opportunities. It also covered the skills development system, including the role of respective stakeholders, and the related constraints, opportunities and interventions in skills development.

The primary technique used was 'snowballing': reviewing existing literature on the skills development sector in Pakistan, and then taking references from these documents. Literature was selected based on its relevance and use in relation to skills demand and skills development at federal and provincial/regional levels, and included material already known to the research team given their knowledge of the research topics. Sources were also identified by key informants interviewed and by members of the Reference Group.

2.2 PRIMARY DATA COLLECTION

2.2.1 KEY INFORMANT INTERVIEWS

Primary data collection entailed structured and semi-structured KIIs with a wide range of actors. Respondents included: employers of varying sizes (small, medium and large, based on the 2019 SME definition in Pakistan);¹ public- and private-sector skills service providers; industry associations related to the sectors that were selected (see Section 2.2.2);² federal and provincial chambers of commerce; federal and provincial government officials from different ministries, divisions and departments; international development partners and think tanks.³ Industry associations helped the research team to identify firms of varying sizes in each sector. The provincial Training and Vocational Education Authorities (TEVTAs), who themselves deliver skills training, hold a register of private training institutes and helped the team to identify both public- and private-sector skills providers.

Seventy-five KIIs were conducted between July and September 2019 (see Table 1). Most were conducted in English in person or on the phone, in the Islamabad Capital Territory, Karachi, Lahore and Peshawar.⁴ The KIIs focused on: gathering additional information on, and deepening the researchers' understanding of, skills demand and skills development beyond what was identified in the literature; gathering up-to-date information on existing and emerging skills needs; and investigating examples of skills development in detail.

Table 1. Distribution of key informants by stakeholder category and location

STAKEHOLDER CATEGORY	ISLAMABAD	LAHORE	KARACHI	PESHAWAR
Employers	-	At least 9 per city [3 employers per sector (1 small, 1 medium, 1 large); 3 sectors in each city]		
Skills providers	-	At least 4 per city (2 private and 2 public)		
Industry/trade associations	-	At least 3 per city (1 for each sector)		
Think tanks	1	At least 1 per city		
Government officials	5	At least 3 per city		
Donors/international development partners	5	-		
Total per city	11	At least 20		
TOTAL (OVERALL)	75			

Note: In Karachi, researchers conducted three KIIs with industry associations related to the garments and textile sector: the Pakistan Readymade Garment Exporters Association, the Pakistan Hosiery Manufacturing Association and the Pakistan Leather Garments Manufacturing Association. In Peshawar, two additional training institutes were interviewed, bringing the total to 75.

¹ Small enterprises have up to 50 employees and an annual turnover of up to PKR150 million; medium enterprises have 51–250 employees and an annual turnover of PKR150–800 million; large enterprises have more than 250 employees and an annual turnover of above PKR800 million (Government of Pakistan, 2019)

² Industry associations in Pakistan support companies and employers of a particular type of industry and protect their rights. They have been set up countrywide and tend to be prominent in policy advocacy and may act as technical partners in setting up TVET systems.

³ While this part of the research, mostly qualitative in nature, will not be representative of the general population of key respondents, it will inform the research questions and offer views and insights that secondary literature and secondary quantitative data may miss.

⁴ Conducting interviews in Quetta (the provincial capital of Balochistan) was initially considered but had to be excluded for security reasons.

.The objectives of the interviews were to gather information on:

- the major sources of skills demand – both present and emerging
- perceptions of the link between skills acquisition and educational attainment and on the utility, relevance and quality of skills training
- the different training approaches being used
- the role that different stakeholders are playing at various levels in the skills development system.

The research team drew on a list of questions developed for the study, and allowed interviewees (and interviewers) the space to outline and explore other relevant issues and emerging topics.

2.2.2 SECTOR SELECTION

The research team identified three main economic sectors per provincial capital that are likely to require skilled labour in coming years. A scoping exercise revealed the need for including a small yet diverse set of key sectors or industrial clusters in Pakistan's economy, and helped tighten the parameters of the study given time and resource constraints. Sector selection then guided the research team in setting up KIIs with two main types of industry-related stakeholders: industry associations that represent the interests of employers in each sector, and employers themselves who are registered as small, medium or large. The study included seven sectors altogether (see Table 2).⁵

Table 2. Employment sectors included in the analysis

KARACHI (SINDH PROVINCE)	LAHORE (PUNJAB PROVINCE)	PESHAWAR (KP PROVINCE)
Textile and garment	Textile and garment	Gems and jewellery
Auto parts	Auto parts	Furniture
Pharmaceutical	Footwear	Marble

These sectors demonstrate different structures and levels of digitalization, and play important roles in the economy. For instance, the textile and garment sector is export oriented and labour intensive, as is the footwear sector. Both of these sectors also cater to domestic demand. The auto parts sector, though capital intensive, can provide sustained employment opportunities in Pakistan, especially in those components that remain labour intensive.

The selected sectors reflect geographical diversity. Clusters of production of textiles and garments, footwear, auto parts and pharmaceuticals predominate in Punjab and Sindh. By contrast, manufacture and processing of furniture, gems and jewellery, and marble are characteristic of KP. Some essential features of each sector are as follows.

⁵ In a future iteration of the study, more sectors can be considered. The Reference Group notes that it would be useful to review the detailed survey conducted by NAVTTC that has found construction, hospitality and energy sectors to have high current and expected labour demand. The 12th five-year plan for Pakistan also speaks to new opportunities. The country has strategic regional importance and is significant in the global supply chain. Dairy, fisheries, the care economy, surgical instruments, cutlery and sports goods are some of the areas in which skills training could help to improve the quality of Pakistan's workforce and national competitiveness.

Textile and garment: This sector accounts for 40 per cent of the total industrial labour force in Pakistan and contributes 25 per cent of the industrial value added and almost 60 per cent of national exports (Chaudhry and Wadho, 2017). The relocation of Chinese garment factories to Pakistan is likely to result in positive contributions to the export bill and GDP (gross domestic product) share. The Punjab Government is establishing the Quaid-e-Azam Apparel Park, expected to house close to 300,000 workers (Punjab Industrial Estates Development Company, KII 2019).

Auto parts: This sector is expected to grow in the coming years but currently employs 500,000 people. Karachi has the largest auto parts cluster in Pakistan, followed by Lahore. Partnerships with Chinese companies also suggest high growth potential resulting in increased demand for skills ranging from basic welding to design of auto parts (Afraz et al., 2016).

Pharmaceutical: Around 760 pharmaceutical companies are located all over Pakistan. Pharmaceutical production units in provinces tend to concentrate in major cities like Karachi, Lahore and Peshawar. Although Punjab contains the largest number of firms, Karachi leads the way in terms of production, capacity utilization, volume and size of business (Emerging Pakistan, n.d.). Pakistan's pharmaceutical industry is worth US\$2.1 billion, with exports of roughly US\$190 million (Emerging Pakistan, n.d.).



Footwear: Pakistan is the eighth largest manufacturer of footwear in the world, producing approximately 400 million pairs a year (sold locally as well as exported) with a value of US\$116 million. Of the 500-plus manufacturing units established in Pakistan, 60 per cent are in Lahore. The sector currently employs around 110,000–130,000 workers. The domestic demand for footwear is also significant, and is met by both local production and imports, which are worth approximately US\$100 million) (Afraz et al., 2016). The Servis Group has signed a joint venture with a Chinese company to target export markets, and more of these partnerships are expected (Afraz et al., 2016).

Gems and jewellery: This is among the top emerging trades for KP. Exports from Pakistan of these products exceeded US\$1.2 billion in 2013 (Zaheer, 2013). Experts argue that this industry has great untapped potential and will require skilled expertise and related training in cutting and polishing (Mehsud, 2019).

Furniture: KP's forest cover of 22 per cent provides timber for furniture-making in KP, and Peshawar is included in the six main clusters of the furniture industry in Pakistan. The industry in KP's context requires more dynamic designs, a more highly skilled workforce, and better wood seasoning (Kamal, 2017). This sector reflects potential for high employment generation.

Marble: The marble and granite industry in Pakistan has total estimated reserves of around 160 million tonnes located mainly in Balochistan, KP and Sindh. Moreover, around 90 per cent of the total reserves are believed to be in KP, and marble represents one of the largest manufacturing sectors in the region (Trade Development Authority of Pakistan, n.d.). Several of the marble sites in the area are facing closure due to poor law and order and the absence of modern marble processing skills. This sector requires a range of specialized skills including marble-cutting and mosaic-making.

2.3 ANALYSIS AND VALIDATION

The analysis stage drew together findings from the literature review and the KIIs, and triangulated results across multiple interviews and data sources. It also involved additional document reviews to fill gaps in the information. This process drew out key themes in terms of the research questions.

The validation stage involved sharing the country case study report with the UNICEF country and regional offices and with the Reference Group, for review and comments. The report was then revised and finalized based on these inputs.

Section 3

WHAT IS THE
DEMAND FOR
SKILLED WORKERS?

Section 3

WHAT IS THE DEMAND FOR SKILLED WORKERS?

This section examines the demand for skilled workers in Pakistan through a review of: available literature on the labour market; assessments of skills needs; and analyses of skills gaps conducted for various sectors and provinces. The major sources of demand as cited in existing evidence bases can be grouped by sector and geographical area. Demand for skills, the literature shows, is also rising from: strong China–Pakistan trade relations and opportunities under the China Pakistan Economic Corridor (CPEC); overseas employment; growth in information and communications technology (ICT); and urbanization. Before discussing the major sources of demand, we present some key data on the labour force in Pakistan.



Photo credits: UNDP Pakistan

3.1 KEY LABOUR FORCE DATA

In 2018, 65.5 million people were part of Pakistan's labour force (aged 10 years or older). Of this total, 61.7 million were employed and the remaining 3.8 million were unemployed (Labour Force Survey, 2018). Age-specific labour force participation rates (LFPRs) show that 25–29-year-olds were most economically active (i.e., either in employment or actively job-seeking), followed by 20–24-year olds (Labour Force Survey, 2018) (see Table 3). Participation rates are far lower for women than for men, and are projected to lower over time because of a consistent decline in the share of agriculture in employment, in which most women are employed (see Figure 3).

Table 3. Labour force participation rates in 2014/15 and 2017/18, and projections for 2020/21 (%)

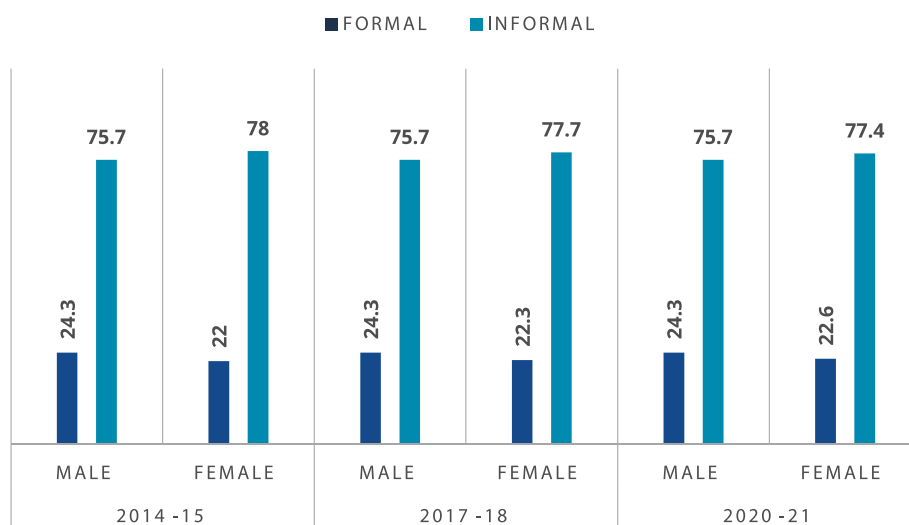
AGE	2014/15			2017/18			2020/21		
	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE
10–14	9.6	11.2	7.7	8.2	9.8	6.4	7.0	8.6	5.3
15–19	33.5	47.6	18.0	32.6	47.6	15.6	31.7	47.6	13.5
20–24	52.6	82.3	25.7	52.5	84.6	23.3	52.4	87.0	21.1
25–29	58.6	96.7	26.6	57.1	96.1	24.7	55.6	95.5	22.9

Source: Labour Force Survey (2018). Note: the projections for 2020/21 are based on the available data for 2014/15 and 2017/18, assuming current trends continue (based on Compound Annual Growth Rate, CAGR) and all else remains unchanged.

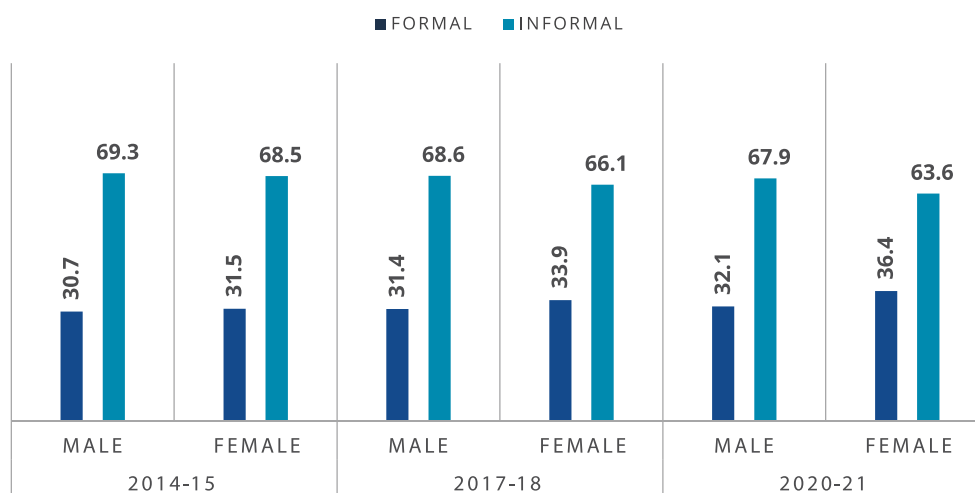
Another key feature of the labour market is the overwhelming nature of informality in both rural and urban areas – exceeding 75 per cent and 60 per cent respectively, and affecting both men and women (see Figures 1 and 2).⁶ Categories with the highest share of informal workers in 2018 included service and sales workers, craft and trade-related workers, and workers in elementary occupations.⁷

⁶ The definition of 'informal sector' is based on household enterprise status and size of employment. It includes: all household enterprises owned and operated by own-account workers, irrespective of the size of the enterprises; enterprises owned and operated by employers with fewer than 10 people engaged. It includes owners of the enterprise, contributing family workers and employees (whether employed on an occasional or continuous basis, or as apprentices). Excluded are all enterprises engaged in agricultural activities or wholly engaged in non-market production (Labour Force Survey, 2018).

