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CHANGING LIVES THROUGH TVET

A Journey of TVET Reforms in Pakistan

TVET Sector Support Programme
2011-2021



Implemented by

giz Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH

Published by
Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

Registered offices
Bonn and Eschborn, Germany

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Photo Credits
TVET Sector Support Programme

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TVET Sector Support Programme 2011 - 2021



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ACRONYMS

AJK	Azad Jammu and Kashmir	IMC	Institute Management Committee
APFMA	All Pakistan Furniture Makers Association	KP	Khyber Pakhtunkhwa
BIA	Business and Industry Association	LMI	Labour Market Information
BTE	Board of Technical Education	M&E	Monitoring and Evaluation
CBT&A	Competency Based Training and Assessment	MoU	Memorandum of Understanding
CCI	Chamber of Commerce and Industry	NAVTTTC	National Vocational and Technical Training Commission
CCJP	Career Counselling and Job Placement	NEX	National Employment Exchange
CfC	Charter for Compassion	NVQF	National Vocational Qualification Framework
COVID	Corona Virus Disease	OJT	On-the-job Training
CPEC	China Pakistan Economic Corridor	PEFMA	Pakistan Electric Fan Manufacturer Association
	DACUM Developing a Curriculum	PGMEA	Pakistan Gloves Manufacturers & Exporters Association
DAE	Diploma of Associate Engineering	PPE	Personal Protective Equipment
DBoM	District Board of Management	PVTC	Punjab Vocational Training Council
DTESD	Directorate of Technical Education and Skills Development	R&D	Research and Development
		RPL	Recognition of Prior Learning
FPCCI	Federation of Chambers of Commerce and Industries	SSC	Sector Skills Council
GB	Gilgit Baltistan	TEVTA	Technical Education and Vocational Training Authority
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit	TVET SSP	Technical and Vocational Education and Training Sector Support Programme
GPATI	German Pakistan Training Initiatives	TVET	Technical and Vocational Education and Training
GPCCI	German-Pakistan Chamber of Commerce & Industry	WBT	Workplace-based Training
IAC	Industry Advisory Committee	WCCI	Women Chamber of Commerce and Industry



PREFACE

Competent and well-motivated employees are indispensable assets of any company. Such employees have the skills, knowledge and attitudes required by employers.

The creation of these attributes is the role of Technical Vocational Education and Training (TVET). Likewise, an efficient and effective, high quality TVET system is the gatekeeper for self-employment, company start-up, diversity and growth of the private sector, as well as employment and equitable local wealth creation.

The bulk of vocational training has been and still is delivered either through formal fulltime institution-based courses or non-formal and informal on-the-job training in companies of all sizes.

The background of the entire page is a close-up, high-resolution image of the Pakistani flag. The green field is prominent, with the white crescent and star clearly visible. The flag appears to be waving, with folds and ripples creating a sense of movement. The lighting is warm, with a yellowish-gold glow, particularly on the right side, suggesting a sunset or sunrise. The word "PAKISTAN" is superimposed over the center of the flag.

PAKISTAN

COUNTRY PROFILE


21st century is the most modern century, where one has to deal with technology at every single step for moving ahead. Human resource has to be skilled with technologies to fulfill the demands of the modern-day world.

Pakistan is a developing, resource-rich country but its people, especially youth, lacked technical training. *64% of the population of Pakistan is youth and over 2 million enter in the job market every year. This pool of formally educated youth could not get jobs as they are not trained to fulfill the requirement of the labour market.

It was 2011 when the government of Pakistan realized that our developing country necessitates a skilled workforce for ensuring sustainable economic development. Despite that, Pakistan's TVET system, technical education standards, curriculum, and teacher training materials have to be commensurate with the growing needs of national and international job market.

The significance of Technical and Vocational Education and Training (TVET) institutes was recognized as these are the vital elements of any policy initiative that aims to improve socio-economic conditions, create jobs, and alleviate poverty, and overcome many challenges in the sector, such as ensuring quality, access equity, and relevance of current TVET practices.

THE CHALLENGE

A man with a mustache, wearing a patterned sweater, is working with large wooden pipes. He is sitting and looking down at a pipe he is holding. The background shows a complex structure of many more wooden pipes, suggesting a construction or manufacturing site.

Pakistan's Technical and Vocational Education and Training (TVET) system was confronted with numerous challenges in the area of access, quality, equity and relevance. The limited number of training institutes were unable to cater to the needs of the growing young population.

With this backdrop, the TVET sector had been neglected in Pakistan since its independence and comparatively more resources were allocated for mainstream education. The status of TVET in Pakistan was considered to be low and had predominantly been operated by public institutions with a small percent of apprenticeships in companies and some private training providers.

There was a huge need for capacity building of the instructional staff as per the need of CBT philosophy. Lack of knowledge between the conventional system of training and CBT model had created the gap, which was one major factor responsible for not producing the required output.

TVET was also constrained by limited lab infrastructure and obsolete equipment. Quality and relevance of the training itself was not up to the mark, while there was limited cooperation between the public and private sector as far as TVET policy formulation and delivery is concerned.

THE **BEGINNINGS**

In April 2011, the five-year TVET Sector Support Programme was launched to support the Government of Pakistan in the National Skill Strategy implementation. The programme was jointly funded by the European Union, the Kingdom of the Netherlands and the Federal Republic of Germany. The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH implemented the Programme in partnership with National Vocational and Technical Training Commission (NAVTTTC) and in close cooperation with Technical and Vocational Training Authorities (TEVTAs) and other TVET stakeholders including the private sector.

The introduction of a new planning system adopted by NAVTTTC, TEVTAs, PVTC and other TVET bodies; the design of a management, information system; capacity building throughout the public TVET system; new training programmes for TVET teachers; a fund to stimulate innovative training and a dual training programme to encourage employers and TVET providers to work together were also included in the reforms.

Moving on with the aspiration to bring systematic reforms in TVET sector, the Federal Ministry of Education and Professional Education started work on drafting a National Policy for Technical and Vocational Education and Training (TVET) in March 2015. The policy was prepared with the collaboration of government, employers, and TVET representatives making a team known as Task Team and was the subject of widespread consultation.



THE FIRST PHASE

2011-2016

For decades, the technical and vocational education and training system (TVET) has been pursuing a number of different training and qualification pathways: formal, non-formal and informal, in companies and in private and public training institutions.



Policy Formulation

To overhaul and scale up the reform in the TVET sector, the government of Pakistan launched the first-ever national technical and vocational education and training (TVET) policy in March 2015.

The TVET policy, which feeds into the macro-economic and development policies such as Vision 2025, is seen as a step towards creating a paradigm shift in the delivery of skills training aiming at equipping millions of young men and women with employable skills.

Pakistan needs skilled workers so that industry and overall businesses can compete in the regional as well as international markets, because a better-qualified workforce increases competitiveness, productivity, and efficiency.

Similarly, the policy document also talks about the introduction of a national quality-based system to classify the qualifications within the TVET sector.



Launch of **NATIONAL TVET POLICY**

The launch of Pakistan's first National TVET Policy in March 2015 reflects Government's commitment towards providing access to high quality training for young people.

Rollout of **National Skills Strategy**

To support the Government of Pakistan's endeavours of reforming the TVET system under the National Skills Strategy (NSS), TVET Reform Support Programme, was launched in 2011.

In the first phase of reforms, the TVET Sector Support Programme (SSP) has been designed to implement the National Skills Strategy (NSS) in line with its several objectives and key interventions.

Identifying the vital importance of skill development in achieving long-term economic and social growth, the government was committed to overhauling its TVET system, as aimed and detailed in the National Skills Strategy (NSS) 2009-2013.

New Apprenticeship Law & Cooperative Vocational Training

In the past, the TVET Sector Support Programme has successfully piloted this type of training arrangement under the term 'Cooperative Vocational Training (CVT)'. For trainees who are new entrants into TVET and are recruited by companies, the CVT scheme differs little from formal Apprenticeship, save for the inclusion of all company sizes and the arrangement under CBTA and its delivery modalities.

Encouraging results were registered through the Training Fund of the TVET Sector Support Programme in Sindh and Balochistan, in which different approaches of WBT were applied. Overall, the Training Fund was aimed at enhancing the employability of trainees through workplace-based training.

Demand-oriented non-formal and informal on-the-job training lacked the important elements of well-structured training with required theoretical knowledge leading to recognised qualifications, whilst restricting labour mobility and acceptable living wages.

Only formal Apprenticeship as a time-bound qualification pathway combines practical training in the workplace with theory and often, practical training in training institutes.

However, the Apprenticeship system catered for less than 5% of the entire formal trainee population. Against this background, and due to the fact that training in the private and public sector is not linked with each other led to a duplication of the national training effort and created a mismatch between labour-market supply and demand. Revision of the Apprenticeship Ordinance 1962, development of Human Resource Development (HRD) policy for TVET teachers and piloting of a comprehensive monitoring and evaluation system within the TVET sectors were some of the other significant results of the TVET reform achieved in the past.

The TVET policy suggested various measures to achieve objectives. The policy set out a target of creating one million quality training places each year and estimated that if successfully

implemented one in four school leavers will be able to get an apprenticeship to join a training programme by 2050.

Formal Apprenticeship, which is the 'flagship' of workplace-based training, benefited only a small number of the entire trainee population. In the foreseeable future, institution-based training was likely to continue to dominate the delivery of formal TVET. However, it was anticipated that an effective linkage between formal institutional-based training with non-formal and informal workplace-based training (and vice-versa) would eventually become the norm for training and qualification pathways. The systematic approach envisaged the strengthening of coordination and ownership by the involved partner organizations.

In this way, CVT development showcased that the involvement of enterprises in the planning and delivery of training is key and provided lessons learnt for the TVET reform process and the modernization of the apprenticeship scheme.

