

Enhancing Institutionalized Partnerships between TVET

Institutions and the World of Work in the Arab Region





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This report, a UNESCO initiative, examines Partnerships between Technical and Vocational Education and Training (TVET) Institutions and the World of Work in the Arab Region. The information collected and research conducted follows the methodology and guidelines of UNESCO for the national reports on enhancing institutionalized partnerships between TVET institutions and the world of work in the Arab region. This report aims to support partners in the design and implementation of relevant Technical and Vocational Education and Training (TVET) policies that can contribute to employment.

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Foreword

In line with its TVET Strategy, UNESCO promotes TVET as an integral part of education. The Organization strives to support the efforts of Member States to enhance the relevance of their TVET systems and equip youth and adults with skills required for employment, decent work, entrepreneurship, and lifelong learning.

In the Arab region, the landscape of TVET is changing fast in response to social, political and economic factors, demographic developments and labour market trends driven by technological and work processes developments. To provide access to quality TVET, Member States must define and strengthen regulatory frameworks for TVET to define roles, rights, obligations, and accountability of public and private actors, encourage stakeholder participation, and foster partnerships. Effective governance models for TVET involve relevant local stakeholders and business associations and in particular, close partnership between TVET institutions and the world of work - public-private partnerships (PPP).

The adoption of PPP within the TVET sector in Arab countries has received varying levels of attention and prioritisation. In some cases, PPPs are embraced nationally, and in other cases, they are ad-hoc, scatter-gun and dealt with at the municipal level. It is however increasingly clear, the private sector (PS) has demonstrated a keen interest in this modality and that some countries are having more success at harnessing PS dynamism, commercial know-how, and resources to their advantage than others. There is a need to understand:

- How PPP in TVET can better serve the national interests of Arab countries;
- > Which models best result in quality, affordable, inclusive and sustainable training.

This study on the Arab States Region covers investigating PPP in five countries: Egypt, Iraq, Jordan, Palestine and Lebanon. This study aims to support Arab region TVET stakeholders to explore practical options to strengthen and improve partnership between TVET institutions and the private sector in the Arab States Region.

A new kind of industrial revolution is happening all over the world and Arab Sates Region is becoming a middle-income region. TVET needs to support the country's medium and long-term targets for human capital development, crucial for achieving not only the Sustainable Development Goals (SDGs) but also economic growth. As both have common interests, it makes sense that the public and private sectors collaborate to modernise the technical institutions and develop a skilled workforce.

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List of Abbreviations

AHUC	Al Huson University College	
ATS	Applied Technology School	
BAT	Basra Academy for Training	
CAQA	Center of Accreditation and Quality Assurance	
СС	Community College	
CCC	Consolidated Contractors Company	
CDC	Career Development Center	
CSB	Civil Service Bureau	
DGTVE	Directorate General for Technical and Vocational Education	
DOS	Department of Statistics	
EBRD	European Bank for Reconstruction and Developmen	
EDF	Education Development Fund	
EFQM	European Framework for Quality Management	
EGAC	Egyptian Accreditation Council	
ENABEL	Belgian Development Agency	
ETF	European Training Foundation	
ETVET	Employment and Technical and Vocational Education and Training	
EU	European Union	
FAO	Food and Agriculture Organization of the United Nations	
GDP	Gross Domestic Product	
GIZ	German International Cooperation/Gesellschaft für Internationale Zusammenarbeit	
ICT	Information and Communication Technology	
IEC	Industrial Education College	
IECD	Institut Européen de Coopération et de Développement	
ILO	International Labour Organization	
IMF	International Monetary Fund	
JAPM	The Jordanian Association of Pharmaceutical Manufacturers	
JIEC	Jordan Industrial Estates Company	
LET Council	Local Employment & Training Council	
LMIS	Labour Market Information System	
MEHE	Ministry of Education & Higher Education (Lebanon)	
MoA	Ministry of Agriculture	
MoETE	Ministry of Education and Technical Education	
MOEHE	Ministry of Education and Higher Education (Palestine)	
MOF	Ministry of Finance	
MoHE	Ministry of Higher Education	
MOHESR	Ministry of Higher Education and Scientific Research	