⁷ Elementary occupations consist of simple and routine tasks which mainly require the use of hand-held tools and often some physical effort (International Labour Organization, n.d.).

Figure 1. Informality in rural areas, in 2014/15 and 2017/18, and projections for 2020/21 (%)

Source: Labour Force Survey (2018). Note: the projections for 2020/21 are based on available data for 2014/15 and 2017/18, assuming current trends continue (based on CAGR) and all else remains unchanged.

Figure 2. Informality in urban areas, in 2014/15 and 2017/18, and projections for 2020/21 (%)

Source: Labour Force Survey (2018). Note: the projections for 2020/21 are based on the available data for 2014/15 and 2017/18, assuming current trends continue (based on CAGR) and all else remains unchanged.

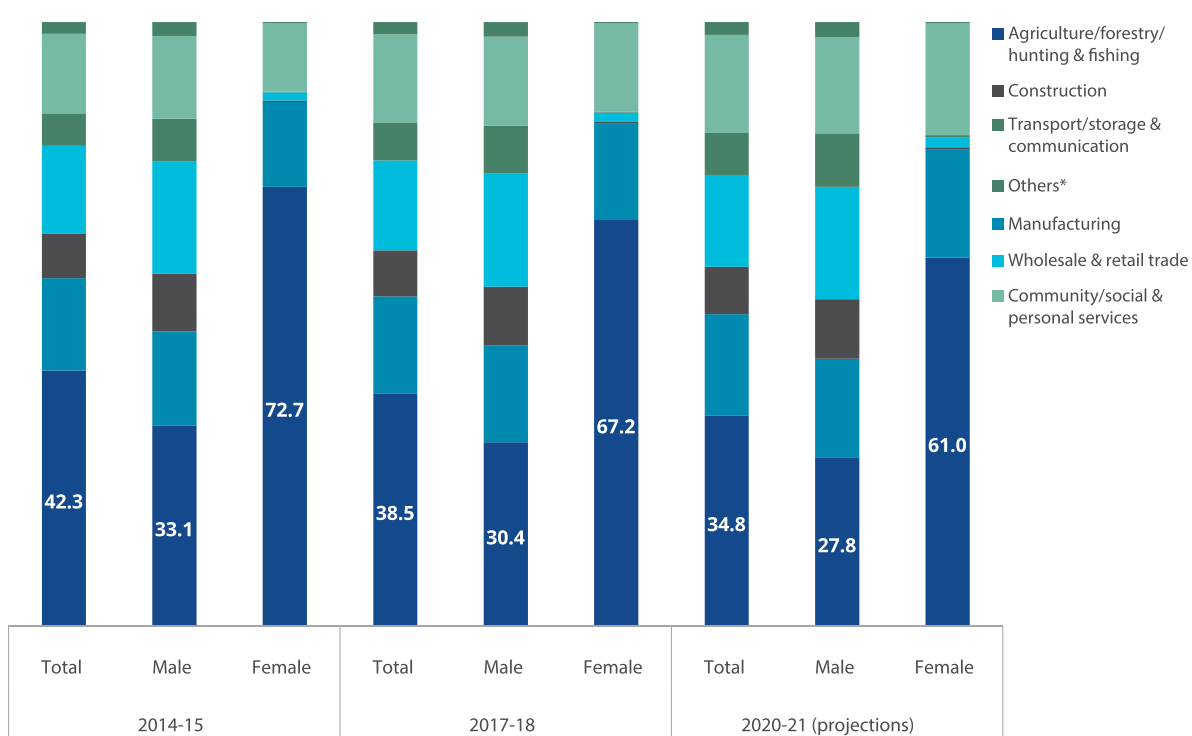
3.2 DEMAND FOR SKILLS

3.2.1 SECTORAL DEMAND FOR SKILLS

DEMAND FROM MAJOR INDUSTRY DIVISIONS

Labour Force Survey (2018) presents jobs-related data for the following industry divisions: agriculture, manufacturing, construction, wholesale and retail trade, transport/storage and communication, community/social and personal services and an 'others' category. Figure 3 clearly illustrates that, of all female workers with jobs in 2015 and 2018 and projected for 2021, most are in agriculture (72.7 per cent, 67.2 per cent and 61 per cent, respectively). Compared to men, very few women have jobs in construction, manufacturing, transport/storage and communication, and wholesale and retail trade. Labour laws in Pakistan do not protect workers in agriculture. Most women in the sector are denied basic care and skills, and receive very low wages.

Figure 3. Employment by major industry division, in 2014/15 and 2017/18, and projections for 2020/21 (%)

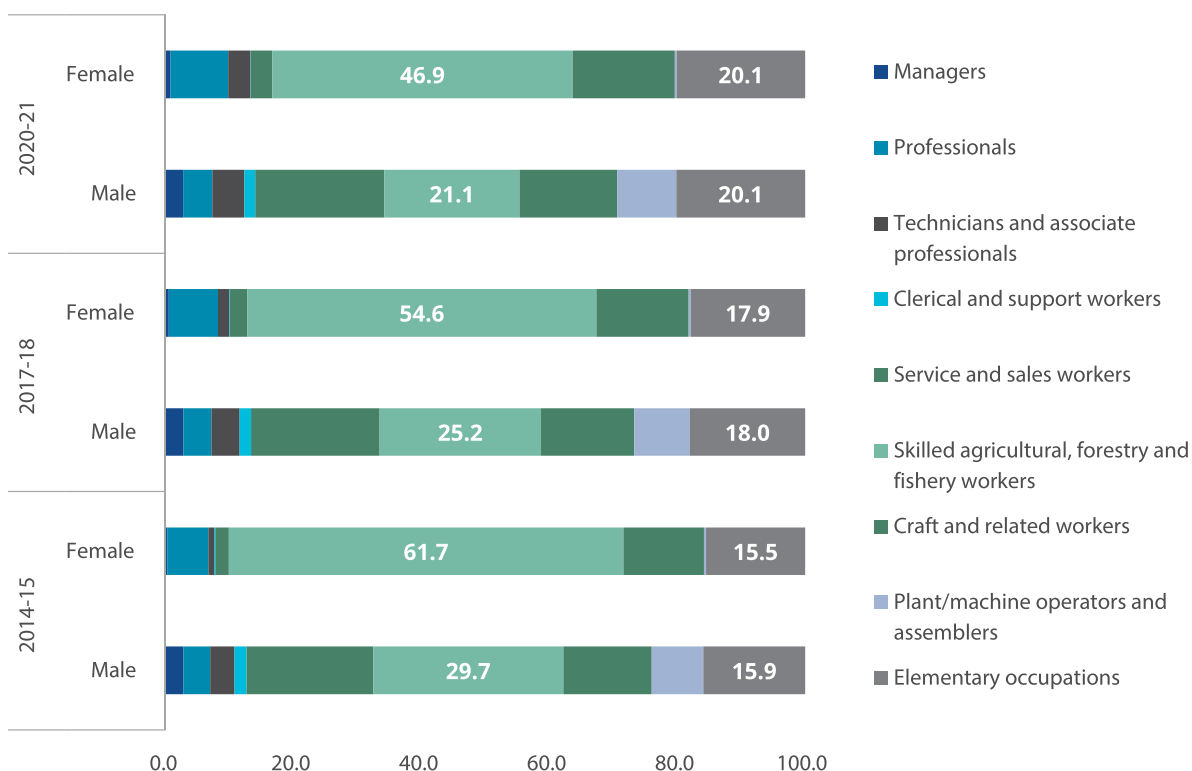


Source: Labour Force Survey (2018). Note: projections for 2020/21 are based on data for 2014/15 and 2017/18 assuming current trends continue (CAGR) and all other factors remain unchanged.

DEMAND FOR SKILLED WORKERS IN PARTICULAR OCCUPATIONS

Data on employment rates of skilled workers by occupation reinforce some of the earlier findings and highlight some specific challenges as well. Of all females employed, most were agricultural workers in both 2015 and 2018 and projections for 2021 indicate that 46.9 per cent of all working women would be agricultural workers (see Figure 4). Moreover, it is projected that 20.1 per cent of both men and women in employment in 2021 will occupy managerial roles.

Figure 4. Employment by major occupations, in 2014/15 and 2017/18, and projections for 2020/21 (%)



Source: Labour Force Survey (2018). Note: projections for 2020/21 are based on data for 2014/15 and 2017/18 assuming current trends continue (CAGR) and all other factors remain unchanged.

The data also show that there has been high employment growth between 2015 and 2018 for specific types of skilled workers – plant/machine operators (14 per cent) and technicians and associate professionals (10.6 per cent) – and modest growth of 5 per cent for professionals and craft and trade-related workers. Females have seen higher gender parity ratios of 0.5 in 2018 in professional occupations and 0.6 in agriculture (see Table 4). Women are typically paid less than men in all occupational categories.

Table 4. Various occupational status indicators, 2018

TYPE OF SKILLED WORKER	NUMBER OF PEOPLE IN EACH OCCUPATION (MILLIONS)	AVERAGE RATE OF EMPLOYMENT GROWTH (%) BETWEEN 2015 AND 2018 (HIGHEST TO LOWEST) BY OCCUPATION	GENDER PARITY IN EACH OCCUPATION	AVERAGE MONTHLY WAGES FOR MEN (US\$)	AVERAGE MONTHLY WAGES FOR WOMEN (US\$)
Plant and machine operators	5.4	14	0.009	112	74
Technicians and associate professionals	2.4	10.6	0.11	178	124
Professionals	3.1	5.3	0.5	230	146
Craft and trade-related workers	9	4.9	0.28	114	34
Managers	1.4	4	0.05	367	319
Service and sales workers	10.1	3.7	0.04	108	90
Elementary occupations	9.9	3	0.3	90	42
Clerical support	0.9	0.1	0.015	178	120
Agriculture, forest and fishery workers	19.5	-3	0.6	115	37

Source: Authors' calculations based on Labour Force Survey (2018). Note: Data on average monthly wages in Pakistan rupees (PKR) come from Labour Force Survey (2018); an exchange rate based on xe.com from 7 October 2019 has been used where PKR157 = US\$1.

DEMAND FOR TVET GRADUATES

Broadly, three sectors generate the most demand for skilled TVET graduates: manufacturing, services and construction. Within the manufacturing sector, NAVTCC (2017) finds the annual skills demand to be the highest for TVET graduates who are machine operators, nearing 30,000. Annual demand is between 10,000 and 25,000 for each of the following skilled graduates: helpers, electricians, stitchers, professional cooks and fitters. For machinists, mechanical engineers and technicians, quality control staff, civil engineers and garment and plant operators, annual demand for the graduates in each category is between 5,000 and 10,000.