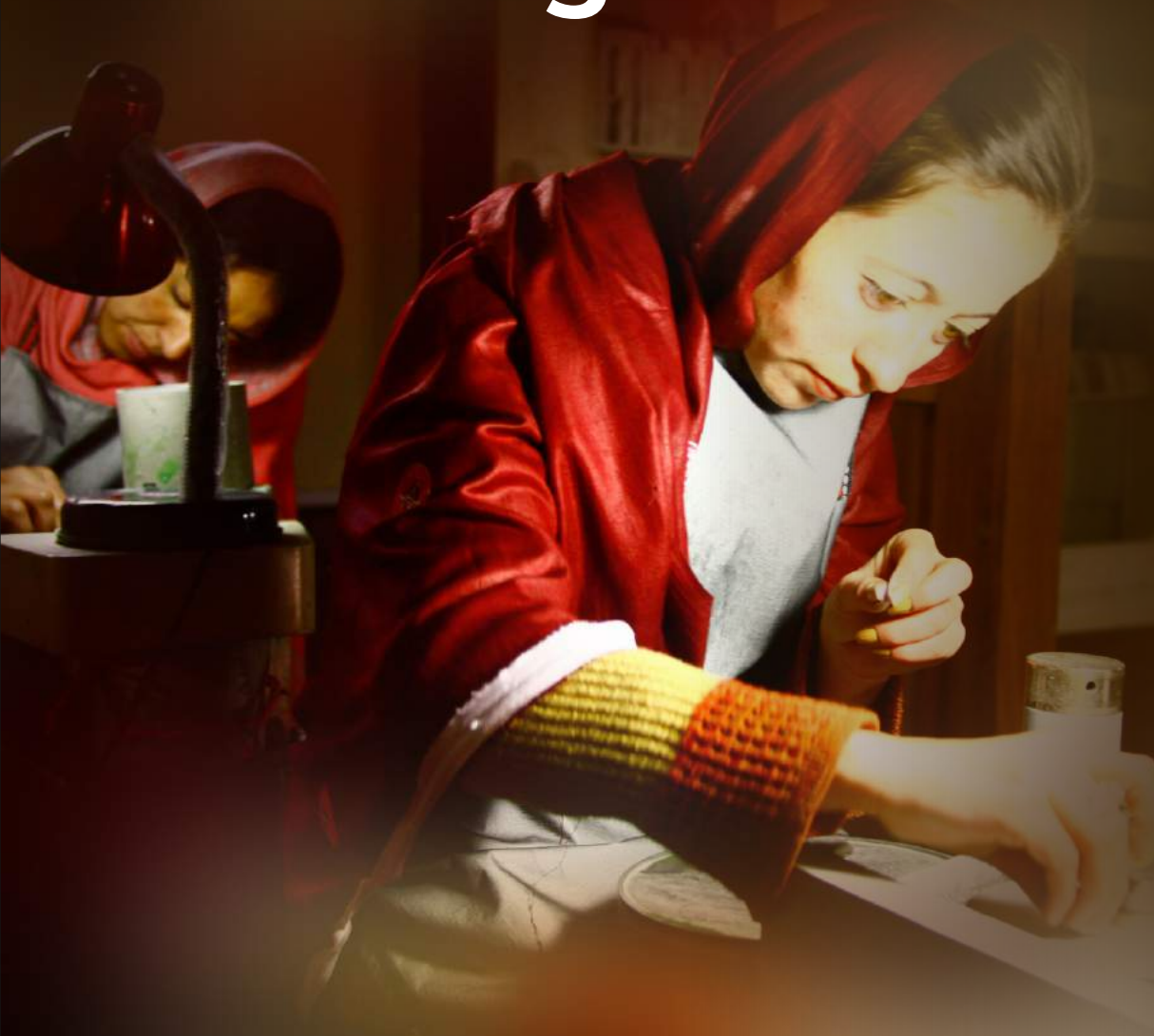
CHANGING
LIVES
THROUGH
SKILLS



GERMANY PAKISTAN TRAINING INITIATIVE



Germany Pakistan Training Initiative



There was a weak linkage between training delivery and the market needs, resulting in training institutes across Pakistan producing a workforce, which did not meet the demand of the market. A major reason was the limited involvement of the employers in the training delivery process.

Germany Pakistan Training Initiative (GPATI), was a skills development project aiming at equipping young Pakistani men and women with employable skills. GPATI not only strengthened the bilateral economic cooperation between Pakistan and Germany but also contributed to a paradigm shift in the skills development system of Pakistan. This German system had been modified and developed into an appropriate model of cooperative training to match Pakistan's need for a highly-skilled workforce.

Under Germany Pakistan Training Initiative, numerous activities were undertaken to promote Cooperative Vocational Training (CVT) which is based on German 'Dual-Training' model.

BMZ & GIZ – The Funding

The German Federal Ministry for Economic Cooperation and Development (BMZ) funded the project in its pilot phase and the implementation was managed by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, a federal enterprise, which supports the German Government in achieving its objectives in the field of international cooperation for sustainable development around the globe.

Cooperative Vocational Training

One way of training for your future occupation is by pursuing a dual vocational training programme. Such programmes offer plenty of opportunities for on-the-job training and work experience. Programmes usually last between two and three and a half years and comprise theoretical as well as practical elements.

Participants spend one or two days a week, or several weeks at once, at a vocational school where they acquire the theoretical knowledge that



they would need in their future occupations. The rest of the time is spent at a company. There they get to apply their newly acquired knowledge in practice, for example by learning to operate machinery. They get to know what their company does, learn how it operates and find out if they can see themselves working there after completing their training.

This combination of theory and practice gives participants a real head start into their job: by the time they have completed their training, they would not only have the required technical knowledge, but they would also have hands-on experience in their job.

The Programme, therefore, supported the introduction of cooperative training in Pakistan, in which training institutes and enterprises shared the responsibility for vocational education. The approach of the component “Cooperative Training and Green Skills” was based on the German Dual Training System and had been modified to match Pakistan's need for a skilled workforce.

The component assisted training institutes, enterprises, and TVET authorities to implement the courses.

The Beginnings

The Cooperative Vocational Training (CVT) was initially launched as Germany Pakistan Training Initiative (GPATI), entailing certain instruments to involve enterprises in planning and delivery of cooperative training. The objective of this training programme was to showcase that the involvement of enterprises is key for ensuring demand-orientation in the TVET-sector aimed at teaching the right knowledge, skills and attitude for performing a job. This scheme had been initiated in Punjab and Sindh while the component then extended its activities to innovative sectors, such as further training in the area of green skills that include renewable energy and energy efficiency. On the basis of the lessons learnt from the pilot phase, the initiative was then transformed into a systematic approach to promote CVT in Pakistan.

A total of 143 enterprises including Business Industry Associations (BIAs) were involved in planning and training delivery. CVT focused on developing a comprehensive

partnership between TVET institutes and companies in the field of vocational training through combining theoretical and simulated practical training in TVET institutes with workplace-based learning in the companies. Rules and procedures for training partners were needed to realize training and ensuring the quality as well as issuing national and international recognition of certificates in the light of National Vocational Qualifications Framework (NVQF).

The systematic approach envisaged the strengthening of coordination and ownership by the involved partner organizations. In this way, CVT development showcased that the involvement of enterprises in the planning and delivery of training is key and provides lessons learnt for the TVET reform process and the modernization of the apprenticeship scheme.

Scheme Benefits:

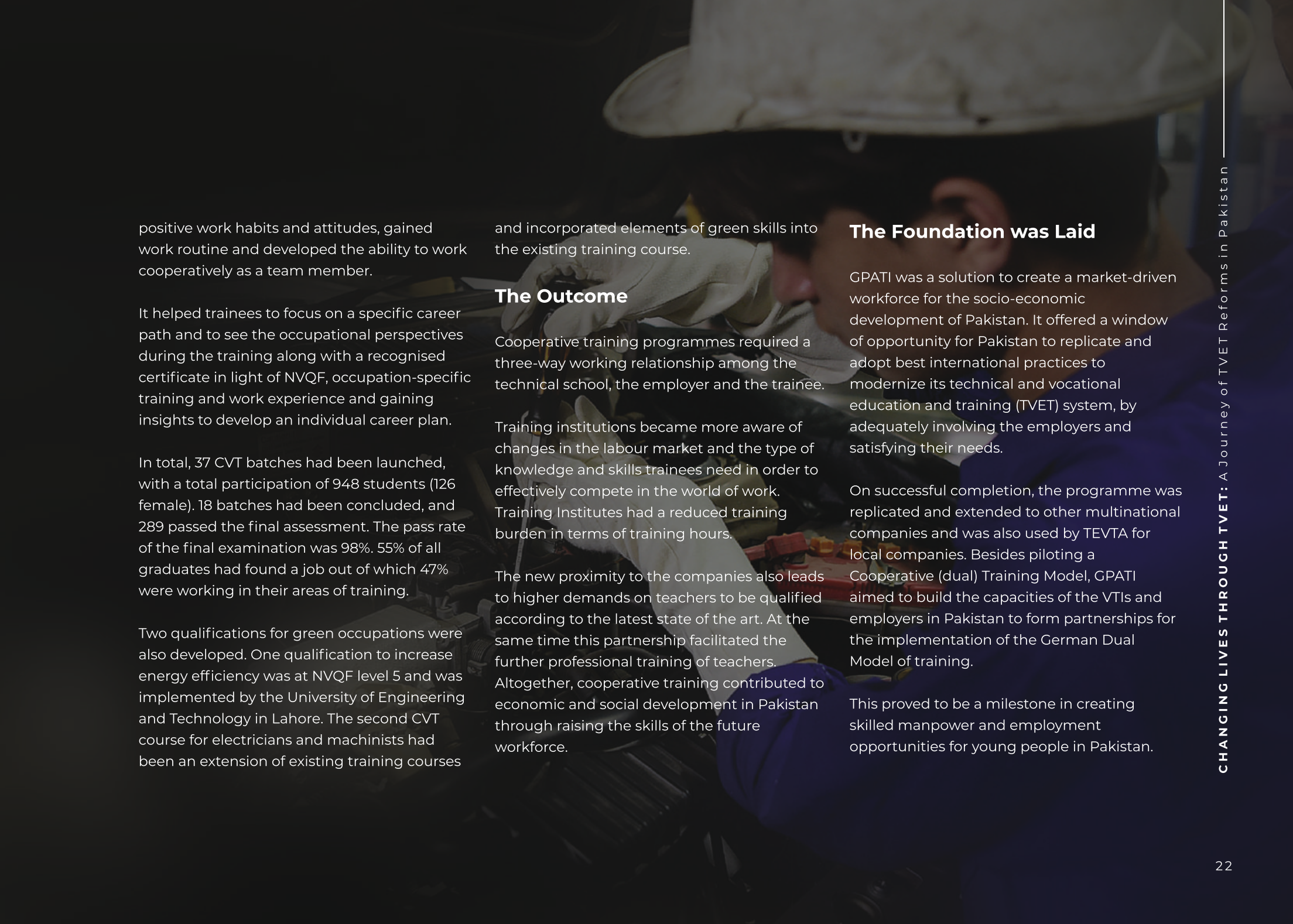
The cooperative vocational training scheme generated multiple benefits for the involved stakeholders.

Employers Benefits:

A participating company had direct and indirect benefits that included reduced setting-in costs for new staff along with higher productivity through recruiting professionals, who were trained by the same enterprise according to its requirements. It also gave a better company image in the market especially for branding purposes and helped the company to get involved in all stages of implementation for a focus on its skill needs.

Trainees Benefits:

Young people gained access to vocational training, which considered the needs of the labour market as the cooperative vocational training provided the opportunity to seek on-the-job knowledge, work experience and technical skills at the shop floor level. It supported the delivery of the theoretical knowledge by practical application and in problem-solving hands-on work situations. Through this experience, a trainee developed



positive work habits and attitudes, gained work routine and developed the ability to work cooperatively as a team member.

It helped trainees to focus on a specific career path and to see the occupational perspectives during the training along with a recognised certificate in light of NVQF, occupation-specific training and work experience and gaining insights to develop an individual career plan.