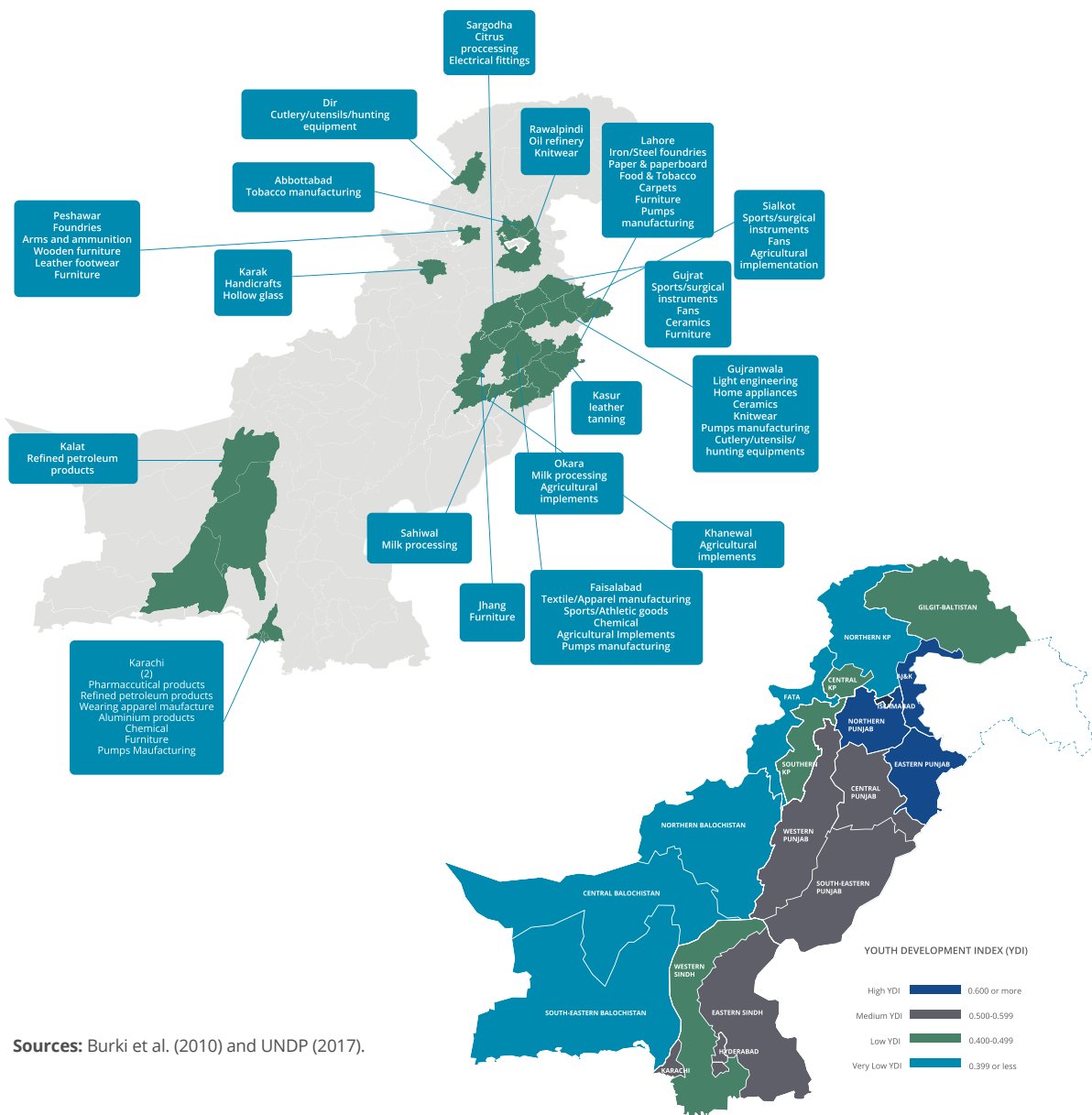
Within the services sector, NAVTCC (2017) finds annual skills demand to be the highest for TVET graduates who are welders, with around 19,000 needed. There is annual demand for between 5,000 and 10,000 from each of the following groups of skilled TVET graduates – call centre agents, waiters, cutter-machine operators, laboratory technicians, computer operators, polishers, accountants, sales and marketing staff, security guards and printing machine operators. Within the construction sector, annual demand falls to between 5,000 and 6,500 each for TVET-trained plumbers, masons and carpenters.

3.2.2 AREA-SPECIFIC DEMAND FOR SKILLS

Burki et al. (2010) argue that industrial clusters in specific parts of Pakistan demand skills to facilitate the development of related value chains. Map 1 (left) shows existing clusters of industrial and economic activity, with areas of higher density of employment demand where youth could go to explore job opportunities.

Getting youth from local areas to respond to area-specific demand is one way to ensure their access to jobs and training. Looking closely at the same geographic areas and the level of youth development,⁸ as measured by United Nations Development Programme (2017) (see Map 1, right), we find that in only certain parts of Pakistan, mainly Punjab, youth development levels are high. There are several industrial clusters there which young people could tap into.

Map 1. Industrial clusters in Pakistan and youth development in those areas



Sources: Burki et al. (2010) and UNDP (2017).

⁸ The Youth Development Index (YDI) is a composite index designed to measure youth development in Pakistan at the regional level. The YDI is based on nine indicators within the four dimensions of education, employment, engagement, and health and well-being. The YDI is the geometric mean of the four-dimensional indices. Three indicators are included under education. Two indicators are included within the dimension of employment: youth labour force participation rate and ratio of total unemployment rate to youth unemployment rate (UNDP, 2017).

The National Vocational and Technical Training Commission and GIZ (2017) study on skills demand in Pakistan also shows that major economic hubs in Punjab and Sindh require a range of skilled workers.

- Lahore's ready-made garments sector will require 26,000 skilled workers annually, including stitchers, designers, merchandise managers and export officers. Its light engineering and auto parts sector will need 10,000 welders, CAD, CAM and mould machine operators per year.
- Sialkot's manufacturing, sports goods and leather gloves sectors will require 14,000 stitching-machine operators, designers and pattern-makers per year.
- Various manufacturing sub-sectors in Karachi, which is not only Sindh's main manufacturing hub but also Pakistan's, will require thousands of skilled workers.
- KP's tourism and hospitality sector will need over 4,000 tour operators, hospitality and hotel staff, and travel managers per year, as will its construction, manufacturing and energy sectors.

3.2.3 DEMAND FOR SKILLS FROM STRONG CHINA–PAKISTAN RELATIONS

Another cause of rising demand for skills is the link between Pakistan and China under CPEC, and outside it through a recently revised free trade agreement (FTA). CPEC has often been quoted as a game-changer for Pakistan. The Early Harvest Programme under CPEC, which is now complete, involved significant investments in energy and corridor infrastructure. The Long-Term Plan (LTP) lays down the framework of China–Pakistan collaboration over the next decade. It allows for strong collaboration in agriculture, agriculture research, industry and tourism (Government of Pakistan, 2018).

The Pakistan Government has identified nine priority Special Economic Zones (SEZs) under the CPEC collaboration, and anticipated job creation exceeding 800,000 (Government of Pakistan, 2018). The establishment, design and operation of SEZs will require design engineers, construction workers, maintenance staff and security guards. The establishment of SEZs is also likely to increase skill demand for operations labour.⁹ Public documents estimate anywhere between 400,000 and 700,000 jobs being created (Government of Pakistan, 2018).

Under CPEC SEZs, Pakistan is likely to gain from Chinese relocation in key sectors such as garments, textiles, footwear, light engineering, plastics, utensils, glass, ceramics, house electronics and cement.

Pakistan's labour is currently not trained to work in Chinese set-ups and will require skilling to meet the demand. United Nations Development Programme (2018) finds that Chinese firms looking to relocate require their factory workforce to be highly productive and disciplined in terms of punctuality and speed of work. The National Skills for All Strategy also clearly notes that the unfolding of CPEC and allied projects are expected to include considerable job opportunities for skilled female workers, particularly in IT and hospitality, and as paramedics (National Vocational and Technical Training Commission, 2019b).

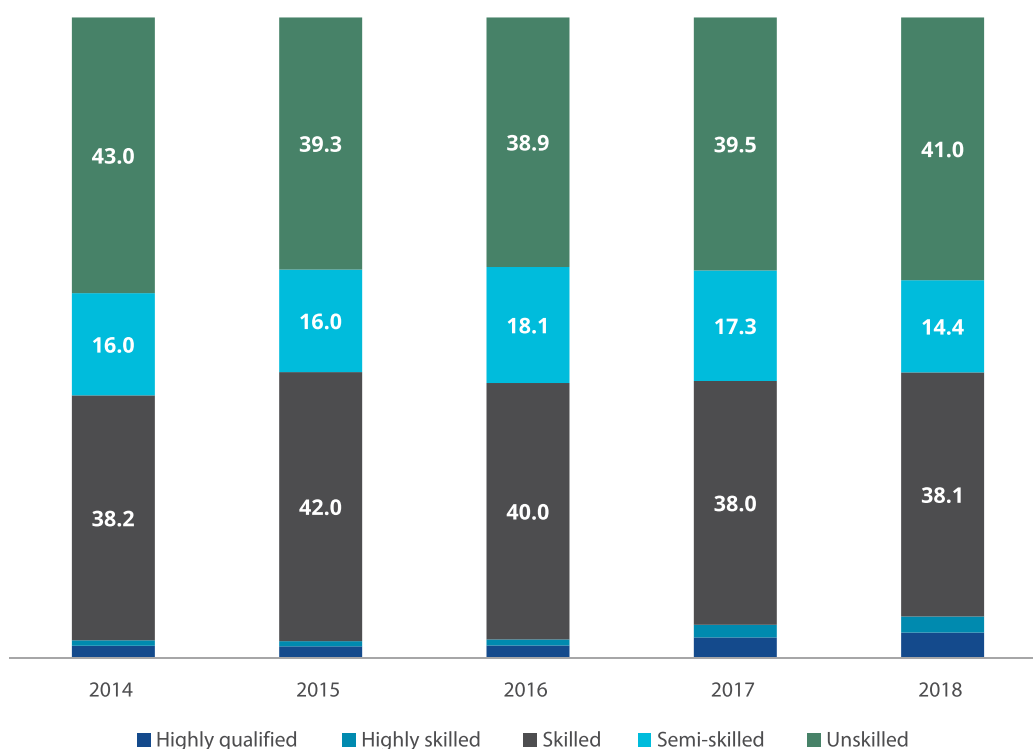
Pakistan and China have recently negotiated FTA 2. Under this revised FTA, Pakistan can currently access 313 additional product lines at preferential tariffs. China's total imports in these product lines exceed US\$84 billion per year (United Nations Comtrade data). The sectors concerned include auto parts, textile value chains, electronics and processed food, and will require a large amount of skilled labour.

⁹ Operations labour includes workers in maintenance, cleaning, security and transport.

3.2.4 OVERSEAS DEMAND FOR SKILLS

In 2018, an estimated 382,000 skilled and unskilled workers found jobs overseas; 49 per cent were from Punjab alone (Bureau of Emigration and Overseas Employment, 2018). However, in previous years the numbers were significantly higher (over 750,000 in 2014; nearly 950,000 in 2015; 840,000 in 2016 and nearly 500,000 in 2017). Of the various categories of workers going abroad to work each year between 2014 and 2018, the sum of the shares of highly qualified, highly skilled, skilled, and semi-skilled workers exceeded the share of unskilled workers (see Figure 5).¹⁰ A higher proportion of highly qualified and highly skilled workers such as engineers, doctors, teachers and pharmacists migrated for work in 2018 than in previous years.

Figure 5. Overseas employment by skill level, 2014–2018 (%)



Source: Bureau of Emigration and Overseas Employment, 2018

Typically, annual demand for skilled workers in labour markets abroad has been concentrated in the following trades: drivers (110,000), masons (65,000), electricians (33,000), steel fixers (28,000), plumbers (27,000) and fitters (20,000) (National Vocational and Technical Training Commission, 2018a). There has been a noticeable decline in the demand for labourers, technicians, masons, carpenters, electricians, agriculturists, salespeople, steel fixers, plumbers and operators (Bureau of Emigration and Overseas Employment, 2018).

In 2018, over 54 per cent of Pakistani workers migrated to the United Arab Emirates (UAE), followed by Saudi Arabia (26.4 per cent), Oman (7.1 per cent), Qatar (5.5 per cent), Malaysia (2.6 per cent), Bahrain (1.5 per cent) and Kuwait (0.13 per cent) (Bureau of Emigration and Overseas Employment, 2018). Gulf Cooperation Council

¹⁰ Although disaggregation of these data by age and gender would have been insightful, the Bureau provides only these aggregate figures

countries remain major destinations for Pakistani migrants and continue to import a large amount of the country's construction workers, engineers, customer service staff, drivers and workers in other elementary occupations. In the next few years, EXPO 2020 in Dubai and the FIFA World Cup 2022 in Qatar are specific events that will require large numbers of workers and a variety of skills.¹¹ Qatar has announced 100,000 jobs for Pakistani workers for FIFA 2022 and has also opened visa centres in Islamabad and Karachi (Bureau of Emigration and Overseas Employment, 2018).

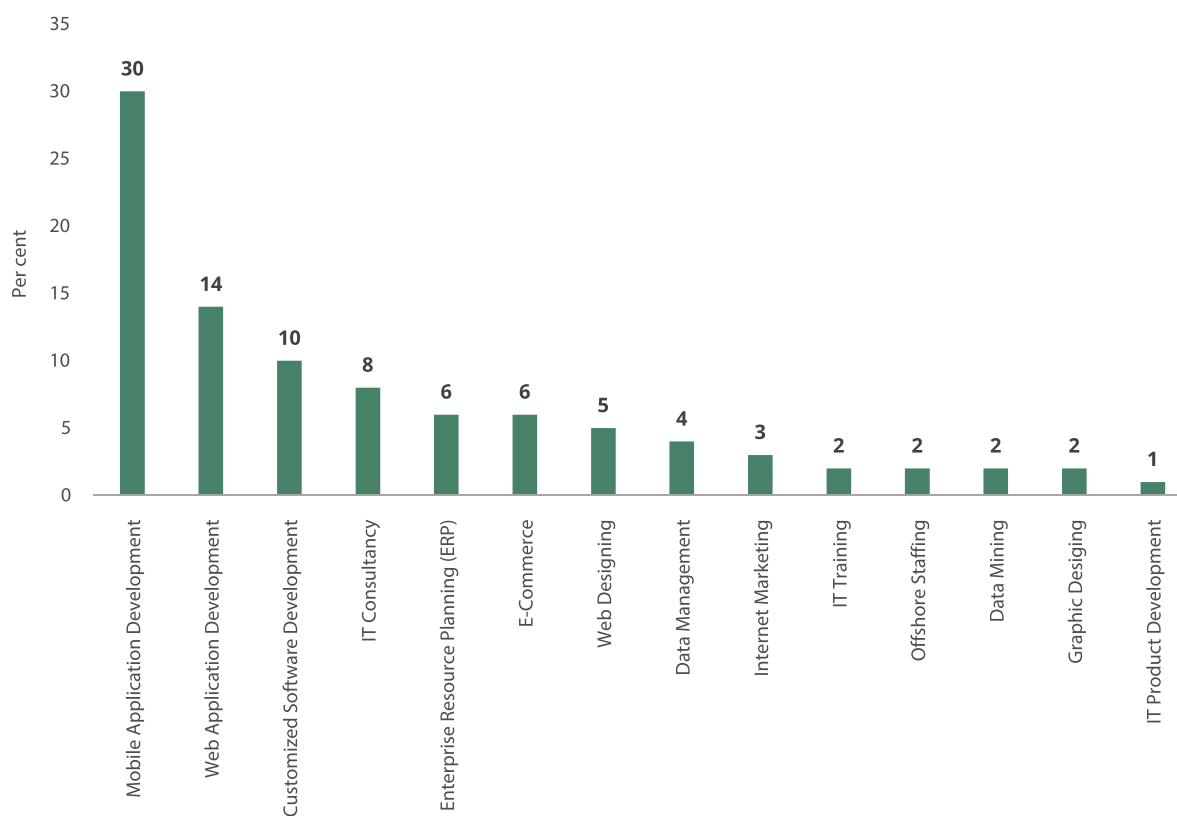
National Vocational and Technical Training Commission (2019b) also notes two specific challenges. First, the majority of Pakistani youth work in the international markets as unskilled workers and earn less than a third of what a skilled worker earns. Moreover, due to the increasing demand for a highly skilled workforce at the major destinations of Pakistan's migrant workforce, Pakistan is increasingly losing space to international competitors. The second concern is that Pakistani women are underrepresented in the international job market. "While competitors including India, Philippines, Bangladesh, and Sri Lanka have made substantial headway in acquiring a permanent foothold in terms of migrant females' workforce, Pakistan has failed to come up with any policy response to capture the emerging opportunities, keeping within the religious and cultural context of its female population" (National Vocational and Technical Training Commission, 2019b).

3.2.5 DEMAND FOR SKILLS FROM THE ICT SECTOR

Pakistan's ICT sector has experienced significant growth over the last 10 years and is carving a differentiated position as the preferred source for software developers, programmers, bespoke software solutions specialists and application designers. Pakistan was ranked fourth in the world for online freelance development in 2017 (Rehman, 2017). Its formal IT exports have exceeded US\$1 billion (of the total US\$24 billion) and are expected to grow. In terms of future outlook, the CEO of Ignite estimates that Pakistan's IT industry is well on course to reach the US\$7 billion mark by 2020 (Hanif, 2017).

Pakistan has more than 2,000 IT companies and call centres, and many more are being established. Over 20,000 IT graduates and engineers qualify each year. Fourteen software technology parks (in rented commercial buildings), covering an area of one million square feet, are in development, as are several world-class purpose-built technology parks on government-owned lands. The National ICT R&D Fund in collaboration with the Ministry of Information Technology conducted a survey of over 300 IT firms located in 10 cities of Pakistan (Pakistan IT & ITES Industry Survey, 2014). The respondents identified mobile and web application development skills as key requirements for the future (see Figure 6).

¹¹ Remittances from Pakistanis working abroad currently amount to around US\$16 billion (in fiscal year 2019) according to 2019 figures from the State Bank of Pakistan (State Bank of Pakistan, 2019). Data disaggregated by age, gender and education level are not available.

Figure 6. Future skills demand within Pakistan's IT industry

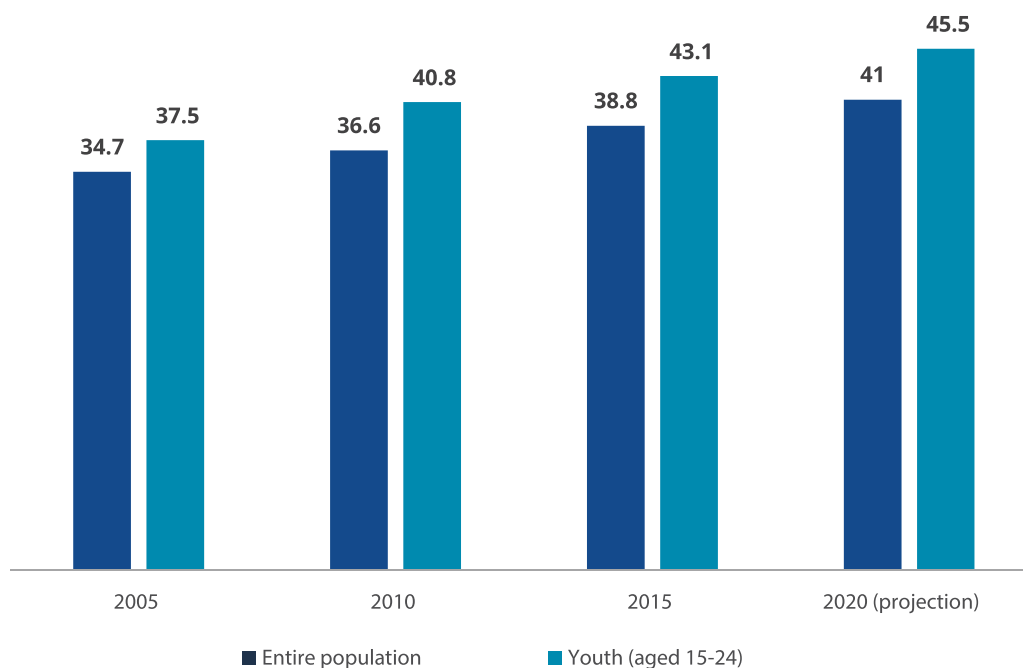
Source: Pakistan IT & ITES Industry Survey (2014).

The advancement of IT solutions has also leveraged growth in retail sectors by opening opportunities for online trading and sales. Companies such as OLX, Daraz, Homeshopping, Zameen and many more have experienced significant growth, resulting in an increased demand for skills. Demand for e-sales staff and agents is likely to grow over the next decade (United States Agency for International Development, 2018a).

3.2.6 URBANIZATION-RELATED DEMAND

Pakistan has one of the highest urbanization rates in South Asia – 38.8 per cent in 2015 (United Nations, 2017). This has significantly increased the demand for skilled workers, including construction workers, drivers, cleaners, electricians, plumbers and service providers. Increasing patches of urban pockets also boosted demand for commercial centres, banks and insurance facilities, creating further demand for skills (National Vocational and Technical Training Commission and GIZ, 2017).

Census data for 2017 show that, in addition to Karachi and Lahore, there are six more cities with a population of more than a million (Faisalabad, Rawalpindi, Multan, Hyderabad, Gujranwala and Peshawar). This urban transition significantly impacts the demand for skills. Furthermore, the proportion of young people aged 15 to 24 living in urban areas was higher compared to the overall population living in urban areas in 2000, 2010 and 2015. Projections suggest a continuing increase in young urban populations for 2020 (see Figure 7).

Figure 7. Urbanization rates for the whole population and for youth (aged 15–24), 2005–2020 (%)

Source: UN estimates, July 2017; projections for 2020 based on 2010–15 (CAGR) assuming current trends continue.

3.3 FACTORS CONSTRAINING THE DEMAND FOR SKILLED WORKERS

While significant skills demand exists and is emerging from various sources, several constraining factors prevent further expansion of demand. These include a low-level skills trap, and the lack of appropriate and timely measurement of demand due to information gaps.

3.3.1 LOW-LEVEL SKILLS TRAP

Pakistan is stuck in a low-level skills trap where employers settle for the kind of low skills readily available in the market. This sub-optimal use of human capital leads to low-quality production, undermining the overall potential of the economy. Where employers continue to accept low-skilled workers, the actual demand for technical skills in the market may not become evident (United Nations Development Programme, 2017).

The evidence of a low-level skills trap was first put forward by Amjad (2005) who argued that Pakistan failed to break away from its dependence on low-skills, low-technology manufactured exports due to its very low level of human resource development. This remains true today. In 2018, the illiteracy rate of the working age population (10 years or older) was 48.2 per cent. Around 30.6 per cent had an education level below matriculation. Only 5.1 per cent had degrees (Labour Force Survey, 2018). Another important manifestation of this low-level skills trap, the author argued, was that most of the new jobs generated are in the informal economy, characterized in most cases by low incomes, low productivity and poor and hazardous working conditions. This also holds true today.

3.3.2 INFORMATION GAPS IN THE LABOUR MARKET'S NEED FOR SKILLS

Accurate and up-to-date information on labour market needs of industries and on the existing pool of young, skilled jobseekers does not exist in Pakistan in any meaningful way. The National Skills Information System (NSIS) was designed to address this issue and has had limited success in providing real-time data.

Information gaps affect skills demand in several ways. Employers' needs fail to reach potential employees, and employers are also unable to find relevant and timely information about skilled applicants, including TVET graduates. Online portals such as ROZEE.pk are useful in that they hold thousands of CVs but, lacking adequate sorting and filtering options, they make it difficult for recruiters and companies' human resource departments to identify the most relevant candidates (United States Agency for International Development, 2018b; 2018c). Similarly, the NAVTTC job portal has nearly 570,000 CVs and only 300 job advertisements (as of 7 October 2019) (National Vocational and Technical Training Commission, n.d.).

Employers' perceptions on the availability of timely data on their labour market needs for skills also vary by region, industry and scale. For instance, all employers interviewed across the marble, furniture and gems sectors in Peshawar reported that information on the labour market needs for skills was not being collected, disseminated and digested by major actors in a timely manner. By contrast, a majority of high-skilled, capital-intensive pharmaceutical and auto parts manufacturing companies in Karachi reported that similar information was promptly disseminated in their area.

The availability of timely data on skills demand was more common in large and medium enterprises, and smaller companies found it more difficult to source labour market data. For example, in the auto parts sector in Lahore, the large employer interviewed stated that, being one of the largest companies in the sector, it receives timely and accurate information. The medium-sized company gets information through contractors, while the small-scale manufacturer stated being unable to access information in the absence of any organized system for small enterprises.

Medium- to large-scale enterprises appear to have their own means of keeping abreast of the competition and changing demands, while small-scale employers relied on informal information from industry colleagues. Most employers interviewed for this study stated they largely sought information on labour market skills through informal means, existing contacts and contractors that source workers. Larger companies found it easier to use a wide range of recruitment tools including LinkedIn and recruitment companies.

Many respondents also stated that industry associations can play the role of information provider but are not doing so in any structured way. According to interviewees, the associations do not contribute significantly to gathering or disseminating information on trends in the labour market or on skilled workers.

3.4 OPPORTUNITIES TO RAISE SKILLS DEMAND

This study also finds that opportunities to raise skills demand do exist. Two notable examples are technological innovation and the labour market's recognition of the relevance of educational attainment in the context of skills acquisition.

3.4.1 TECHNOLOGICAL INNOVATION

Most of the employers interviewed across different sectors in Karachi, Lahore and Peshawar anticipated that technological innovation would increase the demand for highly skilled candidates.¹² The anticipated impact on the demand for low-skilled workers was more mixed. In the pharmaceuticals sector, both the large- and small-scale employers predicted that technological innovation would increase demand for high-skilled candidates and reduce demand for low-skilled workers. A small-sized manufacturer in Karachi said, “[already] so many of the machines are digital ... unskilled labour will not be able to cope with these changes”. A representative of the Pakistan Pharmaceuticals Manufacturing Association explained that pharmaceuticals is all about automation and downsizing of the role of manual labour: “this sector is growing ... there is great potential to tap more of the market; if we move in the right direction, then employment will grow – particularly of skilled labour”.

However, several interviewees indicated that the relationship between employment and technology is not necessarily that simple. For example, while all interviewed employers (small, medium and large) in the footwear sector in Lahore said that they expected technological innovation in the next 5–10 years to increase employment for highly skilled candidates, the representative from the Pakistan Footwear Manufacturer Association said that it may reduce demand for both high- and low-skilled candidates owing to higher productivity. For instance, the respondent explained, “when processes including shoe designing become digitized, then the demand for skilled workers will reduce as a much smaller number of IT experts will come to the forefront”. However, the same respondent also acknowledged that innovation would not be likely to reduce overall employment due to high growth of the sector and Pakistan's low cost of labour, as “it is a labour-intensive industry despite the effects of new technology”.

In other sectors too, although an increase in productivity will reduce the number of workers needed to produce the same levels of output, several respondents suggested that employment may not fall and may even rise as technological innovation could expand business opportunities. For instance, a representative of the Employers Federation of Pakistan in Peshawar commented, “as technology comes, business will be much easier and cheap. Overall productivity will increase, and business will flourish ... hence there will be a room to employ more labour.”

In particular, in primary sectors that have not benefited from much innovation, such as marble and gems, all the employers interviewed stated that technological innovation could increase the demand for both high- and low-skilled workers. Mainly, this was seen to be due to growing business opportunities: for instance, a medium-scale marble manufacturer in Peshawar elaborated, “since the marble sector is unexplored, if technology and resource exploitation took place then business will boost up and we will need all types of labour”.

¹² Of the 27 employers across Karachi, Lahore and Peshawar, 20 stated that they expected technology innovation in the next 5–10 years to increase demand for highly skilled candidates. It is worth noting that the two who predicted a decrease in highly skilled labour, and the one employer that was unsure of the impact of technology on the employment scenario, were all from the garments sector.

On the other hand, in some sectors it was noted that technological innovation could mean that more tasks could be done by relatively low-skilled workers. For instance, a medium-scale auto parts manufacturer in Karachi explained that technology could simplify work: “for instance, when liquid paints were used, highly skilled painters were required; however, after the introduction of powder paint, any painter can do the task using electric guns. Similarly, in welding, electric arc was used previously, hence people who were specialized in handling it were required, but after the introduction of CO2 any person can be trained quickly and perform the task”.

Some respondents did not expect significant technological innovation to occur in the next 5–10 years due to the high relative cost of technology compared to the low cost of labour, and Pakistan’s comparative advantage in labour-intensive industries. For instance, an interviewee from the Lahore Chamber of Commerce and Industries explained, “technological advancement is very important, but we are still at a stage where labour-intensive work is still required”. Similarly, the representative from the Pakistan Association of Automotive Parts and Accessories Manufacturers in Karachi said, “we are not at the volume of China and America where automation can take over. We need skills and manpower to get to that stage ... Before we get there, employment will increase”.