In total, 37 CVT batches had been launched, with a total participation of 948 students (126 female). 18 batches had been concluded, and 289 passed the final assessment. The pass rate of the final examination was 98%. 55% of all graduates had found a job out of which 47% were working in their areas of training.

Two qualifications for green occupations were also developed. One qualification to increase energy efficiency was at NVQF level 5 and was implemented by the University of Engineering and Technology in Lahore. The second CVT course for electricians and machinists had been an extension of existing training courses

and incorporated elements of green skills into the existing training course.

The Outcome

Cooperative training programmes required a three-way working relationship among the technical school, the employer and the trainee.

Training institutions became more aware of changes in the labour market and the type of knowledge and skills trainees need in order to effectively compete in the world of work. Training Institutes had a reduced training burden in terms of training hours.

The new proximity to the companies also leads to higher demands on teachers to be qualified according to the latest state of the art. At the same time this partnership facilitated the further professional training of teachers. Altogether, cooperative training contributed to economic and social development in Pakistan through raising the skills of the future workforce.

The Foundation was Laid

GPATI was a solution to create a market-driven workforce for the socio-economic development of Pakistan. It offered a window of opportunity for Pakistan to replicate and adopt best international practices to modernize its technical and vocational education and training (TVET) system, by adequately involving the employers and satisfying their needs.

On successful completion, the programme was replicated and extended to other multinational companies and was also used by TEVTA for local companies. Besides piloting a Cooperative (dual) Training Model, GPATI aimed to build the capacities of the VTIs and employers in Pakistan to form partnerships for the implementation of the German Dual Model of training.

This proved to be a milestone in creating skilled manpower and employment opportunities for young people in Pakistan.

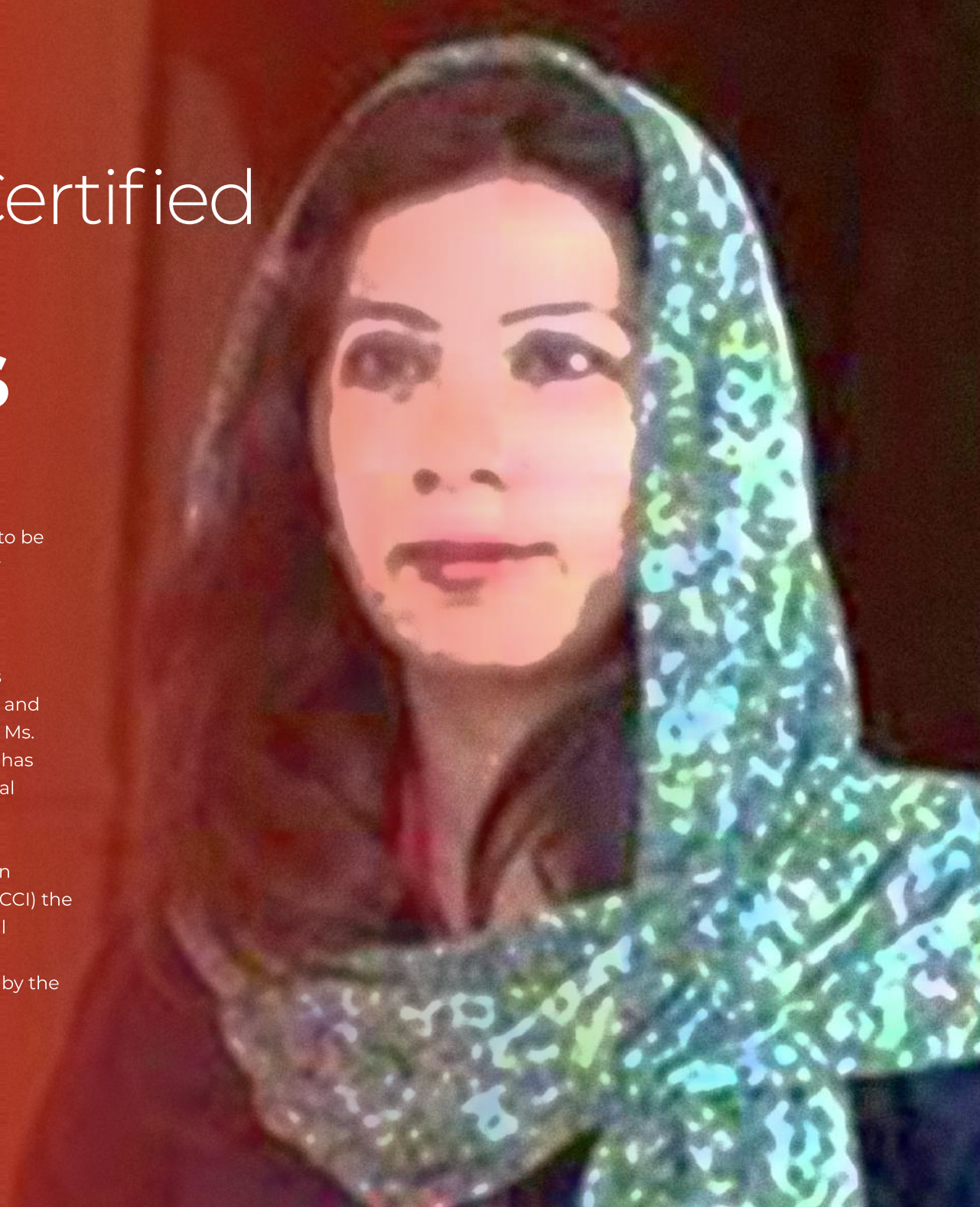
Facilitating Internationally Certified **Vocational Counsellors**

Kiran Zubair

Confidence comes from discipline and training and it proves to be true for Kiran Zubair, one of Pakistan's recently internationally certified experts in vocational counselling and placement.

“The role of a vocational counsellor is to facilitate the aspiring youngsters and this is something which brought tremendous change in my way of dealing when I got the required training and subsequently the international certification,” says a confident Ms. Zubair. She is one of the 31 experts from across Pakistan, who has recently been awarded international certification for vocational counselling and job placement services.

With 31 participants, who passed the international certification process of the German Chamber of Commerce and Industry (CCI) the number of internationally certified experts, offering vocational counselling and job placement services have reached 49. The examination for the international certification was supported by the TVET Sector Support Programme.



It's all about taste and healthy eating; **Something is Cooking**


Shabnam Naz

The mouth-watering menu included Chicken Karahi, Mash ki daal and Raita all for only Rs. 230, which the girls of professional cooking trade were preparing to be delivered to the surrounding offices. Finely packed in small silver foiled boxes, the deal is enough for 2-3 people. The aroma and taste of finger-licking food was a food lover's delight. The next day's menu was to be chicken chop suey and more menu was in the pipeline.

Women Technical Training Centre (WTTTC) had started an incubator for these girls, who were enrolled as the first batch of Professional Cook Level-II as a part of Competency-Based Training (CBT). They are given free shop space in the centre's premises along with groceries and other cooking items for 2-3 months free of cost by the centre so that they could stand on their feet. The deal's prices are kept much lower than the market rates to bring maximum clientele. "Once the girls are able to gather good clientele, they will continue this business with their own capital", says Ms. Shabnam Naz, a smiling, proactive principal of WTTTC, Samangali Road, Jinnah Town, Quetta.

PRIVATE SECTOR PARTICIPATION

A blurred background image of a person wearing a green apron over a white shirt, working in a kitchen. Steam is rising from a pot on the stove, suggesting cooking or food preparation.



Pakistan's TVET Policy asks for greater involvement of the private sector in policymaking and implementation to match technical and vocational education with the demands of the labour market. The policy emphasises that companies need to play a key role in strategy formulation, governance and management, standard-setting and the implementation of training programmes.

The TVET Policy, therefore, proposes to develop an inclusive framework to ensure active participation of companies, which creates mutual benefits for all stakeholders while minimising administrative hurdles.

TVET sector recognized member associations, chambers and large enterprises as the key stakeholders for the involvement of the private sector to design, develop and deliver Technical and Vocational Education & Training. It was extremely desired by the TVET framework to engage private sector to establish and strengthen employer-led institute management committees and increasing their participation in TVET related decision-making bodies at federal as well as provincial/regional level.

More than 1,500 agreements were facilitated between provincial TEVTAs/ training institutes and private sector companies for workplace-based training. Representatives of our partner private industries also shared their opinions about the initiative of TVET Sector Support Programme for involving the private sector to provide technical and vocational training to our youth.



Tobias Becker

Country Director GIZ Pakistan

When the programme started, we saw that there was very little engagement of the private sector and therefore, the demands of the private sector in imparting the training were not really met. So, with the establishment of the National Vocational Qualification Framework we had strong engagement of the private sector to elaborate together the right curriculum for the students.

The engagement of the private sector in a lot of different sectors we are working with, is very relevant. We all know that in development cooperation we cannot work without the involvement of the private sector, therefore, GIZ engages the private sector in different initiatives. We have special initiatives as well, for example in Egypt where we work in the energy framework together with companies like Siemens and established corporations which is beneficial to the organization, to the goals of development and also for the private sector.

So, if you look at the global challenges, which are described as Sustainable Development Goals, they can only be achieved if we work together, and that means we work together with the academia, with the social society, but most importantly the private sector because private investment and private engagement plays a very vital role to achieve them.

A photograph of Iris Cordelia Rotzoll, a woman with short grey hair and glasses, wearing a dark blue patterned shawl over a light-colored patterned top. She is speaking at a podium with a microphone. The background features logos of the European Union and the United Nations.

Iris Cordelia Rotzoll

Head of Programme, TVET Sector Support Programme

In TVET SSP we support the Pakistani government first and foremost with the enhancement of training institutes so that they can deliver modern training according to the needs of the market in line with the Competency-Based Training and Assessment methodology so that the graduates can find a job in the market or income opportunities through self-employment.

We have put a very high emphasis on the sustainability of our activity, so in all what we have been doing, we have been doing this side by side with our partners in order to put them in a position to take over, once the programme will finish.

It makes me feel very proud that in TVET SSP together with our national partners, we are achieving to bring new perspectives to young people and to see this transformation of the young people from the training centre to their role in job, extremely motivating.

The determination of **Welding a Life**

Gul Hasan

Working with a welding rod emitting heat of 150 degree centigrade, Gul Hasan was trying to learn industrial welding, as part of his On the Job Training (OJT) at the welding department of Bolan Castings Limited (BCL), a private company operating in Hub, Balochistan.

It is said that a welder possesses the hands of a surgeon, the mind of an artist and the steady hand of a sniper. With this rare skill set, which makes his hands and clothes dirty, Gul Hasan is one of the beneficiaries of the TVET Sector Support Programme, who was enrolled in the 6-month welding course at Pak-German Technical Training Centre, Hub, Balochistan. He is now doing his OJT at Bolan Castings, after completing his institutionalized training.

Son of a laborer father, the 18 years old trainee, a resident of Hashim Goth, which is five kilometers from the institute, travels via bike to reach the institute or the enterprise. Having studied till matric, Gul Hasan is at the second number among his six sisters and two brothers. "I had learnt flat welding and vertical welding at the centre. Before inducting me as an intern here for the welding job, they took my test and I got selected."



A photograph of a man with a grey beard and glasses, wearing a white shirt, working on a mechanical device. He is using a tool to adjust a part of the machine. In the background, two other men are visible, one wearing a cap and the other with a mustache and glasses. The scene appears to be a workshop or a technical training environment.

Institute Accreditation

The National Vocational and Technical Training Commission (NAVTTTC) introduced for the first time an accreditation system for TVET institutes to assure consistent quality standards of programs and institutes throughout Pakistan. Accreditation is an instrument of external quality assurance, which needs to be complemented by internal quality assurance on the side of the TVET institutes.

The institutes are required to produce a self-assessment report that forms the basis of the accreditation application. Accreditation is a process of assessment through which the discipline(s)/trade(s) of TVET institutes are evaluated by the third-party assessors confirming the quality in accordance with the prescribed standards.

It is a continuous process of assessment leading to accredited programmes and institutions based on prescribed standards and criteria. The NAVTTTC, which is the apex body to set national standards for quality of TVET, accredit the TVET institutes or programmes on the recommendation of TVET Accreditation and Quality Evaluation Committee (TA&QEC), which were set up for this purpose comprises of academia and private sector representatives.

Under the TVET Reform Support Programme, a total of 1,000 TVET programmes were accredited by December 2016. A total of 1,127 TVET programmes/institutes were accredited in different categories and hundreds of more institutes/programmes were in the process of accreditation.

National Vocational Qualifications Framework

TVET Reform Support Programme promoted the introduction of competency-based training (CBT&A) and design of a National Vocational Qualifications Framework (NVQF).

An overwhelmed debate was held on having single qualification, assessment and certification system to support skills development throughout the country. For this purpose, the Pakistan National Vocational Qualifications Framework (NVQF) was established as the core component of a national integrated TVET system. After a series of meetings with key TVET stakeholders, Pakistan's first National Vocational Qualification Framework (NVQF) was unveiled in March 2015. NVQF implementation initiated with the launch of Competency-Based Training (CBT) in which 60 trades were piloted in 142 TVET institutes with an expected 20,000 completers.

In this regard, the newly launched National Vocational Qualifications Framework (NVQF) played an important role to ensure the quality of the training delivery in a way that it had the buy-in from the employers at home and

abroad. Pakistan launched its first-ever National Vocational Qualifications Framework (NVQF) to improve quality, relevance and employability of the skills training in the country. The formulation of NVQF is an important pillar of the National Skills Strategy (NSS) and was developed after repeated rounds of consultations with the major stakeholders of public and private sectors.

The NVQF is a key component in the establishment of a coherent national system of qualifications, assessment and training that supported implementation of the national goals expressed in the NSS and the national TVET policy. The main purpose of NVQF was to improve the quality of outcomes, increase the quality of skills and provide sufficient knowledge that meets the needs of the industry. The underlying objective of NVQF was to facilitate both horizontal and vertical progress by learners within the TVET system and to provide a basis for recognition of qualifications at national and international levels.

Additionally, it provided guidelines for

recognition of prior learning since more than 70 percent of the labour force was trained in the informal sector in Pakistan. The NVQF is an effective tool to increase access to skill recognition because it focuses on qualifications. Qualification is the statement of the standards that need to be achieved. A qualification exists separately from any learning pathway that an individual might take. As a result, the pathway of learning that an individual has taken is less important than the achievement of the standards. Therefore, the NVQF was designed to recognize the achievement of skills from many pathways.

The NVQF integrates formal, in-formal and non-formal achievement, which resulted into increased accessibility to the recognition of skills. The NVQF provided an institutionalized and natural linkage with the industry in designing a training programme as well as delivery and assessment of the learners.

The NVQF is also providing the framework for the delivery of Competency Based Training & Assessment (CBT&A), which was piloted in more than 142 TVET institutes across Pakistan in 60 different trades.



TEVTA Capacity Building

The Technical Education and Vocational Training Authorities (TEVTAs) are the prime agencies for the designing, developing and delivering of the technical and vocational education and training (TVET) at the provincial/regional level.

The TEVTAs are at the forefront of the implementation of the reform envisaged under the National Skills Strategy (NSS). Under the TVET Reform Support Programme, efforts were focused on the development of the overall management and the operational system of TEVTAs.

As a result of such interventions, all the TEVTAs and the designated departments for TVET in the provinces and regions developed their respective human resources development plans, strategies and manuals. Similarly, TEVTAs in Punjab, Sindh and AJK received ISO certification, which helped these organizations to position as corporate entities within their respective areas. Around 800 mid-career and senior officials received training in management skills. As a holistic capacity development approach, managerial, administrative and strategic capacities and competencies of TEVTAs were strengthened in order to meet the increased provincial responsibility for TVET development after the 18th Constitutional Amendment.

Support was provided in order to promote the private sector engagement through public private partnership (PPP). As a result, TEVTAs identified seven different types of PPP ventures and accordingly institutionalized some of them with varying degrees of success.



COOPERATIVE VOCATIONAL TRAINING

Pakistan's TVET policy asked for a greater involvement of the private sector in policymaking and delivery of training to match the demands of the labour market. Keeping this in mind, a Cooperative Vocational Training (CVT) scheme had been introduced.

The CVT took up this idea and proposed procedures on how to facilitate the cooperation between TVET authorities, training institutes and enterprises in planning and delivering training courses. The aim was to link institutional training in training institutes with on-the-job training in enterprises to ensure that trainees learn the relevant skills required to perform a job.

The CVT concept, therefore, promoted the value of shared responsibility between public and private stakeholders and provided various mechanisms to involve enterprises in the planning and delivery of training courses. The first batch of training was launched in Karachi in 2013 with 10 multinational companies and 2 private training institutes as Germany Pakistan Training Initiative (GPATI).

Within a year it was replicated in Lahore with 52 local enterprises and 3 TEVTA Punjab institutions. As of September 2016, a total of 10 training institutes and 143 national and multinational companies were engaged in joint development and delivery of 10 CVT courses.

The pass-outs of this training scheme had greater employability prospects. The scheme also generated advantages for participating enterprises and training institutes through having a trained and qualified human resource.

This approach was based on promising TVET models that had proven successful in delivering high quality, labour market-oriented and inclusive training.

Journey of Hope: From Deep Waters to Lands of **Opportunity**

Tanvir Ahmed

Dera Ghazi Khan is a strategically located district of Punjab. Things got worse during the floods of 2010 and later on due to flash floods. People lost lives, houses, belongings, livelihood and many other things but what they clung to was just hope.

It was critical to enable them to earn for themselves and their families and rebuild all they had lost, says Tanvir Ahmed, Principal, Vocational Training Institute (VTI), Dera Ghazi Khan. "Our institute is running a programme under which we train the deserving youth in welding and fabrication trades. These professions are high in demand, both within the country and abroad, and promise a bright future to the skilful," he adds.

Khizer Hayat, 29, is a beneficiary of the ongoing training programme. He has done his Diploma in Commerce (D. Com) and tried endlessly to find a job but failed miserably. He was highly frustrated when he made a major decision of his life about getting admission in the welding course offered under the FIT programme. Khizer gets Rs 2,000 in stipend under the project and now, he is mulling an offer from Imran Mechanical Works-manufacturers of agricultural equipment.



A man with dark hair and a beard, wearing a dark blue polo shirt, is focused on working with a machine. He has two white patches on his shirt: one on the left chest that reads 'TVET Sector Support Programme' and another on the right sleeve that reads 'TVET Sector Support Programme'. The background is blurred, showing an industrial or workshop setting with warm lighting.

CAUSEWAY TOWARDS COGNIZANCE

The background of the slide is a blurred photograph of a person's hands working on a white, 3D-printed mechanical component. The person is wearing a white lab coat. The scene is set in a workshop or laboratory environment with various tools and equipment visible in the background.

COMPETENCY BASED TRAINING & ASSESSMENT THE PILOTING






Competency-based Training & Assessment the Piloting

The Programme supported the introduction of cooperative training in Pakistan, in which training institutes and enterprises shared the responsibility for vocational education. The approach of the component “Cooperative Training and Green Skills” was based on the German Dual Training System and had been modified to match Pakistan's needs for a skilled workforce. The component assisted training institutes, enterprises and TVET authorities to implement the courses.

The Cooperative Vocational Training (CVT) was initially launched as Germany Pakistan Training Initiative (GPATI), entailing certain instruments to involve enterprises in planning and delivery of cooperative training since 2013. The objective of this training programme was to showcase that the involvement of enterprises is key for ensuring demand-orientation in the TVET-sector aimed at teaching the right knowledge, skills and attitude for performing a job.



This scheme was initiated in Punjab and Sindh while the component extended its activities to innovative sectors, such as further training in the area of green skills that includes renewable energy and energy efficiency. On the basis of the lessons learnt from the pilot phase, the initiative was then transformed into a systematic approach to promote CVT in Pakistan.

CVT focused on developing a comprehensive partnership between TVET institutes and companies in the field of vocational training through combining theoretical and simulated practical training in TVET institutes with workplace-based learning in the companies. Rules and procedures for training partners were needed to realize training and ensure the quality as well as issuing national and international recognition of certificates in the light of National Vocational Qualifications Framework (NVQF).

Scheme Benefits:

The cooperative vocational training scheme generated multiple benefits for the involved stakeholders.

Employers Benefits:

A participating company had direct and indirect benefits that included reduced setting-in costs for new staff along with higher productivity through recruiting professionals, who were trained by the same enterprise according to its requirements. It also gave a better company image in the market especially for branding purposes and helped the company to get involved in all stages of implementation for a focus on its skill needs.

Trainees Benefits:

Young people gain access to vocational training, which considers the needs of the labour market as the cooperative vocational training provided the opportunity to seek on-the-job knowledge, work experience and technical skills at the shop floor level. It supported the delivery of the theoretical knowledge by practical application and in problem-solving hands-on work situations.

Through this experience, a trainee developed positive work habits and attitudes, gained work routine and developed the ability to work cooperatively as a team member.