Similarly, in the garment sector, a medium-sized garment manufacturer in Karachi explained that new technology that has entered Pakistan will create new opportunities in principle, but it is unlikely to be adopted at scale due to high cost. A representative from the Pakistan Readymade Garments Association also stated, “we are far from automation”, adding that technological innovation may at most improve productivity but was unlikely to affect employment. This was in line with the observation from a representative of the Pakistan Hosiery Manufacturers & Exporters Association in Lahore who explained that the garment sector is a labour-intensive industry, and predicted an increase in the share of Pakistan in the international market.

3.4.2 RECOGNIZING THE VALUE OF EDUCATIONAL ATTAINMENT

Employers and industry associations interviewed in this study from Karachi, Lahore and Peshawar across different economic sectors attached varying levels of importance to education in skills development. There was considerable variation in terms of the levels of education required and skill sets valued across sectors and job profiles. Yet, many saw an opportunity in raising skills demand through greater labour market recognition of the relevance of educational attainment in skills acquisition. Some of the main factors that influenced the perceived linkages between education and skill acquisition included the nature of the sector and worker designation, as well as the level of automation within production processes.

Several employers equated educational attainment with intellectual ability to absorb training. For instance, a large auto parts manufacturer in Lahore explained, “training without basic education (secondary level) is very difficult due to the lack of intellectual capability to comprehend task dynamics”. A small footwear manufacturer in Lahore said, “minimum secondary education is central to a productive workforce”. Similarly, in the pharmaceutical sector, literacy was deemed crucial across all roles. In a small pharmaceutical firm in Karachi, it was noted that “four assembly lines means four different kinds of medicines. Everyone has to be able to read labels to differentiate”. Similarly, a representative of the Pakistan Pharmaceuticals Manufacturing Association stated, “in this industry, education is very important. Basic literacy is key even at the lowest level, so even the janitor must have basic literacy to read labels, follow signs and respect restricted areas”. In these instances, educational attainment was linked to literacy.

Another relevant factor was the target market, as those businesses and sectors that service international importers often seek workers with higher education levels who can communicate with foreign importers.

As a medium-sized marble manufacturer in Peshawar explained, “we are living in a global economy hence everyone has to be internationally competitive and should have communication and language skills which can be inculcated through education only”.

At other times, skills development was related to computer literacy. For example, a representative of a medium-sized auto unit in Lahore said, “in the internet age, if you have basic IT skills ... you can get training on the internet and can even get certified.” These views underscore the importance of recognizing the types of skills needed by industries in order to ensure that relevant skills are acquired – which could be within or outside the formal education system.

Some respondents identified the importance of skills and experience over formal qualifications. A medium-sized auto parts manufacturer in Karachi highlighted that, as roles get more specialized, grounded experience is perhaps more important than formal education. This informant highlighted how skill development techniques that adopt locally sensitive approaches can help workers overcome lower educational attainment challenges and surpass those with technical knowledge but no experience. In this context, an effective TVET system could help ensure the availability of skilled workers for industry needs.

The perceived link between skills acquisition and education was often related to the nature of the sector and the specific role of an employee. At a macro-level, for example, a representative of the Chamber of Commerce and Industry in Peshawar commented that the link between skills acquisition and educational attainment is not a significant one: “most businesses flourishing in KP (agriculture, construction, mining and energy) rely on traditional methods and not on modern education”. Nevertheless, this is a function of the current production processes within industries dominant in KP and, going forward, the interviewee noted that a certain level of education is necessary for certain industries like IT and Gemology in a context of growing competition. Education has also become relevant with the adoption of new technologies in production processes. According to a representative of the Pakistan Association of Automotive Parts & Accessories Manufacturers in Lahore, “as the industry moves rapidly towards automation, and products developed by the industry evolve, an educated workforce is needed”. The garment sector has traditionally recruited informally trained skilled workers, who are minimally or not educated, through contractors. However, several informants suggested that they expected this to change due to technology and industry needs. A representative of the Pakistan Hosiery Manufacturers & Exporters Association in Lahore explained, “the garment industry is moving towards high-end technology as CAD/CAM usage has increased a lot and, for operations, education is truly necessary”. In the context of the pharmaceutical industry, a large company in Karachi also stated, “as we move towards automation, educational attainment will become more important due to increases in quality control, regulations and compliance as the sector moves towards international harmonization”.

Overall, therefore, many employers highlighted the importance of basic education in terms of literacy as well as the development of soft skills such as computer literacy and communication. Employers within sectors dependent on more traditional skill sets value technical skills over formal education. However, even within these industries (e.g., gems and marble), the introduction of technology is expected to impact labour demand and increase the need for workers with formal higher education qualifications and IT skills. Some stakeholders indicated that skills training itself relies on educational attainment, and that the existing education system available to most of the population is not equipped to develop the ability to absorb the kind of skills training that will be required, given technological changes.

Section 4

HOW IS SKILLS
DEVELOPMENT
ORGANIZED?

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This section explains how skills development is organized in Pakistan. It starts with an overview of the main actors engaging in skills development in various capacities including in a policy and skills delivery context. This includes the common teaching approaches, and the value of the trainings as perceived by employers and by private- and public-sector skills training providers who were interviewed for this study. Several issues in the supply of skills training became clear as a result of our analysis. The major challenges are highlighted, alongside some potential opportunities.

The major focus of this section is TVET, and findings are premised on insights from existing literature and the KIs that there is a need for effective TVET education to equip youth with relevant skills for productive employment. This is especially the case given gaps in education and labour market realities, some of which are documented in detail in Section 3 above.

4.1 SKILLS DEVELOPMENT IN A POLICY CONTEXT

Governments – at both federal and provincial levels – play a vital role in skills development. Pakistan’s Constitution recognizes free education as a right and accepts the provision of free and compulsory education as the State’s responsibility. Article 25 A states: “The State shall provide free and compulsory education to all children of the age of five to sixteen years in such manner as determined by the law” (Government of Pakistan, 2012). Moreover, since the 18th Amendment to Pakistan’s Constitution and subsequent decentralization, the federal government’s role has been limited to setting standards and regulations for TVET, while provincial governments are responsible for delivering skills training. As a result, dedicated provincial Technical Education and Vocational Training Authorities (TEVTAs) were set up. Since the federal and provincial mandates are different, we discuss each in turn.

4.1.1 FEDERAL MANDATE FOR SKILLS DEVELOPMENT

At the federal level, several ministries and government departments oversee skills development. These include the Ministry of Federal Education and Professional Training and the Ministry of Overseas Pakistanis and Human Resources Development. The National Vocational and Technical Training Commission (NAVTTCC), and the National Training Bureau (NTB) have been set up to steer the development of skills.

NAVTTCC sets the national skills policy framework and strategy, and develops and implements national standards on training. Previously, two strategies were adopted:

the Skills for Growth and Development TVET Policy 2018 (Ministry of Federal Education and Professional Training, 2018) and the National Skills Strategy (NSS) 2009–13 (National Vocational and Technical Training Commission, 2013). However, implementation was weak – coordination failure among various stakeholders was a prime reason. A new strategy – the National Skills for All Strategy – has from 2019 guided interventions in skills development in Pakistan and speaks to a wider skills development agenda.

Priority interventions under the Skills for All Strategy include:

- governance – roles clearly defined
- multi-source funding
- capacity enhancement
- improving quality assurance
- greater access and equity
- increased industry engagement
- focused skills development for the international market
- a viable communication plan for TVET image building.

The Strategy also emphasizes the need for implementing actions from the previous strategies. This includes making the National Vocational Qualification Framework (NVQF) effective and implementing competency-based training and assessment (CBT-A). Greater subscription to the NVQF, key informants argue, will help promote standardization and uniformity of training delivery and assessment. This is seen as the only way in which CBT-A can be promoted.

4.1.2 PROVINCIAL MANDATE FOR SKILLS DEVELOPMENT

At the provincial level, TEVTAs are responsible for technical and vocational skills delivery and are also tasked to register private sector training institutes. However, this results in a conflict of interest as TEVTAs both compete on delivery with private providers and also regulate those providers. Additionally, private providers are limited by the courses designed and approved by TEVTAs.

Under technical education, students can receive a three-year diploma in associate engineering (DAE), a three-year BTech or a four-year BTech with honours. Under the vocational stream, students can take longer vocational trade courses of one to three years, or shorter ones of six months. To qualify for entry into these courses, students must pass Grade 8 under general education; to receive vocational certificates and a DAE, students can enrol after completing Grade 9 (United States Agency for International Development, 2013). These minimum education requirements for entry to TVET prohibit youth enrolment. With a literacy rate of 30 per cent, the majority of Pakistani youth is unable to access these training programmes and is left out of the skills development system (United Nations Development Programme, 2017).

Across the provinces, certification agencies are generally separate for the technical and vocational training streams. The vocational courses offered by both the public and private sector vocational training institutes are mostly certified by the respective provincial trade testing boards. The technical education courses are certified by the technical education boards of the respective provinces (United States Agency for International Development, 2018a; 2018b).¹³

¹³ Some TVET institutions provide certifications of international certification agencies, like City & Guilds and Edexcel. With respect to certification for overseas employers, especially those based in the Gulf region, the private Overseas Employment Promoters run their own trade testing centres across different cities in Pakistan, where the skills of potential migrant workers are tested by a representative of overseas employers (United States Agency for International Development, 2018a).

The Punjab Province has some distinct, complex features.¹⁴ It has a TEVTA as well as the Punjab Vocational Training Council (PVTC) and Punjab Skills Development Fund (PSDF) – all delivering technical education.¹⁵ KP is in the process of replicating this model. Punjab also has two certification and examination bodies: the Punjab Board of Technical Education (PBTE) and the Trade Testing Board (TTB). It has set up the Punjab Skills Development Authority (PSDA) and the Punjab Skills Testing Agency (PSTA) in order to separate the regulatory and assessment functions from the delivery of skills.

4.2 SKILLS DEVELOPMENT IN A DELIVERY CONTEXT

Skills development in a delivery context focuses on TVET, work-based learning, and informal training. According to the Skills Gap Analysis reports for Punjab (National Vocational and Technical Training Commission, 2019a), Sindh (National Vocational and Technical Training Commission, 2018a) and KP (National Vocational and Technical Training Commission, 2017a), the main sources of skilled workers for employers are not TVET graduates but work-based learners and informally trained workers. This study acknowledges that schools and higher education institutions play an important role in developing skills in youth. However, much of the literature highlights TVET training when skills development issues are explored.

TVET providers can be found throughout the country's provinces and regions. In 2018 (latest year available), over 3,500 TVET institutes were operational and enrolled just over 433,000 students (Skilling Pakistan, 2019) (see Table 5).¹⁶ Of these, 1,066 institutes (30 per cent of the total) offered technical education to 277,000 students. The remaining 2,498 (70 per cent) provided vocational training to the other 156,000 students. The delivery for the two streams is managed through polytechnics, vocational training centres and apprenticeship schemes under the Apprenticeship Act. Public sector providers outweigh private providers in technical education. The reverse is true for vocational training, where private providers are the majority. Punjab has the highest number of TVET institutions in the country – 1,672 (a 47 per cent share of the total) (see Table 5).

Table 5. Number of TVET institutions in Pakistan, 2018

PROVINCE/REGION	TECHNICAL		VOCATIONAL		TOTAL
	PUBLIC	PRIVATE	PUBLIC	PRIVATE	TOTAL
Punjab	485	181	485	521	1,672
Sindh	115	186	181	235	717
KP	20	16	117	542	695
ICT	8	12	16	82	118
FATA	8	2	34	32	76
Balochistan	10	4	55	82	151
AJK	7	12	49	67	135
Total	653	413	937	1,561	3,564

Source: Skilling Pakistan (2019).

¹⁴ See Punjab's TVET Institutional Map in Crown Agents (2014). Punjab is also in the process of establishing four technical universities.

¹⁵ Some training services are also provided through sector departments such as agriculture extension, health, education, and mines and minerals.

¹⁶ GIZ supported NAVTTC under the Skilling Pakistan Initiative to conduct this mapping exercise.

Female enrolment in TVET is low in comparison to male enrolment (see Table 6). Reasons include issues with skills training supply which is imbalanced and favours trades more commonly associated with men, cultural barriers, poor perceptions of TVET as ‘second-class education’ (United Nations Development Programme, 2017), lack of exposure to training in a co-working environment, and distance to training facilities (United States Agency for International Development, 2018a).

Table 6. Enrolment in TVET, by province

PROVINCE/ REGION	PUBLIC				PRIVATE		
	TYPE	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL
Punjab	Vocational	94,013	59,279	153,292	35,768	9,735	45,503
	Technical	19,530	4,322	23,852	3,397	2,780	6,177
	Total	113,543	63,601	177,144	39,165	12,515	51,680
Sindh	Vocational	29,620	10,122	39,742	18,121	7,626	25,747
	Technical	18,323	1,081	19,404	971	330	1,301
	Total	47,943	11,203	59,146	19,092	7,956	27,048
KP/FATA	Vocational	5,783	2,617	8,400	16,939	25,347	42,286
	Technical	16,327	1,203	17,530	2,156	400	2,556
	Total	22,110	3,820	25,930	19,095	25,747	44,842
Balochistan	Vocational	2,873	822	3,695	6,612	6,020	12,632
	Technical	824	125	949	450	121	571
	Total	3,697	947	4,644	7,062	6,141	13,203
ICT	Vocational	1,066	477	1,543	1,524	1,882	3,406
	Technical	605	139	744	141	76	217
	Total	1,671	616	2,287	1,665	1,958	3,623
AJK	Vocational	1,866	1,218	3,084	2,134	2,810	4,944
	Technical	1,768	18	1,786	566	95	661
	Total	3,634	1,236	4,870	2,700	2,905	5,605
Gilgit Baltis- tan	Vocational	1,897	1,101	2,998	2,055	8,032	10,097
	Technical	97	10	107	0	23	23
	Total	1,994	1,111	3,105	2,055	8,055	10,110
PAKISTAN	TOTAL	194,592	82,534	277,126	90,834	65,277	156,111

Source: Skilling Pakistan (2019)

Informal systems of apprenticeship, in comparison to TVET, tend to be more popular in Pakistan. Young adults often obtain on-the-job training from traders such as mechanics, electricians and plumbers, and from artisans such as wood-workers, painters and potters (United Nations Development Programme, 2017). Over 70 per cent of skilled workers are trained in the informal sector, through the *ustaad-shagird* (master-apprentice) system and 'learning by doing'. This informal system of training is common in more precarious forms of work that offer the lowest quality of employment to young people, where they are likely to face dangerous working conditions, receive low wages, and gain little job stability or mobility (United Nations Development Programme, 2017).