It helped trainees to focus on a specific career path and to see the occupational perspectives

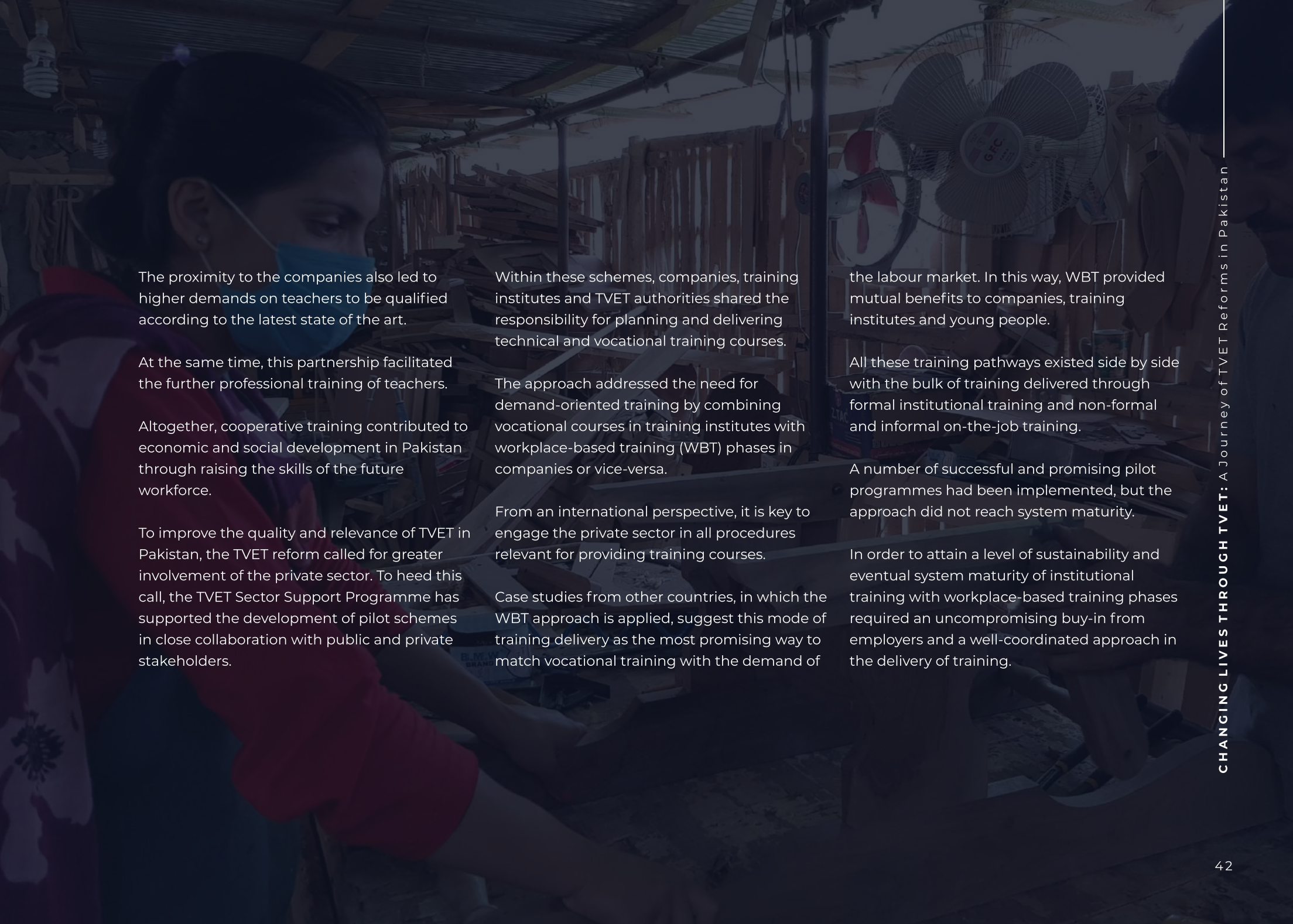
during the training along with a recognised certificate in light of NVQF, occupation-specific training and work experience and gaining insights to develop an individual career plan.

Training Institute Benefits:

Cooperative training programmes required a three-way working relationship among the technical school, the employer and the trainee.

Training institutions would become more aware of changes in the labour market and the type of knowledge and skills trainees needed in order to effectively compete in the world of work.

Training Institutes had a reduced training burden in terms of training hours.



The proximity to the companies also led to higher demands on teachers to be qualified according to the latest state of the art.

At the same time, this partnership facilitated the further professional training of teachers.

Altogether, cooperative training contributed to economic and social development in Pakistan through raising the skills of the future workforce.

To improve the quality and relevance of TVET in Pakistan, the TVET reform called for greater involvement of the private sector. To heed this call, the TVET Sector Support Programme has supported the development of pilot schemes in close collaboration with public and private stakeholders.

Within these schemes, companies, training institutes and TVET authorities shared the responsibility for planning and delivering technical and vocational training courses.

The approach addressed the need for demand-oriented training by combining vocational courses in training institutes with workplace-based training (WBT) phases in companies or vice-versa.

From an international perspective, it is key to engage the private sector in all procedures relevant for providing training courses.

Case studies from other countries, in which the WBT approach is applied, suggest this mode of training delivery as the most promising way to match vocational training with the demand of

the labour market. In this way, WBT provided mutual benefits to companies, training institutes and young people.

All these training pathways existed side by side with the bulk of training delivered through formal institutional training and non-formal and informal on-the-job training.

A number of successful and promising pilot programmes had been implemented, but the approach did not reach system maturity.

In order to attain a level of sustainability and eventual system maturity of institutional training with workplace-based training phases required an uncompromising buy-in from employers and a well-coordinated approach in the delivery of training.

Turning Dreams into Reality Skilfully

The city of Muzaffargarh lies along the bank of the Chenab River. This proximity is a boon for its thriving agricultural sector. In 2010, however, the area was shown the devastating downside of being so close to a thundering watercourse when it experienced one of the worst floods in the region's history, drowning countless villages and localities in its path. It was with the aim of lending these victims of the flood a chance at self-uplift that the Punjab Vocational Training Council launched a free training program for young men in the field of welding and fabrication at the Vocational Training Institute (VTI) in Muzaffargarh. Admission into the course was reserved for only the most deserving candidates who had suffered directly or indirectly from the floods.

Asif, a trainee, has his parents, four brothers, and a grandfather to look after. His father was a mason but in poor health, so Asif realized that he himself would have to support the family financially and undo the losses they had suffered. A friend told him about the training course being offered and he applied immediately. "Such opportunities don't knock on your door twice," Asif enthuses. "We're getting world-class training on the most modern machines absolutely free. We also get free uniforms, free books and a Rs. 2,000 stipend. It's almost like a fairytale!"

E-Learning Centres

Effective interaction between teacher and the learner plays an important role in the provision of quality technical and vocational education and training (TVET). Relevance and quality of TVET training can only be imparted if the teaching methods are relevant to what is needed in the job market.

Within the TVET sector of Pakistan, the training of TVET teachers/instructors both pre-service and in-service was uncoordinated and marred by constraints such as lack of equipment, insufficient financing and lack of incentives to train.

To address this challenge, out of 15,000 TVET teachers available in the public sector institutes, a total of 8,500 TVET teachers/instructors were trained in pedagogy skills by adopting a blended learning approach.

As per the plan, first 100 lead trainers/e-tutors (LT/ETs), including 26 females, selected from the TVET institutes functioning across Pakistan were trained by using modern e-learning method. These LT/ETs, then, imparted training

to TVET teachers in their respective regions in the 18 e-learning centres, which were established in Punjab, Sindh, Khyber Pakhtunkhwa, FATA, Balochistan, Gilgit-Baltistan, Azad Jammu and Kashmir and Islamabad Capital Territory.

To provide the TVET system with qualified teachers, for the first-time in Pakistan, a post-graduate study Programme – B.Ed in Technical Education was introduced in 2014. This programme was launched jointly by the University of Punjab, the Virtual University and the German Technical University of Kaiserslautern.

Realizing the potential of this study programme, the Karachi University also replicated this study programme. Offered by the Faculty of Education of the Karachi University, the study programme has been renamed as “Post-Graduate Diploma” to adjust to the local needs. The programme was started in February 2016 in close cooperation with the Sindh Technical Education & Vocational Training Authority (S-TEVTA) in Karachi.

GENDER

is no barrier in skills development

Situated at a distance of around 70 kilometers from Punjab's provincial headquarter Lahore, the district of Chunian has a large population of transgenders. In a startling move, the Vocational Training Institute (VTI), Chunian announced a training course on industrial garments stitching, exclusively for transgenders. Being part of a marginalised segment of society, left to live on their own, the transgenders were overjoyed to know that somebody cared enough to lend a helping hand. Abdur Rehman, the principal of VTI Chunian explains that the ultimate goal of this programme is to train and enable transgenders to find jobs and that too in a high-demand profession such as industrial garments stitching.

Shaukat Ali is a shining example of someone who has taken up this training course with great enthusiasm. A transgender hailing from the village of Nathoki, Kot Radha Kishan, District Kasur, she was just 10 when signs of a change of gender began to appear in her body and her parents' attitude towards her changed. Today, she is very happy to have found a light at the end of the tunnel. Having learnt to work on five different stitching machines, she says she is able to stitch dresses for both men and women. She is a step ahead of many others in the class as she is already running a small stitching center in her house and earning a healthy income.



Fund For Innovative Training

A Fund for Innovative Training (FIT) was set up as an instrument to assist the TVET reform in Pakistan through stimulating and supporting innovative approaches to skills development. Designed as a funding facility for providing support to organizations in Pakistan, the FIT aimed to develop, introduce, expand or pilot skills development initiatives in line with National Skills Strategy priorities.

It had potentially generated new experience about how best to address access, equity, quality and relevance challenges in the Pakistani technical and vocational education and training system.

FIT had been designed to generate innovation in the skills development landscape of Pakistan. FIT-funded projects, therefore, brought new solutions to identified quality, relevance, access and cost

challenges. This included new avenues of training delivery, new partnership models between training providers and stakeholders, new curricular concepts or new approaches to include neglected target groups.

Objectives of the FIT were translated into four windows such as 1) green skills, 2) access for marginalized groups, 3) getting enterprises onboard and 4) promotion of self-employment. Through FIT, 36 short-term vocational training projects were implemented which benefitted around 125,000 men and women across Pakistan.

In addition, 2 learning regions were also established in Frontier Region Peshawar and Swat that benefitted 1,800 men and women in areas of small-scale agricultural and fish farming.

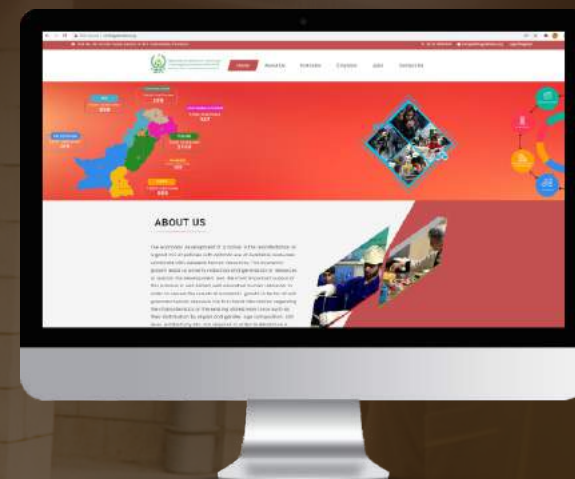
National Skills Information System

A reliable labour market information system plays an important role in collecting and analysing real-time information to make evidence-based TVET policies and decisions. For this purpose, a National Skills Information System (NSIS) was established at the National Vocational and Technical Training Commission (NAVTTTC).

It is a web-based information collection and dissemination system that provides timely and accurate information on demand and supply analysis for job seekers, students, TVET planners, training institutions and industry/employers. The NSIS can be accessed through website: www.skillingpakistan.org.

The NSIS helped prospective students on questions such as selection of trades, institutes and the occupations with higher prospects of employability. For training institutions, the system helps to anticipate the skills sets needed in the job market as well as the performance of their respective trained people in the job market.

For employers, it offers an insight about the pool of available skilled workers as well as their geographical locations. Similarly, the policymakers are able to track the number of trainees enrolled, passed out and employment status in various professions to help reduce the skills mismatch in the labour market.



As of September 2016, data of approximately 700,000 skilled workers and over 70,000 employers was available on the website. Around 900 visitors visited the website and over 400 job seekers upload their profiles on the website daily. The data of over 3,581 TVET institutes (both public and private) was also available giving information such as institute profile, courses offered, teaching faculty and the infrastructure details.

Through the provision of timely and accurate information on the basis of demand and supply analysis the NSIS created sustainable linkages between TVET institution and the employers.

Vocational Counselling & Job Placement

Young men and women need counselling in career selection to make informed choices. While selecting a career path within the technical and vocational education and training (TVET), the main idea behind counselling is to first apprise the trainee about the trades and occupations, which are high in demand in the market and secondly help the trained ones finding a decent job in the area they are trained for.

Effective delivery of employable skills within formal TVET system is not possible without structured vocational counselling and job placement services. Career counselling is vital for labour force development of a country and has increasingly been recognized as an important element of employment promotion and efficient labour market practices.

Pakistan's youth needed to be guided to proper vocations and employment opportunities that best utilize their talents. There was no unified structure available for the TVET trainees for vocational counselling and job placement in Pakistan. The TVET

Reform Support Programme helped to set up 102 Vocational Counselling and Job Placement Centres (VC&JP) across Pakistan.

The support included the provision of necessary equipment and training of 247 vocational counselling and job placement officers, nominated by the various public and private sector TVET delivery organizations. The main objective of this intervention was to establish a knowledge base and quality of service among people working in VC&JP services or employment-related topics such as human resource management.

Selected staff were trained on how to provide client-oriented counselling and how to liaise with local industry. The training of vocational counselling and job placement officers was conducted in phased manners, as 49 among the total number also received international certification.

In 2015, these officers passed the international certification process of the German Chamber of Commerce and Industry (CCI).

THE SECOND PHASE

2017-2021



Inauguration Ceremony Support to the Technical and Vocational Education and Training Sector in Pakistan (TVET III)

December 2016
Islamabad

MARRIOTT
ISLAMABAD

The second phase of the programme was initiated from 2017 for further five years with an estimated budget of €53 millions, jointly contributed by the European Union and Germany.

What is new; what is different?

- The adoption of the National Vocational Qualification Framework (NVQF)
- The change to competency-based training and assessment (CBTA)
- The recognition of the importance of the workplace-based training (WBT)



SUSTAINABILITY

We achieved a lot since 2011 when reforms were brought out in the TVET Sector. The formulation and approval of a National TVET Policy, development of National Vocational Qualification Framework (NVQF) and piloting of Competency Based Training and Assessment (CBTA) are all the accomplishments of reforms in phase 1.

After witnessing the success of the first phase of the reforms, the second phase of TVET Sector Support Programme was launched in 2017.

In this second phase of reforms, the TVET Sector Support programme emphasized on:

- Improved governance
- Enhanced collaboration between private and public sectors for design, delivery and shared decision making

Technically trained employees are the demand of modern-day labour market but to provide technical training to people, involvement of industry is also required. A competent and skilled workforce is an

indispensable asset for the employer, and to create attributes like skills, knowledge and attitudes in the labour force is the role of Technical Vocational Education and Training (TVET).

It was truly assessed that an efficient and effective, high-quality TVET system is the gatekeeper for entrepreneurship, company start-up, diversity and growth of the private sector, as well as employment and equitable local wealth creation.

The reforms in the TVET sector of Pakistan revolve around the National TVET Policy and National Vocational Qualification Framework (NVQF). Competency-Based Training and Assessment (CBT&A) methodology provides the basis for the design of training. The training is delivered either through institute-based training or workplace-based training, whichever is appropriate for the desired training outcome.

A determined woman can lead her **way to success**

Humaira Akhtar

A CBT beneficiary of TVET Sector Support Programme

Humaira Akhtar, a master's degree holder in Urdu is a perfect illustration of the saying: "With hard work and dedication, anything is possible". She is an inhabitant of Kharotabad, Balochistan where women are used to staying within the boundaries of home.

She got herself enrolled in a 6-months Computer Operator, CBT course being run by the TVET Sector Support Programme at HRDC society. Her competence and dedication paid off with a regular job as an education supervisor in an Afghan Refugees Project in Quetta. Humaira is the beneficiary of TVET Sector Support Programme, which is working with NAVTTC, provincial TEVTAs and PVTTC since 2011 for bringing reforms in the TVET Sector.



NVQF

The Adoption

The NVQF focuses on defining qualifications, developing standards and processes for design, delivery and accreditation, developing equivalency with international standards and creating quality assurance standards and procedures. The creation of the NVQF is a major achievement that has been made through a well-thought methodical approach. There are three volumes of NVQF manual that outline all the related processes and functions.

Under the management and coordination of the federal apex body, the National Vocational and Technical Training Commission (NAVTTTC), experts from participating companies develop a definition of the qualification for all formal institution-based courses and increasingly for non-formal workplace-based courses in demand by the private sector.

The qualifications define the job profiles and occupational as well as competency standards, describe the responsibilities and tasks of a

graduate in an occupation and the related skills, knowledge and attitude required to perform it. The qualifications are classified within the NVQF. NAVTTTC endorses the qualifications and notifies the curricula, and thereby, levels all competency units against level descriptors, which define the level of knowledge, skills and attitude.

After the development of standards and their levels as per the level descriptors, same levels of standards are grouped and formed as package and considered as certificate level 1, 2, 3 or 4. NAVTTTC publishes and constantly updates the competency standards and curricula for all national qualifications on its www.navttc.org.

The NVQF recognises all existing qualification pathways and allows them to move towards greater formality through the assessment system and Recognition of Prior Learning (RPL) and Recognition of Current Competencies (RCC), which paves the way for subsequent training pathways with higher formal qualifications.



Learning is an alleyway for a **better livelihood**

Adeel William

CBT beneficiary of TVET Sector Support Programme and Trainer at a TVET Institute.

Hailing from Quetta, Balochistan, Adeel heard about Pearl Institute of Technical Training and enrolled himself in a 6 months' course of Web Designing. After the completion of the course, he received on-the-job training for a working environment understanding in the industry at the same institute. Adeel's assessors and employers were so much satisfied with his understanding and practical skills of web designing that they hired him for the position of "Instructor" at the Pearl Institute.

Along with the work, he is also pursuing his bachelor's degree in Computer Science from Virtual University. Adeel expresses his gratitude for such courses which are means of livelihood for those who cannot afford formal education after secondary classes.

A young man with dark hair, wearing a grey long-sleeved shirt with purple accents on the cuffs and a purple vest, is focused on working on the headlight of a dark-colored car. He is wearing a grey glove on his right hand. The background is dark and industrial, suggesting a workshop or garage setting. The lighting is dramatic, highlighting the man's face and the car's headlight.

CHANGING LIVES *THROUGH SKILLS*

SHIFT TO COMPETENCY BASED TRAINING & ASSESSMENT



Shift to Competency-Based Training & Assessment

The National Vocational & Technical Training Commission (NAVTTTC), Technical Education & Vocational Training Authorities (TEVTAs), Trade Testing Boards (TTBs), Punjab Vocational Training Council (PVTTC), Punjab Board of Technical Education and a number of private sector TVET institutes jointly introduced Competency-Based Training and Assessment (CBT & A) in selected vocational trades across Pakistan.

The introduction of CBT&A is an important element of the National Skills Strategy (NSS), which is the basis of the ongoing TVET sector reform in Pakistan.

It also provides the basis for the implementation of the National Vocational

Qualifications Framework (NVQF).


Under this paradigm shift, the CBT programmes are designed and delivered by adopting a systematic approach, focusing on better employability of the trainees with strong market linkages. Through competency-based assessment, the trainees are assessed after completing the programme and awarded high quality national vocational certificates.

All stakeholders in TVET (the private sector, private and public training institutes, trainees and Government) have come to the conclusion that both training approaches alone and in isolation, are imperfect: The supply-oriented formal institution-based courses lack the relevance of the world of work and inadequately respond to labour-market

demands and requirements. As a result, employment rates after training remain too low, which in turn contributes to a poor image of TVET as a career choice.

Formal full-time institutional training in a supply-oriented approach became the norm. At the same time, the private sector became reluctant to absorb trainees from institutions and increasingly opted for on-the-job skilling to meet labour-market demands.

It is for this reason that Pakistan embarked on a comprehensive TVET reform. At the core of this reform is the demand orientation of TVET qualifications in the National Vocational Qualification Framework (NVQF) and training delivery under the competency-based training



and assessment (CBTA) system with the recognition of the essential role of the workplace. Training institutes are increasingly adopting the CBTA system. The system departs from the traditional approach to education and training by placing a heavy emphasis on what a person can do in the workplace after the completion of training. Progression of learners within CBT is not time-bound; instead, it depends on the person's ability to demonstrate the necessary competence for the occupation.

CBTA is based on competency standards. The competency standards for each qualification provide the foundation for the training content of CBTA and serve as guidelines for the

development of the curricula and assessment packages. In this way, the training content and assessments are subsequently linked with the demands of each occupational profile, which are set by the industry. The course design, the curricula and assessment criteria are derived from these standards.

This approach ensures that the training content reflects the needs of the labour market. In this way, CBTA supports learners to acquire competencies demanded in the labour market, which leads to better employability of graduates.

The assessment packages reflect the competency standards, which are required to perform the occupation.

The competency standards are the basis for the assessments, which reflect tasks and responsibilities of the respective occupational profile. The packages define exercises, methods and documentation to collect evidence of a trainee's performance. In this regard, the assessment packages support the assessors to define whether a candidate is 'competent' or 'not yet competent' in performing the occupation-related skills.

Accredited assessors representing training institutes and companies jointly assess the competency of trainees. The graduates receive national certificates and reference letters from companies that have provided training at the workplace.

For the love of Handmade Jewellery

Mrs. Saleem

"Alfos Collection" is the brainchild of Mrs. Saleem, a trainee at the Gems & Jewellery Training and Manufacturing Centre (GJTMC), who is making fashion jewellery for the last 10 years.

"I enrolled myself in the fashion jewellery designing course to refresh my learning through Competency-Based Training (CBT), a new approach of learning skills," says veiled Mrs. Saleem, who had set up her fashion jewellery kiosk at the '13th Gems and Jewellery Exhibition and Skill Showcasing', held in the backyard of Serena Hotel, Quetta by GJTMC in October 2018.