According to some employers, the *ustaad-shagird* model is on the decline, especially in certain industries. In Sialkot, for example, each surgical industry had an *ustaad-shagird* training facility next door, before closure due to concerns about child labour. The lack of alternative training options has affected the apprentices and potential workers of the surgical industry (United States Agency for International Development, 2013).

The Apprenticeship Act in Pakistan makes it mandatory for industries to induct youth for on-the-job training (OJT).¹⁷ However, this has been largely ineffective, and firms tend to comply without seeing any real benefits, or make only minimal effort. A key informant from Punjab TEVTA stated that industries do not want to risk expensive machinery and equipment falling into the hands of apprentices. However, some informants also stated that the expansion of the Apprenticeship Act will integrate the private sector in training delivery, assessment and OJT.

4.2.1 THE RANGE OF TEACHING METHODS AND SETTINGS

The public and private sector skills providers interviewed for this study in Lahore, Karachi and Peshawar stated that they use a combination of teaching methods. Nearly all ensure that they maintain links with prospective employers and academia to roll these out. Some trainings from both sets of providers focus entirely on OJT through ensuring placements (albeit temporary) of graduates in enterprises. Key informants referred to these as 'enterprise-based training' and 'work-placement-based training'.

Some trainings focus on a combination of OJT and classroom-based training. A major driver here is sector-specific demand: where sectors do not require OJT, the providers focus on classroom-based training. A private sector skills provider explained that, "some courses like photography and fashion designing are already practical based (and often lead to self-employment); they do not require OJT".

Most employers who preferred trained workers from the private sector felt that the private sector is better equipped for practical training compared to public TEVTAs, which lack equipment to provide practical training. For instance, "a diploma holder of a public TEVTA would have touched the welding machine just once, which is insufficient". Employers who preferred hiring workers from public TEVTAs argued the opposite. A small auto parts repairer mentioned that private institutes provide 'classroom-based' but not 'practical' training, whereas public institutes enable both practical and on-the-job training. Such divergent views did not lead to particular conclusions except that training approaches in both private and public sector institutes varied.

¹⁷ During 2014, the ILO (International Labour Organization) closely collaborated with NAVTTC, the Government of Pakistan and other development partners to update the TVET Policy and Apprenticeship Act of 1969. There was no previous TVET Policy in Pakistan, while the existing Apprenticeship Act had a number of weaknesses which had rendered the law inapplicable. Therefore, a technical working group, consisting of numerous institutions including the ILO, prepared a draft TVET policy and drafted a new Apprenticeship Act. More recently, GIZ has supported NAVTCC to develop an apprenticeship framework; however, this is yet to be implemented.



Because Pakistan's industry is highly non-standardized, workers trained on one production line may not be able to apply their skills to another one in the same sector. This issue also points to the limits of practical training.

When skills providers were asked whether they assisted trainees with placements, 9 of the 13 said they did. The lowest average rate reported for the years 2014 to 2019 was 65 per cent, and the highest was 80 per cent. Common reasons for not achieving 100 per cent placement rates in any year were attributed to trainees dropping out during the course, for example due to personal reasons or lack of interest in continuing learning, and to students not seeking jobs on completing their training.

4.2.2 PERCEPTIONS ON THE VALUE OF SKILLS TRAINING

Skills providers were interviewed in the different locations on the value of training they provided. When asked "if [they] issue a training certificate, what is its value in the job market?", 7 of the 13 agreed with "increased likelihood of being hired" and "career progression", and 6 agreed with all options (including increased likelihood of being hired, career progression, better salary, and higher starting position).

The employers interviewed had mixed views on the value of trainings and at times differentiated between private and public providers. Several strongly favoured graduates from private training institutes, whereas some preferred hiring public TEVTA graduates. Some employers did not distinguish between the two, stating either that potential employees were hired because of merit and they did not discriminate in favour or against private or public sector training, or because the employers themselves were not "concerned about certification", or because they found both training providers to be "equally incompetent". Some firms resolved this issue by establishing training institutes such as the Infinity Training Institute, created for the auto parts cluster in Lahore by a group of leading auto parts companies.

4.3 CHALLENGES CONFRONTING SKILLS DEVELOPMENT

There are several challenges confronting the skills development system, especially within the TVET sector. Here, we discuss some of the major concerns highlighted in the available literature and in the KIIs conducted for the study.

4.3.1 MISMATCH BETWEEN DEMAND AND SUPPLY OF SKILLED WORKERS

Data from the NSIS highlights a strong disconnect between the demand from industries for specific types of skilled TVET graduates and their supply. Using NSIS data from 2018, we found the demand for skilled graduates across Pakistan to be highest for machine operators, stitchers, electricians, professional cooks, drivers, call centre agents, fitters and welders. But the supply is insufficient to meet this demand, and the deficit is sizeable (see Table 7).

Table 7. Trades in high demand and the scale of shortages of skilled TVET graduates

TRADE	DEMAND	SUPPLY	DEFICIT
Machine operators	29,361	874	28,487
Stitchers	19,420	14	19,406
Electricians	21,502	6,532	14,970
Professional cooks	14,943	1,706	13,237
Drivers	13,130	797	12,333
Call centre agents	10,291	0	10,291
Fitters	10,345	433	9,912
Welders	18,964	9,250	9,714

Source: National Skills Information System (n.d.)

The supply of skilled TVET graduates was highest for computer application and office professionals, tailors, beauticians, electrical and civil DAE holders, refrigeration and air conditioning staff, certified Auto CAD professionals, and embroiderers (hand and machine). But, demand for these skills from industries was low (see Table 8).

Table 8. Trades in low demand and the scale of surplus skilled TVET graduates

TRADE	DEMAND	SUPPLY	SURPLUS
Computer application and office professionals	2,912	35,366	32,454
Tailors	1,860	23,374	21,514
Beauticians	515	19,717	19,202
Electrical DAE holders	3,480	16,810	13,330
Civil DAE holders	6,173	18,732	12,559
Refrigeration and air conditioning	1,249	10,624	9,375
Auto CAD certified	961	10,263	9,302
Embroidery (hand and machine)	579	8,802	8,223

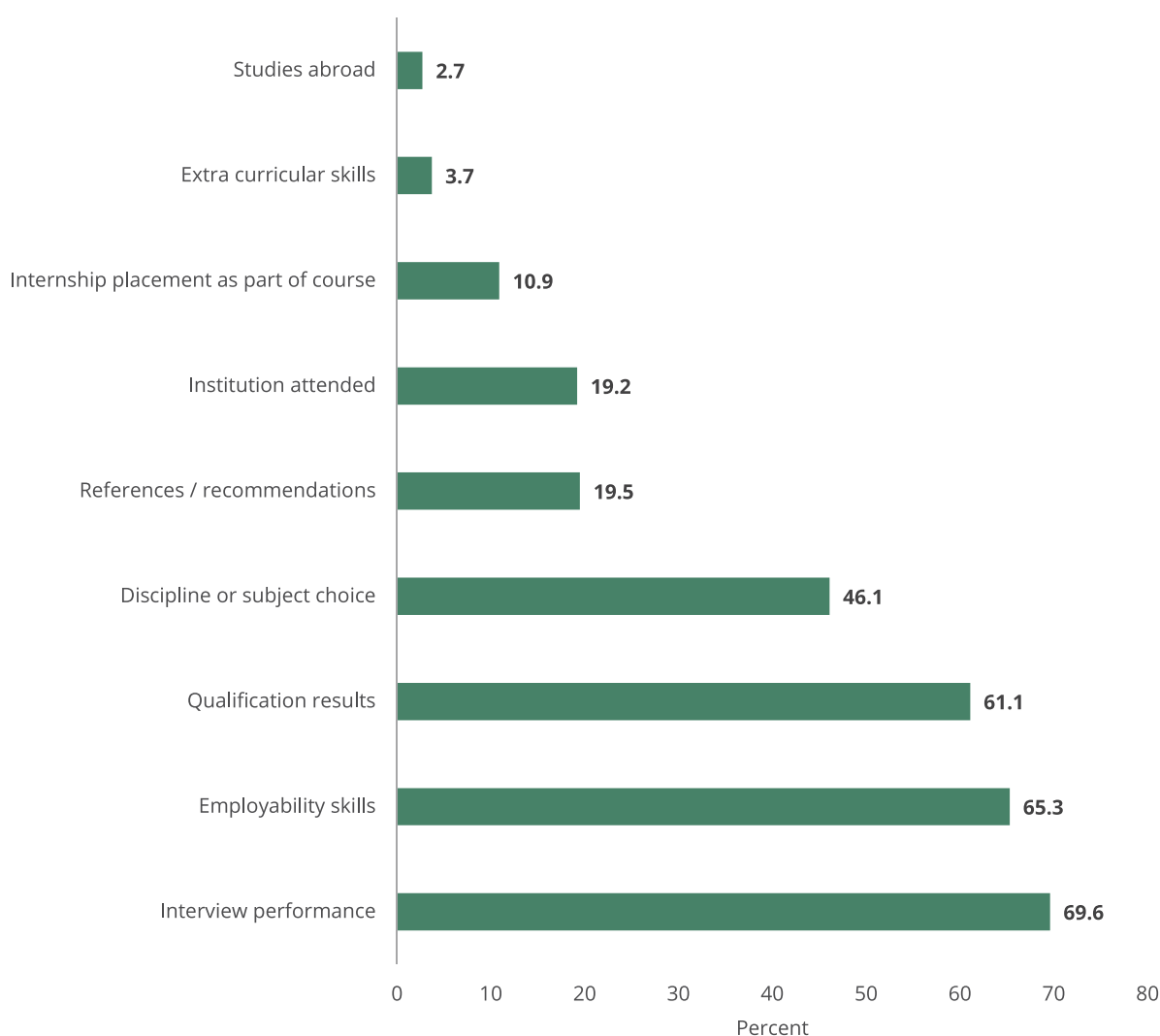
Source: National Skills Information System (n.d.).



4.3.2 THE LACK OF SOFT SKILLS DEVELOPMENT

Employers find the lack of soft skills to be a major issue in Pakistan and argue increasingly that these are more important than technical skills at entry level (United States Agency for International Development, 2018b). The Higher Education Commission (HEC) Survey (2016) found that employers look more closely at employability skills than at academic qualifications received or academic institutions attended (see Figure 8). The most important employability skills in their view are soft skills including analytical, problem solving, self-discipline and people skills (see Figure 9). All employers interviewed for the study agreed that both sets of training providers – public and private – do not generally focus on soft employability skills (including communication, interpersonal, basic IT and English language skills).

Figure 8. Most important criteria for recruiting graduates (percentage of firms)



Source: Higher Education Commission (2016).

Figure 9. Preferences for employability skills (percentage of respondents)

Source: Higher Education Commission (2016).

Most private and public sector skills providers interviewed across locations in Karachi, Lahore and Peshawar acknowledged the lack of soft skills development within TVET to be a significant problem, and stated they were gradually increasing emphasis on them in training curricula. The Sindh TEVTA respondent mentioned that, prior to the competency-based training (CBT) approach, TVET institutions did not traditionally focus on “soft skills such as attitude and communication skills”. The same respondent further explained, “the model we are adopting now has a strong focus on these skills”. A key informant from GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit) also mentioned that all CBT curricula developed include modules on soft skills and occupational health and safety.

Some training providers included soft skills training throughout their programmes and learning cycles. As one private provider stated, “almost all courses focus on communication, interview skills, motivational training, presentation making and delivery”. Some providers separated soft skills training from the technical and vocational courses, and offered grooming classes, and classes on interviewing techniques, only after those courses were completed.

4.3.3 CONCERNS ABOUT RELEVANCE, QUALITY AND OUTCOMES OF TRAINING

Many argue that Pakistan’s skills development system is failing to convert trained youth into gainfully employed workers, and the issues of institutional governance, information and coordination failures create disharmony in the system and lead to poor labour market outcomes. In 2016/17, 56 per cent of TVET graduates were unemployed, 19 per cent had become entrepreneurs and only 15 per cent got salaried jobs in the private sector, while 1 per cent did so in the public sector. Smaller percentages went on to pursue higher education, moved abroad or got internships (Skilling Pakistan, 2019).

Policy frameworks at the federal level do exist (see Section 4.1) but their absence at provincial level seriously hampers the implementation of policies and strategies. The engagement with the private sector is weak and, apart from the Punjab Skills Development Fund (PSDF) and Punjab TEVTA, public-private partnerships (PPPs) are rare.

Key informants across the various stakeholder categories explained that training providers and public institutions lack the capacity to conduct meaningful market research to inform course designs. Many teach outdated and less market-relevant curricula that do not suit employers' needs. The training content does not expose trainees to entrepreneurship to the extent that it should, and so TVET graduates end up looking for jobs rather than move into self-employment.

The skills mismatch in Pakistani national and provincial labour markets, provincial governments argue, is the result of the lack of standardization and coordination among training providers/TVET authorities and employers (National Vocational and Technical Training Commission, 2019a). Links between TVET bodies and the private sector have been largely ineffective. Advisory boards and platforms led by the private sector are established but their usefulness has been questionable.



There are limited and ineffective job-placement services across the country, which reduce the placement rates of graduates (United States Agency for International Development, 2018a). The information failure distorts labour market outcomes as weak job placement and career counselling results in limited opportunities for employers and graduates to meet. ICT-based solutions to address these information gaps (e.g., the NSIS jobs portal, ROZEE.pk, and the overseas employment portal) are not as effective as they are designed to be.

The certification system is non-uniform and does not provide credible signals to the labour market, especially in overseas markets. This study finds that employers have little faith in existing certifications, as the workers fail to deliver what the certificate promises. This issue is going to be addressed under the NVQF. A key informant from GIZ states: "accreditation of training delivery has been developed, promoted and strengthened by the TVET Sector Strengthening Programme" (see Section 5), and "donors need to promote the established regime and the culture of quality assurance".

The overall image of the TVET sector is not positive; it is usually seen as a public intervention to support marginalized groups, and so the linkage with skills demand is weak. It is believed that more able individuals (both technically and financially) do not join the technical education stream (Khan, 2019). There is a need to reverse this by improving the image of the TVET sector and enhancing the quality, relevance and outcomes of trainings. The Skills for All Strategy (National Vocational and Technical Training Commission, 2019b) has developed a communications plan to improve the poor image.

4.4 OPPORTUNITIES FOR FURTHER SKILLS DEVELOPMENT

Despite the challenges noted above, opportunities for further skills development do exist. An emphasis on entrepreneurship could combine access to finance with training delivery, and training focus on entrepreneurship would help support self-employment of TVET graduates. Other key opportunities are a greater role for education in skills development and a greater focus on women.

4.4.1 AN EMPHASIS ON ENTREPRENEURSHIP

In Pakistan, wage-based employment will not cover the demand for jobs among the young working-age population. This creates the opportunity for training youth in skills (including entrepreneurship, technical skills and accessing start-up grants or capital) that enable them to become entrepreneurs.

In recent years, investment in cultivating entrepreneurship has risen, especially in urban centres (United Nations Development Programme, 2017). Top-ranking higher education institutions, including the Lahore University of Management Sciences (LUMS), the Institute of Business Administration (IBA) in Karachi, the National University of Science and Technology (NUST) in Islamabad and the Institute of Management Sciences (IMS) in Peshawar, have established incubation centres that regularly organize events promoting entrepreneurship. The government, private sector and international development partners also support business incubation centres to facilitate start-ups and to help convert ideas into business models. In 2017, Pakistan had 28 business incubators, accelerators and co-working spaces that provided mentoring, office space, consultancy and networking opportunities to potential and existing start-ups (United Nations Development Programme, 2017).

Skills development interventions that encourage entrepreneurial activity need to be more inclusive of youth from varying economic and educational backgrounds and geographic locations. Initiatives could aim to train young people in marketable skills such as oral and written communication, presentation techniques and report writing, as well as on the financial aspects of running a business, ensuring fair wages and protecting worker rights, profit maximization and investment methods (United Nations Development Programme, 2017).

Training providers have an especially vital role in encouraging entrepreneurship. To this end, key informants in all three provincial study locations explained that most public and private skills providers are adopting training approaches to encourage entrepreneurship. Of the 13 providers interviewed, 10 said they are: embedding an 'entrepreneurship' approach in their curriculum; mentoring students; hosting teacher-led workshops (e.g., on business models); hosting student-led workshops; offering networking opportunities with the business community; creating incubation centres; and acting as intermediaries between donor agencies and government departments that have loan schemes available for their students. The other three

providers, which were not encouraging self-employment opportunities through their courses, stated that students themselves were taking on this responsibility.

In Karachi, both the Skills Development Council (SDC) and the Sindh TEVTA officials interviewed mentioned a focus on entrepreneurship in their trainings, but to varying degrees. Both organizations have collaborated on this with the Institute of Business Administration in Karachi. The SDC focuses on a small set of activities, e.g., “offering a one-month course on entrepreneurship, where management skills are provided, and trainees receive motivational lectures on becoming entrepreneurs”. The Sindh TEVTA is moving in this direction and focusing on a larger set of priorities. A key informant from there explained, “we are in the process of incorporating entrepreneurship training as part of our curriculum. We will also be focusing on psychology and mentorship of students for pursuing entrepreneurship based on the CBT model”. Among private providers, the Peshawar-based Gems, Jewellery Training and Manufacturing Centre uses the curriculum and faculty of the Institute of Management Sciences in Peshawar in carrying out its own entrepreneurship training programme.

A key informant from the ILO explained that this organization has started supplementing CBT with business training in the shape of delivering the ‘Know About Business’ methodology. This worked well for students graduating from hospitality training. Similarly, ILO also imparted training in ‘Start and Improve Your Business (SIYB)’ in HEC-affiliated universities. SIYB training is available through an SIYB association formed by certified trainers and faculty from these universities.

The Punjab TEVTA has linked its graduates with securing financing to start their own enterprises. It provided PKR500 million to Akhuwat – Pakistan’s largest interest-free microfinance organization. A key informant explained that this is “to give interest-free loans to TEVTA graduates who submit promising entrepreneurial proposals and demonstrate how they will be self-sufficient and pay back the loan. The loan amount is around Rs.0.1 million and more than 25,000 graduates have started their own businesses. The success of the initiative can be gauged from the fact that nearly all the beneficiaries have returned the loan amount after successfully starting their businesses.”

4.4.2 A GREATER ROLE FOR EDUCATION IN SKILLS DEVELOPMENT

Expanding education is a means to realize far greater objectives – those of providing learning and skills and expanding human capabilities (United Nations Development Programme, 2017). There is therefore a greater need and role for education in skills development and for producing quality young students who are fit to meet labour market demands and who can improve their development outcomes. Pakistan’s education system needs to focus on skills that enhance cognitive development and analytical and critical thinking (United Nations Development Programme, 2017).

Unless Pakistan develops closer collaboration between the various systems – primary, secondary, higher, vocational and skills training (United Nations Development Programme, 2017) – there is a risk that the youth will not be fit for the future world of work. Greater links between the education system and industry are also needed. Establishing such links would help to develop relevant demand-driven curricula, design skills development and capacity-building programmes to train students in skills that meet changing industry and trade requirements, and establish standardized and coordinated systems of job information and placement (United Nations Development Programme, 2017).

4.4.3 A CONCENTRATED EFFORT TO CREATE MORE SKILLED FEMALE WORKERS

Women need to be considered a core target group for skills development as well as employment policies. Jobs for women should not be restricted to a supply-side reaction in the form of increasing jobs in areas that are traditionally 'female' (United Nations Development Programme, 2017). Women need a level playing field in terms of equitable access to skills development as well as employment opportunities and reduced occupational segregation.

The greatest barrier to female employment and enhanced skills development has been gender discrimination in a highly patriarchal Pakistani society. Families largely dictate women's choices about entering the workforce, whether to go to school and for how long, and which skills to prioritize over others. Other barriers to skills development and access to jobs also need to be overcome. Mobility is a major reason for women not being able to join the workforce. Lack of flexibility in working hours also denies women entry into the workforce. The digital divide also excludes many women from becoming financially and economically active (Khan, 2018).

Skills development focused on women can help them become more independent intellectually as well as financially. Multifaceted approaches to professional training can help women overcome traditional barriers to career growth. Such approaches would include vocational programmes and awareness campaigns about women's legal rights at work, and how to access markets for quality employment and form interpersonal relations and networks that encourage greater empowerment (United Nations Development Programme, 2017). And so, one major opportunity for further skills development is represented by young women of the current and future workforce.

Section 5

HOW CAN SKILLS
DEVELOPMENT
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HOW CAN SKILLS DEVELOPMENT EFFORTS BE SUSTAINED?

The current landscape of youth skills development in Pakistan is being shaped by several key stakeholders from the public sector and by international development partners. These actors exhibit relative strengths and weaknesses, which need to be understood in the context of how to sustain skills development efforts in the long run.

It is widely acknowledged that public sector training providers are well positioned for nationwide outreach, and relevant structures are in place for undertaking a wide variety of youth-related initiatives in the coming decades. Private sector training providers can complement their public sector counterparts in enhancing existing training capacities and in bridging the gap between domestic/sector-specific skills capacity and market demands. At another level, development organizations are likely to conceive and implement demonstration/exemplary (pilot) projects and are willing to explore previously uncharted territories to address critical gaps.

Given a wide canvas of opportunities, moving forward on the skills development agenda in a sustainable manner requires concerted efforts by different stakeholders (and at various levels) to identify best practices in youth skills development and to direct resources towards enhancing existing capacities appropriately. It is further important to note that no one solution will suffice and what works in one sector or geographic location may not work in another context. The scope of this section is therefore limited to a broad overview of some recent initiatives and collaborations between the public and private sectors, and with international development partners. The views of key informants pertaining to skills development, and enabling factors and barriers that need to be addressed to sustain positive outcomes, are also highlighted.

Public sector initiatives in youth skills development are largely undertaken in collaboration with international development partners. For instance, the Government of the Punjab launched the Punjab Skills Development Fund (PSDF) in 2010. PSDF is a provincial entity and was established as a not-for-profit company. Over the past three years, PSDF's outreach extended to all 36 districts of Punjab. Close to 300,000 young people, 36 per cent of whom are female, received training in "250 demand-driven and market relevant trades" (Punjab Skills Development Fund, n.d.).

Several (pilot) projects have also been launched in collaboration with multilateral and bilateral agencies such as the European Union (EU), the United Nations Development Programme (UNDP), the World Bank, UK Department for International Development (DFID) and GIZ. The three examples included in this section highlight the different types of arrangements with varying geographic scales ranging from nationwide outreach to specific localities for intervention in major cities.

5.1 RECENT INITIATIVES IN YOUTH SKILLS DEVELOPMENT



5.1.1 EU: TVET REFORMS

Among recent initiatives, TVET reforms were initiated in 2011 with assistance from the EU, the German Federal Ministry for Economic Cooperation and Development (BMZ), the Netherlands and Norway. The implementation of the first two phases resulted in the provision of TVET services to deprived and marginalized communities in predominantly rural areas of Pakistan. Almost 35,000 men and women received training in Phase 1 across 32 districts in Punjab, Sindh, Balochistan, KP and the Federally Administered Tribal Areas (FATA). In addition to the training of 880 officials across the provincial TVET bodies, the TVET authorities in Punjab, Sindh and Azad Jammu and Kashmir obtained ISO certification.

TVET II resulted in the formulation of the “first-ever national TVET policy” and a revision of the apprenticeship law aimed at greater private sector participation in delivering TVET (GIZ, n.d.). The NVQF was formulated and 1,200 programmes were accredited. A pilot competency-based training and assessment (CBT-A) was rolled out, “in 60 trades through 142 TVET institutes with 20,000 graduates across Pakistan” (GIZ, n.d.). Capacity building was one of the key components of TVET II, especially managerial capacity to implement TVET reforms. The fund for the Innovative Training component in the second phase resulted in the provision of TVET services (direct and indirect) to almost 125,000 men and women across Pakistan. Moreover, 18 e-learning centres were established, through which 8,500 TVET students received training in pedagogy. Partnerships between Pakistani universities and a German institute resulted in designing and launching postgraduate initiatives to train TVET faculty. As part of an effort to make training-related information more accessible, the NSIS was launched to provide access to “real-time data for labour market analysis”. Other inputs included a “donor coordination mechanism” (GIZ, n.d.).

Under TVET III, the focus of attention shifted to “governance and private sector participation in the TVET sector to enhance access to quality skills development that meets demands of the labour market” (European Union, 2019). Based on lessons learned in the previous phases, the third phase is geared towards implementing the national 2018 TVET policy and the national Skills for All Strategy, as well as enhancing private sector participation in TVET delivery (European Union, 2019). The ongoing TVET reforms being carried out with donor assistance indicate the public sector’s awareness about the need for change to take place and to improve existing structures and modes of service delivery. Additionally, the need for and long-term benefits of collaborating with private sector entities is recognized. The three phases of TVET reform provide opportunities to reflect on previous implementation cycles where lessons learned can be incorporated, and deficiencies addressed, in upcoming projects.

The TVET reforms constitute an almost decade-long journey involving training through public, private and community-based providers (European Union, 2019). Key conclusions drawn from an evaluation of the actions undertaken under TVET I thus far indicate the need for district-specific research prior to the launch of training sessions and a revision of initial assumptions where self-employment is seen to follow from enrolling in short-term training courses. Around 90 per cent of female participation was limited to four of the low-paying trades, and certain trades remain male-dominated. Limited female mobility remains a core issue in terms of access to wage employment and/or markets, resulting in overall low levels of income for an important segment of the population. In addressing the gaps in the TVET reforms, it is noted that appropriate market research is integral to an understanding of the existing spatial, cultural and socioeconomic dynamics in which TVET training is provided (European Union, 2019).

The evaluation report (European Union, 2019) on TVET I emphasizes that insufficient information gathering only hinders progress during service delivery and is likely to have limited impact on project beneficiaries. Moreover, the selection of trades needs to be informed by relevant research into prevailing market conditions and future trends. The study further stresses that “targeted interventions ... should be used to promote women’s participation in non-conventional skills trainings which have market relevance and lead to better employment outcomes. Economic sectors like tourism and hospitality, and healthcare offer immense potential for women’s employment.”

The quality of training provided is another area that requires specific attention in TVET delivery. It is imperative to focus on the quality of training rather than the quantity of trainees when scaling up. As the evaluation report points out, “training high numbers with limited absorption in the market results in cynicism and lowers expectations from future programmes. Undertaking more research with an emphasis on local conditions should help set more realistic levels of expectations of employment outcomes which, in turn, can be improved by such research helping a better fit between trainees and the market” (European Union, 2019).