"I learnt jewellery making and cutting of jewels in a female conducive environment of the centre. Earlier, I didn't have permission to go out and commercialise my talent. But now I face no limitation from my family."



Management at **National Level**

The NVQF is managed at the national level through the NVQF Management Committee (NMC) of NAVTTC. Besides overall management and policy directions on management and implementation of NVQs, NMC ensures that NVQF level structure is appropriate, objectives are being met, management of the NVQF system is effective and efficient and employers are satisfied with the quality of the graduates with NVQF qualifications.

Furthermore, NAVTTC in cooperation with stakeholders ensures efficiency, consistency and integrity of the NVQF operations as per national skill demand and trends of labour markets. Membership of the NMC is drawn from representatives of the organised private sector (Chambers, Associations, SSC), representatives of TVET service providers in the public and private sectors, representatives of non-formal and informal sectors and the chairs of QAB committees.

Realizing the Childhood Dreams

Neha Naz

With the sizzling sound of frying Chapli Kababs and beckoning to collect the ready orders one after other, Neha Naz is the lone female chef sharing workspace with 20 other male colleagues in the kitchen of one of the top-line restaurants in Karachi.

Ms. Neha, 23 has been trained as a professional chef under a workplace-based training, offered by Karachi Institute of Culinary Arts in 2019. The training project is funded by the European Union and the governments of Germany and Norway under the TVET Sector Support Programme.

“The chef training has not only enabled me to be employed by one of Karachi's popular restaurants, but I have also managed to grab two international awards in the field of my training,” says Ms. Neha with jubilation.



Facilitation at **Provincial & Sector Levels**

Provincial TVET authorities in the public and private sector play an important role in the management of the NVQF at provincial level. It, therefore, makes good sense to manage WBT in close cooperation between TEVTAs (and Punjab Vocational Training Council - PVTC) and BIAs.

While training providers participate in policy discussions in NMC meetings, they also have a particular role in supplying the resources needed by the institutions introducing NVQs. In addition, TEVTAs and training institutions under their administration needs to monitor that training is in accordance with the NVQs and prepare trainees sufficiently for competency-based assessment and workplace requirements.



TVET service providers are responsible (among others) to:

- Coordinate with private sector / technical working group / Institute Management Committee meetings and assisting in implementation of decisions of these committees.
- Process requests for development, registration and review of national vocational qualifications.
- Arrange / organise trainings for managers, instructors, assessors, M&E and accreditation etc.
- Create liaison with private sector for support in vocational counselling and job promotion activities.
- Determine the necessary budgets and supply funding to meet equipment and machinery demand and prepare a roll-out plan for introduction of NVQs

and install quality assurance M&E system in all the institutions for quality delivery of training and assessment (CBTA, WBT, Accreditation, RPL)

- Undertake human resource development (HRD) activities (Teachers Training/Principals, Trainings/Assessors Training, etc.)

TVET service providers may enter into cooperation agreements with BIAs to support the relationship between Associations/ Chambers/ Sector Skill Councils TVET Committees, NVQF Support Units (NSU), Institute Management Committees (IMC), Public and Private Service Providers, CBTA/ WBT companies and institutes, in delivering workplace-based training phases in companies or providing access to company workers and employees for formal training in institutes. Such agreements can cover a number of

elements, such as:

- Identification and selection of participating companies.
- Joint induction sessions.
- Assistance with the drafting of training plans.
- Conducting assessments in cooperation with QABs.

The main role of BIA representation on IMCs is to ensure that institute management gives due recognition to CBTA as well as WBT. NVQF Support Units (NSU) are established at national (NAVTTTC), provincial (TEVTAs and QABs) level.

The main objectives of establishing NSUs within partner's organisations are to:

- Support sustainability in NVQF development, implementation, assessment & certification processes.
- Develop a team of “NVQF Quality Champions” in the relevant organizations to look after different quality assurance aspects of NVQF.
- Improve coordination at national and provincial levels in implementation and management of NVQF.

In addition, BIAs could also establish NSUs and perform the following support services within the framework of agreements with training providers:

- Identification of WBT courses, such as definition of trades, number of trainees, time schedules and sequencing of classroom and workplace training phases.

- Identification of training institutes and companies as implementing partners for the delivery of WBT.
- Organise WBT promotion and recruitment events.
- Assist trainees at training institutes to find companies willing to provide workplace training (alternatively, this could also include facilitation of job placement, internships, practical training exposure, job shadowing, etc.)
- Assist trainees undergoing non-formal and informal training at the workplace and those who are self-employed to access theoretical and specialised practical training phases in institutes and prepare them for RPL or RCC.
- Facilitation of accreditation of training plans, assessments and certification.

Smart Thinking

Ghulam Fatima

The 32-year old Ghulam Fatima, a Niazi Pathan and married with 5 children, is the most competent student of BWBA. Educated till matriculation, she faced first resistance from her 16 years old son, when she applied for the cooking course. Seeking a bypass, she would reach her parents' home and then from there she would come to the institute.

She started a business of cooking and selling biryani from home with her two coursemates. "We are serving 40 orders of Biryani daily @ Rs 120/pack. We are also applying at NIC (National Incubation Centre) registration as a start-up. I am trying to transfer the business sense to my daughter which I couldn't get in my time, she added.



National **SKILL FOR ALL STRATEGY**

The National Skill for All Strategy guides skills development strategies and defines coordination of all components and players involved in the design and delivery of skill training. The strategy secures commitment from all the stakeholders for the development of skill and talent of the people to contribute to the economic development of the nation and provide them employability. The policy provides governance, structure and roles and responsibilities and emphasis on enhanced private sector participation in BIAs role.

Institute

MANAGEMENT COMMITTEES

The IMCs manage the training activity of training institutes to ensure that training is aligned with the skills need of industry, it is cost effective and it is heading towards employment or towards further training.

A background image showing two women in a workshop setting. One woman, wearing a red sari, is using scissors to cut a dark wig. The other woman, wearing a yellow sari, is holding the wig steady. The scene is brightly lit, and the focus is on their hands and the wig.

Workplace-Based **TRAINING**

The workplace-based training is conducted at an enterprise where the lead training provider is an enterprise. In such a training, the institute may help the enterprise for delivering the theoretical part of the training. Workplace-based training provides a direct relationship between the company and the trainee. The model focuses on teaching the skills, knowledge, and competencies in an environment in which the students are supposed to work after graduation.

THE WBT APPROACH

The background of the slide is a photograph of an open electronic device, possibly a power supply or a computer component. A large, white, curved fan is visible in the foreground, partially obscuring the internal components. To the right, there are various electronic parts, including a blue capacitor, a white cylindrical component, and some wiring. The overall lighting is dim, with a blueish tint.



The WBT Approach

The WBT approach can be defined as a series of formal training phases, which integrate the CBT curriculum with the workplace to create a different learning paradigm. It deliberately merges theory with practice and acknowledges the intersection of explicit and tacit forms of doing and knowing. By definition, WBT is vocational training conducted in the workplace as part of the productive work of a trainee.

The introduction of CBT promoted flexibility in the Pakistani TVET system by allowing for individualisation and diversification of learning pathways. In this way, training pathways and courses can be designed and delivered in a flexible manner that meets the requirements of companies. The flexibility should foremost emphasise the recognition of the importance of the workplace in training.

Inclusion of the workplace in institution-based training will complement and complete the training outcome, whilst non-formal company-based training will become formal through the adoption of CBT curricula of the structured training, which is usually delivered in the training institute.

In this way, WBT creates career awareness and helps trainees attain competencies, such as practice-oriented skills and positive work attitudes. It provides them with real-life work experiences where they can apply theory and technical skills and enhance their employability. The WBT approach furthermore, promotes the value of shared responsibility between public and private stakeholders.


WBT is guided by a number of procedures on how to facilitate the cooperation between

TVET authorities, training institutes and companies, including their respective business and industry associations (BIAs), in planning and jointly delivering training courses.

The key driver for successful WBT is the need for active policies and approaches to secure training that meets the need of the workplace. Ideally, 70% of training should be practice-oriented with as much as feasible conducted at the workplace.

At the centre of this training approach are the curricula. They translate the competency standards into learning outcomes and specify where the different learning modules are conducted.

In this regard, the curricula select either the training institute or the company as the place



of learning and link institutional and workplace-based training with each other.

Furthermore, the curricula define trade-specific as well as general subjects, such as communication, computer literacy, English and life skills as topics for classroom lessons in training institutes.

WBT courses cater for two types of trainee populations: trainees enrolled in institution-based training and trainees employed and receiving non-formal or informal training at the workplace. This distinction is important for the planning of WBT, whereas no distinction is made for its delivery under the Training Plan. Both approaches would apply the same training plan.

A CBT beneficiary of **TVET Sector Support Programme**

Janta Bhawani

Janta Bhawani is an example of sheer resilience and saying no to all the odds in life. Janta went partially blind in her childhood and it kept on increasing by the age. Her parents stood by her side and continued giving her the confidence and courage every special child needs to have in life. She continued her education with other normal vision kids and ended up graduating in Physiotherapy.

Janta got married and she took it as a new motivation to struggle more for earning a decent life for her two beautiful kids. She tried hard to find a job in a relevant field of a private or a government hospital but the responses were quite usual like, we loved your portfolio but the policy does not support of hiring a special person on such a job.

As Janta describes, 'this was quite a dark period of my life but my parents kept me motivated and filled with positive energy. One day she received a promotional text message by NOWPDP (Network of Organizations working with people with disabilities, Pakistan) about a customer care representative course for visually impaired people supported by TVET Sector Support Programme.

This brought new hope to her and she was enrolled in a three-months' course of customer care representative. Janta successfully completed the course where she was taught by the industry experts and that also included visually impaired instructors who are working in the industry for more than a decade now. After the completion of her training, she received an on-job training (OJT) of another three-months. This led her to a permanent job in a well-reputed customer care brand and now she is working there as a customer care representative.



Successful Launch of **CBT based National Diploma at level-5 in Pakistan**

The Pakistan Association of Printing and Graphic Arts Industry (PAPGAI) and Shaheed Benazir Bhutto Dewan University (SBBDU) came together and announced the launch of a national diploma at level 5 in Post Printing Operations, using a competency-based training and assessment (CBTA) methodology. The first batch of training began in March at the Times Press Private Limited and Saima Packaging, both of which are PAPGAI member companies. These businesses will help teach 50 young men and women in the printing and graphic arts in the first batch.

This event was declared as an important milestone by Dr. S.M. Minhajuddin, CEO Times Press Private Limited, Mr. Aleem Tinwala, Director Saima Packaging Private Limited, and Mr. Salman Haroon, Chairman TVET Committee, PAPGAI. They emphasized the importance of human resources in the printing sector, as well as the value of training human resources according to the CBTA strategy. The desire of

the industry to take the lead in the design and delivery of competency-based training can not only save time but also a lot of expenses.