5.1.2 UNDP: YOUTH EMPLOYMENT PROJECT

UNDP implemented the Youth Employment Project (YEP) in Karachi between 2015 and 2017, with financial support from USAID. The YEP was launched in continuation of UNDP’s efforts to improve the quality of skilled labour available in Karachi, specifically via the Gender Promotion through Skills Development in Garment Factories project (2006–2012) (GENPROM) and the Promoting Employment and Productivity in Garment Industry project that started in 2012. Premised on a Public-Private Partnership model, the YEP entailed “skills training for youth, capacity development of local training providers and policy research/advocacy on issues on youth employment” (United Nations Development Programme, 2016).

This project focused on the garment sector with an emphasis on enhancing existing capacities of trainers to provide skills associated with employability. The YEP was expected to improve youth income and employment, on one hand, and productivity in the garment sector, on the other. The key achievements include training of close to 7,000 men and women and secure employment for approximately 4,000 graduates. Target beneficiaries lived in marginalized areas of Karachi, and strategic approaches reduced distances between training institutes and trainees' homes. This impacted "decisions about seeking and completing training, particularly for women" (United Nations Development Programme, 2016).

Key recommendations for scaling up certain aspects of the project include reducing travel time between training centres and trainees' (especially female trainees') homes. While partnership with private entities in the garment sector was a core feature of the project, further attention is required to identify the skills necessary for securing employment in the garment sector. Moreover, the role of training institutes in designing and implementing courses that address existing skills gaps in a sector is integral to increasing employment opportunities.

5.1.3 WORLD BANK: PUNJAB SKILLS DEVELOPMENT PROJECT

The Punjab Skills Development Project (PSDP) is a provincial government initiative with loan assistance from the World Bank. This five-year project began in 2015, using results-based financing (RBF) as a measure to support skills development in Punjab. The core components are enhancement of existing skills training systems, improvement in quality and relevance of skills training, and better access to market-relevant trades. A disbursement-linked indicator (DLI) was identified with time-bound targets for sub-components. The present arrangement is premised around partnerships with public sector entities in the province to accredit, certify and deliver skills training services. Targets include: developing a single agency responsible for accreditation, registration and certification of all training providers and graduates in the province; and addressing institutional constraints in Punjab TEVTA to become efficient and effective in terms of providing quality training and market-relevant courses.

The idea behind the project is to raise the quality of skilled graduates by introducing CBT-A and fostering partnerships between employers and training institutes. The project emphasizes industry partnership agreements (IPAs) to improve the quality and relevance of training. To this end, the purpose is to match 'skill supply' (i.e., what trainers provide) with 'skill demand' (what the private sector requires). Interventions focus on developing partnerships with SMEs in priority economic sectors. A training fund is attached with PSDF, to support market-based training through its network of independent trainers.

The project will come to an end in 2020. Discussions with the Programme Implementation Unit (PIU) outline several outputs. PSDP supports implementing partners including Punjab TEVTA, Punjab Vocational Training Council (PVTC) and private sector trainers. Institutional capacity-building measures include creation of the Punjab Skills Development Authority (PSDA) and the Punjab Skills Testing Agency (PSTA). These bodies will function as the two main regulatory agencies in the province. It is expected that coordination failures and the lack of private sector training providers will be addressed through the PSDP.

The project directed efforts to improve existing capacities at Punjab TEVTA. Several CBT courses (30 courses in 80 institutions) have been launched but the impact of these courses is not yet evaluated. Additionally, a partnership framework for Punjab TEVTA was formulated, allowing it to sign at least 18 industry partnership agreements. However, a key hindrance pertains to limited institutional and financial support and no coordination with the PSDF partnership framework.

Significant resources were allocated to develop a model to streamline existing institutional structures aimed at encouraging competition and growth among training providers in Punjab. Since the institutional establishments in the skills sector are similar across provinces, the model in Punjab may be replicated to address coordination failures elsewhere. CBT courses developed in Punjab can also be adapted for other provinces. The partnership framework attempts to offer a cost-effective model to enable industry partnerships, resulting in better employment outcomes for trainees.

5.1.4 OBSERVATIONS ON THE INITIATIVES

The three cases included in this section highlight variations across TVET outreach and service delivery. Whereas the EU-funded TVET phases have nationwide outreach, the UNDP project is limited to one city (Karachi) and the World Bank project focuses on skills development in Punjab. Relative strengths pertain to phased development in the case of the EU-funded project, with an opportunity to reflect on lessons learned during each stage of TVET design and service delivery, including the development of relevant skills-related policies and strategies. The UNDP project addresses location-specific youth employment challenges with an emphasis on gaining sector-related skills. The ongoing World Bank project emphasizes institutional strengthening in Punjab to encourage competition and growth among training providers.

5.2 PREVAILING STAKEHOLDER PERCEPTIONS ON SKILLS DEVELOPMENT

While public sector entities have a wide outreach with respect to skills development training, much remains to be done in terms of bringing about long-term changes. Key informants from the public sector draw attention to inter-departmental as well as cross-sectoral cooperation, along with political will, to enable effective skills development among youth. According to a senior official from the Ministry of Federal Education and Professional Training, it is imperative for government departments to articulate and commit to relevant policies. In this respect, designing policies reflecting ‘consensus of all’ would be an important step. It is equally important to foster environments where all provincial governments agree to follow standardized curricula. Along similar lines, an official of the Ministry of Commerce and Industry asserted that “a cohesive industrial policy environment”, where synergies between the public and private sectors (and think tanks) exist, is required. Further, inter-provincial coordination is necessary in order to reinforce political will across stakeholders.

In terms of practical strategies to scale up skills training, the use of technology is highlighted as an important mechanism. According to a representative of the National Incubation Centre, “technology when applied appropriately is an enabler”. For instance, to broaden the scope of skills training, technological applications that support distance or e-learning are helpful resources to reach out to a significantly larger number of beneficiaries. However, it is necessary to design courses appropriately to impart knowledge and information that can be supported on digital platforms. According to a NAVTTC official, attempts to transfer practical hands-on skills development through distance learning yielded unsuccessful outcomes and courses were discontinued as a result. In this context, NAVTTC has finalized an intervention called virtual TVET, through which lectures and programmes will be disseminated across the country.

Donor representatives share similar perspectives. A UNDP official emphasized the need for gradual progress in increasing use of new technology, or at least training youth to be proficient in its use. In addition to

receiving skills training in basic services in the industrial sector, it is suggested that young people should also be equipped to adapt to technological advancements, resulting in better skills and higher wages. At the same time, “trainings at the grassroots level, which combine on-the-job with in-classroom training based on industry demand remains critical”.

As far as donor participation is concerned, a GIZ representative commented that “all development partners should strengthen each other” through collaborative arrangements. However, the government’s critical role is underscored, especially for replicating and/or scaling up projects. It is acknowledged that, while donors can design and implement pilot measures, they cannot cover an entire sector. Necessary funding from the government “with full ownership” is integral to arriving at sustainable solutions. Another key informant from the EU added, “sustainability is more critical than scalability where the biggest challenge is funding and system development” and, in this regard, “the government undoubtedly plays a crucial role”. However, as the GIZ respondent noted, “the private sector plays an important role in contributing toward economic development” and there is a need for greater collaboration and synergies between various stakeholders in order to make a substantial impact on youth skills development.



Pakistan's leading think tanks reflect mixed views about potentially innovative approaches to youth skills development. The Punjab Skills Development Programme and Benazir Bhutto Shaheed Youth Development Programme (BBSYDP) were cited as examples of provincial government interventions in Punjab and Sindh. However, a respondent highlighted that the impacts of these initiatives need to be rigorously evaluated. BBSYDP, for instance, faces allegations of mismanagement and corruption (Abro, 2019). On the other hand, social enterprises such as the Aman Foundation are noted for directing efforts to address specific gaps in health and education by integrating technology in curriculum development, training and project implementation. Under the present circumstances where the majority of youth lack basic education, imparting skill sets premised on technological innovation is likely to face barriers at some point. Another key informant supports the incorporation of innovation as a matter of policy where data and technology are integral to deliver and scale up skills development programmes.

As far as specific skills training solutions in Pakistan are concerned, it is somewhat difficult to identify instances that may be scaled up and/or replicated. At a sectoral level, there appears to be evidence of initiatives to address existing gaps in skill sets such as in the textile sector where graduates from recognized higher education bodies are expected to be absorbed into a relatively large and growing sector. This seems to enable better positioning to partner with leading industries to assess and meet the demand for various skill sets concomitant with labour market conditions and trends. This may also enable approaches to international development organizations to secure funds.

At the same time, it is imperative to be cognizant of additional tiers of training required beyond university degrees to survive in a competitive, and international, environment, especially when export orientation of the textile sector is considered. Similarly, in the case of the pharmaceutical sector, there is scope for collaboration among companies to support and strengthen university departments for research and training. In this respect, a long-term approach coupled with necessary investment, including in innovation, is required.

Think tank representatives agree that, for large-scale socioeconomic benefit from youth skills development, both replicability and scalability across sectors need to be addressed. At a broader level, lessons learned in one sector may well be applied to another sector in the presence of certain enabling factors. However, it is worth considering existing barriers and overcoming them so that appropriate mitigation measures are articulated accordingly. Several factors affect the ability to achieve sustainable skills development in the current context. In the automobile sector, for instance, two or three manufacturers dominate most of the market share. While in-house training is provided in certain instances, manufacturers fall short of creating a wider base of skills for fear of losing workers to competitors or independent operation.

In a wider context, there is negligible attention paid to marginalized and disabled youth. In such instances, even where policies exist, the extent to which they are implemented remains questionable. Long-term systemic changes can be brought about by addressing policy gaps, understanding how innovation can be incorporated at various stages of skills development, and securing appropriate funds for a programmatic rather than short-term, project-based approach. In this case, both public and private sources of funds are crucial to ensure sustainability.

Section 6

CONCLUSION AND RECOMMENDATIONS

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This study focused on skills demand and skills development in Pakistan, to improve understanding among key stakeholders in the country about the skills development ecosystem and the opportunities it can bring to youth. The study first examined several major sources of skills demand in Pakistan – from growing sectors and sub-sectors such as manufacturing, services and construction, to area-specific demand that considers the clustering of industrial activity in Pakistan. Also included were opportunities arising from strong China–Pakistan relations (with CPEC a prime example), overseas demand for skilled workers, and the demands from the growing ICT sector and urbanization. The study also considered the barriers to raising skills demand, including the low-skills trap facing Pakistan, and information gaps that exist around skilled labour needs and supply. At the same time, it pointed to new opportunities for raising skills demand through technological innovation and recognition of the relevance of educational attainment in the context of skills acquisition.

The study then explained how the skills development system is currently organized, identifying the major challenges and opportunities. Among the challenges are: the skills mismatch; the lack of focus on soft skills development; signs of low-quality, less market-relevant trainings and consequently poor labour market outcomes. This highlights the need for raising skills development efforts. New opportunities, especially an emphasis on entrepreneurship, are critical to enable trainees to set up new enterprises, as are the needs to increase the role of education in skill building and to focus on skills development of women.

In light of the findings, the study recommends major stakeholders to commit to:

STRENGTHEN LINKAGES ACROSS KEY ACTORS

- Develop greater linkages between skills providers, academia and industries to help bridge the gap between the kind of skills employers want and the training both public and private sector institutes are able to provide.
- Integrate TVET in secondary schools and add subjects that will equip students with more employable skills from an early age, prior to them entering the workforce.
- Improve communication among key actors. This will enable TVET providers to train youth for jobs where skills requirements change quickly. This will also allow employers to inform the curriculum of TVET.
- Address information failures in the labour market to improve links between employers and skilled workers (including career counselling services), as well as increasing the use of ICT-based job portals.

FAST-TRACK POLICY IMPLEMENTATION

- Pursue implementation of the 'Skills for All' road map for skills development, notified by the Government of Pakistan and presented in the Cabinet, which explicitly lays down measures for sustainability.
- Address coordination failures within and across institutions engaged in skills development, from both policy and delivery contexts. Reviewing Punjab's model of separating regulatory, training and assessment functions of the various public agencies engaged in skills development would be a useful start.
- Build a positive image of TVET and consolidate scattered training institutions, to encourage investments in TVET.
- Integrate skills development within all major economic growth and industrial policies, so that this feeds into the broader growth agenda.

IMPROVE QUALITY AND RELEVANCE OF SKILLS TRAINING

- Support the creation of a unified and accredited qualification-awarding system. This system should ensure timely issuance of credible and authentic national certificates and be accepted nationally and internationally. Similarly, support the promotion of a quality assurance culture in training delivery and assessment.
- Expand industry engagement in the skills sector to address the issues of training relevance and quality. Public-private partnerships are critical in the development of high-quality TVET because they enable regular communication between employers and TVET providers. It is equally important for industries to develop skills within their workforces.
- Invest in research to assess the demand for skills and to help inform the design of relevant trainings to meet the demand.

LEAVE NO ONE BEHIND IN THE SKILLS DEVELOPMENT AGENDA

- Lay greater emphasis on a skills development agenda for women to increase their prospects to apply and secure potentially higher-paying jobs.
- Address disparities in access to training among social groups such as those from rural areas and those susceptible to exclusion from the training and broader education systems.
- Reduce informality in the training structure and in the composition of employment, as it is associated with poor working conditions, low wages and a low-level skills trap young people may find increasingly hard to escape.
- Create a skilled workforce able to seize employment opportunities abroad and send remittances that could improve Pakistan's economic situation, and ensure their rights as migrants are protected in destination countries.

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