Dr. Aurangzeb Khan, Vice-Chancellor of SBBDU, praised the industry's upcoming strategy in the printing sector, describing it as "one-of-a-kind" in Pakistan's technical and vocational education and training (TVET) sphere. Regional Coordinator Sindh, Mr. Omair Abubaker appreciated the cooperation between SBBDU and printing sector enterprises to take CBT implementation to the next level and open a new chapter for the TVET sector in various trades and technologies across Pakistan.

Development of national diploma in post-printing operations at CBT level-5 and launch of its training is supported by the TVET Sector Support Programme.



RECOGNITION OF **PRIOR LEARNING**

Skills of the individuals from outside the formal system are also recognized through Recognition of Prior Learning/Recognition of Current Competencies (RPL/RCC).

The RPL provides an opportunity informally trained skilled workers to get their skills assessed and certified. This provides a system to improve the job prospects of the individuals trained in the informal sector (Ustaad-Shagird).

The qualifications are a set of competencies, having general, functional and technical skills. Candidates registering through RPL system are evaluated for their skills against the National Competency Standards and may be made eligible for declaring full or partially qualified.

31,162 skilled people who were already trained through the informal system, were issued national certificates through Recognition of prior learning (RPL) system of CBT&A model.

Developing tomorrow by **learning today**

Raheem Gul

Story of a young boy who helped healthcare staff of Sindh-Pakistan in times of COVID-19

Hailing from a sub-urban area of Karachi, Raheem Gul is a young boy from Lyari, and is an enthusiastic learner. Raheem's father is a hairdresser and wishes for his son to complete his formal and skill-based education to secure his career. Raheem is studying commerce in his formal education and aims for learning skills to combine his formal education of business and commerce to start his own business in the future. Raheem applied for dress-making course at "Humqadam" a training project offered by Charter for Compassion. He enrolled in this program in 2019 October and has completed his tenure of six months of competency-based training in April 2020.

Right in the midst of his final workplace-based training phase, the Corona Virus outbreak caused complete lockdown in his city, hindering access to the workplace for completion of his training. But then a ray of hope raised when he was informed by his instructors that his institute will be involved in producing PPE suits and masks for the healthcare staff in Sindh. During his training, Raheem was busy in making health safety kits and fabric masks for healthcare professionals of Sindh under the umbrella of TVET Sector Support Programme.



Shift to Competency Based Training & Assessment

The Competency-Based Training (CBT) is being delivered under cooperative training mode, with three months institutionalised training and two months OJT. The courses are part of a special training fund for Sindh and Balochistan, which was set up by the TVET Sector Support Programme, funded by the European Union and Germany and Norwegian governments. Besides preparing youth for the labour market, the fund supports training institutes to develop and provide tailor-made programmes for enterprises. The objective is to facilitate the training of 18,000 men and women in Sindh and Balochistan and assist them in finding employment after graduation.

“We gave admission only to poor and unemployed youth of the area, who were provided with free training tool kits. The training at par with the international standards, under the supervision of industrial experts, equips trainees with the skill sets needed in the industry. Having right machines and infrastructure, the trainees are given

enough time to learn and practice in the centre before their OJT,” says Mohammad Ayub, trainer and the assessor of Pak-German TTC, while continuing: “the industrial visits and guest lectures give further exposure to the trainees.”

Gul Hasan's father earns a minimum wage of Rs 14,000 pm. To augment this, Gul Hasan works as a security guard in a factory at night and adds Rs 12,000 in the family income.

“Two of my elder sisters couldn't study due to unavailability of schools in the close vicinity of our residence. The younger two are studying now. Welding is a very strenuous job, due to constant exposure to heat, which affects front body, specially the eyes due to high temperature. But I chose welding course to generate better income for my family as my Ustad (teacher) advised me that welding is a good option to improve livelihood. A good welder can earn as much as Rs 25,000. After this course I will join some workshop. The

trainees of welding specially need safety measures, as it is very risky,” says Gul Hasan.

“We tell them about safety. We give them goggles, and other safety gears, while working in the welding department”, explains Shabbir, Deputy Manager Machine Shop and In-charge of HSE (Health, Safety and Environment) at BCL.

In future, Gul Hasan wants to learn MIG (metal inert gas) welding, again a suggestion by his teacher. “MIG welding is used at micro places where human hands can't reach. Big companies use MIG welding. And this is my dream to work in a big company after learning this. In our area, young people have hardly educated till matriculation, and most of them do labour work.

I want to live above this level, and bring better income and living standard for my present and future family,” says profusely sweating Gul Hasan with an aim in his eyes.

Creating a vision for future

Farzana Irfan

For 37 years old Farzana Irfan, there is a life after retirement too. With her BA/B.Ed. degrees, she is serving as JVT female teacher for 22 years in a school in Quetta. “With a plan to work in an office after my retirement, I got myself enrolled in the IT Office Assistant course, offered by the Vocational Training Centre, Quetta.”

“Learning of Excel in course helped me in making my school children's results in a quick and flawless manner,” says Farzana, one of the trainees of the courses offered by Vocational Training Center, Quetta in Competency-Based Training (CBT) model.

The courses include: E-commerce, IT Office Assistant, Cooking, Fashion Designing and Dress Making. Situated in a small two-story building in Jinnah Town, Sumangali Road, VTC Quetta, a project of Balochistan Women Business Association is offering courses to 180 girls as part of a special training fund that was set up by the TVET Sector Support Programme. The Programme is funded by the European Union and Germany and Norwegian governments. The fund facilitates the training of 18,000 men and women in Sindh and Balochistan and assist them in finding employment after graduation.



Delivering WBT - Roles and Responsibilities

Companies contribute to the training of young people and ensure that the relevant competencies are practiced to perform the respective job profile. In doing so, WBT enables companies to train their future workforce while avoiding costs for recruitment and induction of new staff. International experience shows that the productivity of in-house trained employees is higher than of externally recruited staff members. The core criteria to successfully implement WBT are the modalities of cooperation defined between the training institutes and companies delivering training at the workplace. The responsibilities apply regardless whether a trainee comes from the participating company or the training institute. Training institutes and companies are jointly responsible to establish the working procedures for the training delivery within

their organisation.

Those responsible for training institutes and companies need to find an arrangement through regular meetings and visits to coordinate the training delivery by sharing information on the status of the training progress. The tasks include, for example, creating linkages between the training phases, consulting each other on the learning progress of trainees, preparing orientation sessions for trainees before the beginning of each training phase and registering the trainees for the final assessment.

Managing and Supporting WBT

Strong ownership in planning, managing, delivering and monitoring is the backbone of WBT. In this regard, WBT differentiates between operational and management tasks. With regard to delivering WBT, each

stakeholder needs to take over certain responsibilities at the operational level. Efficient, effective and smooth management and coordination of NVQF and WBT calls for the establishment of a well-defined management structure at national, and coordination structure at provincial and sector levels with clear roles, responsibilities and functional relationships for management, coordination and support at all levels. Whilst policy and direction for the functional relationship among stakeholders is the domain of NAVTTC, coordination of workplace-based training is mainly the responsibility of training institutes (WBT coordinators in training institutes) in cooperation with companies. However, in addition, the active involvement of BIAs and the private sector at large is not only desirable, but is essential. (The Operational Guidelines for BIAs by the Federation of Pakistan Chambers of Commerce and Industry (FPCCI) deals in detail with the engagement of BIAs in TVET.)

A CBT beneficiary of **TVET Sector Support Programme**

Noman

Since birth, Noman might not be able to communicate his thoughts verbally, or he may not be able to listen to his loved ones' voices, but his passion spoke louder than his words and he could clearly hear success knocking on his door. Noman, from Malir in Karachi, shared a family of two brothers and four sisters. In the beginning, his family communicated to him through sign language as he slowly started to pick up what they were saying.

Noman was never treated differently by his family due to his special requirements. He also learned how to use the mobile phone with the help of his siblings. His schooling was done at a normal school. All of the siblings including Noman would go to the same school. His teachers, parents and Noman himself worked hard to pass his matric and intermediate exams. Noman could not study after intermediate and wanted to gain a skill and start working. This is when he found out about Memon Industrial and Technical Institute.

Prior to joining MITI, Noman was working at Pakistan Society Printing Corporation. Owing to his dedicated hardworking performance, PSPC sent Noman to complete a Machinery Diploma at MITI. Noman gained valuable experience from the training that was provided to him at MITI. He further sharpened his skills with this diploma which really benefitted him in his professional and personal life. Noman is now married and has a school-going son.



New CBT&A Qualifications Development & Implementation

The ongoing TVET sector reform in Pakistan revolves around the National TVET Policy and National Vocational Qualification Frame Work. The approach for the design of the training is created on the Competency-Based Training and Assessment (CBT&A) methodology.

The training is delivered either through institute-based training or workplace-based training, whichever is appropriate for the desired training outcome. CBTA model also has the flexibility of providing certification to people that are already trained through an informal system. This process is called recognition of prior learning (RPL).

The CBT&A is designed, developed and delivered through a process using the skill requirements of the market. It allows the learners to attain competencies, required for a job and that are recognized nationally through competency standards set by NVQF. This requires participation of industry throughout the process of training from design till placement providing solid linkage to market.

New qualifications for Competency-based training & assessment were introduced and implemented for enhancement in the TVET sector support programme. 72 qualifications were developed and 58 were implemented for CBT&A.

41,372 men and women completed their training, assessment and certification through competency-based training & assessment methodology using new qualifications.

Advantages of CBT&A Programmes:

- are focused on skills, knowledge, understanding and attitudes/values.
- describe observable, demonstrable and assessable performance.
- are broader in scope than a mere list of specific tasks or skills.
- enable the learners to acquire competencies, which are recognized by the industry all over the country through competency standards set under NVQF.
- offer greater prospective of employability to the learners.
- enable the informal skilled workers to get their skills assessed and certified through recognition of prior learning and current competencies.
- involve industry in all the steps of training delivery right from designing the skills to assessment and placement of the skilled workers.
- allow flexibility in the movement of learners from one institution to another.

THE OUTRO



TVET Sector Support Programme since inception of its second phase in 2017 has achieved training of approximately 50,000 young men and women in various competency-based occupations, assisted national and provincial TVET authorities in recognition of prior learning of around 50,000 men and women across Pakistan, for human resource development of TVET officials, trained as-many-as 5,500 teachers, assessors, principals and TVET personnel. TVET SSP has supported in accreditation of 335 institutes, and for promoting workplace-based training and private sector led management of training 491 IMCs have been established and almost 1,580 partnerships are signed.

The Program has facilitated partnerships with over 100 enterprises and 16 different business and industry associations. To meet the quality and industry's demand and standards 72 different National Vocational Qualifications ranging from Level 1 to Level 4 and Level 5 are developed in recent years. Work-based training is a powerful vehicle for developing workplace skills and promoting productivity of the labour force. With the help and support of key players, a long distance on the TVET reforms journey has been covered and gaps have been identified. With this vision, Pakistan's TVET Sector Support Programme's Work-Based Training initiatives will bear tremendous results and bring Pakistan amongst the top countries on skilled labour index.



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