MoL	Ministry of Labour
Molsa	Ministry of Labour and Social Affairs
MoSA	Ministry of Social Affairs
MSCoE	Model Skill Center of Excellence
NAQAAE	National Authority of Quality Assurance and Accredetation in Education
NCHRD	National Center for Human Resources Development
NCVT	National Center for Vocational Training
NEO	National Employment Office
NET	National Company for Employment and Training
NGO	Non-Governmental Organization
NQF	National Qualification Framework
NTEP	National Training and Employment Project
NTF	National Training Fund
OECD	Organisation for Economic Co-operation and Development
PPP	Public Private Partnership
PS	Private Sector
PVTD	Productivity and Vocational Training Departement
QAA	Quality Assurance and Accredetation
SACS	Sector Skills Advisory Coordination Services
SAT	Swedish Academy for Training
SCHRD	Supreme Council for Human Ressource Development
SMEs	Small and medium enterprises
SSC	Sector skills council
TVET	Technical and Vocational Education Training
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNHCR	United Nations High Commissioner for Refugees
UNRWA	United Nations Relief and Works Agency
USAID	United States Agency for International Development
VET	Vocational education and Training
VTC	Vocational Training Corporation
WARD	Welfare Association for Research and Development
WBL	Work Based Learning
WFD	Workforce development

1. Background

According to UNESCO's Strategy for Technical and Vocational Education and Training (TVET) (2016-2021)¹ at least 475 million new jobs need to be created over the next decade to absorb the 73 million youth currently unemployed and the 40 million new annual entrants to the labour market. There is a need for a strategy to be developed and activities designed to create not only decent work but also to foster an equitable, inclusive and sustainable society of active citizens, in line with Sustainable Development Goals 4 and 8, addressing lifelong learning, life skills and 21st century skills.

The challenges in transitioning into the labour force is one of the most important issues that concern young people. Unemployment is a complex issue for which there is no single reliable indicator to explain. This has led many studies to link unemployment to the quality and relevance of outputs of the TVET system and its compatibility with the needs of the labour market.

In the Arab region, the labour market demands and critically needs a skilled labour force for its development; however, "the skills that individuals are entering the job industry with, do not meet the demanded criteria of companies who are being influenced by socio-economic trends which include the adaption of technologies."² The demand for potential workers is relatively high, nevertheless, opportunities are limited due to the lack of required skills of individuals and the mismatch between the skills demanded in the job market and the supply of provision. This mismatch is widened by the lack of market involvement in the educational process, evidenced by a lack of firm regulations on work-based learning, relevant internship or apprenticeship opportunities aligned to training programmes – making them either obsolete or requiring much improvement before they can serve the demands of the labour market.

As youth unemployment is a major challenge in the Arab region, resolving this in a timely manner requires TVET institutions to continuously align the level of relevance of programmes to market needs, provide up-to-date job market information and expand the provision of quality career guidance and counselling services – all of which can be supported by the private sector. As part of its recommendations in its TVET Strategy, UNESCO emphasises that governance models for TVET should involve relevant local stakeholders and business associations in particular between TVET institutions and the world of work, hence, Public-Private Partnerships (PPPs) in order to enhance the relevance of TVET systems and equip youth and adults with skills needed in the labour market and hence improve levels of employment, decent work, entrepreneurship, and lifelong learning.

¹ http://unesdoc.unesco.org/images/0024/002452/245239e.pdf

² The Future of Jobs 2018" World Economic Forum

2. TVET and National Development

TVET comprises all theoretical and practical activities aiming to qualify individuals for conducting specific work operations or entering a defined profession/occupation. In order to find work TVET graduates must possess relevant qualifications, i.e. the right knowledge, skills and competencies to match the needs and demands of the labour market. UNESCO defines TVET as "those aspects of the educational process involving, in addition to general education, the study of technologies and related sciences and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupation in various sectors of economic life."

In many countries, the State plays a predominant role in the financing and in the provision of TVET. Current efforts to adapt TVET to the requirements of the labour market, and more broadly to sustainable development imperatives, include broadening the participation of private sector in the governance and management of TVET systems. It is becoming increasingly difficult for a State-operated TVET system to deliver knowledge and skills that are updated at all times in the dynamic, global economy with continuous changes in technologies and markets. The private sector has access to relevant information about development and skills needs, and to updated equipment and specialised staff with updated qualifications.

As a result, States are looking to develop effective partnerships between the public and private sector in different sectors and services such as health, transportation and education. The purpose of organising PPPs in TVET is to improve the relevance and quality of training provided by the national TVET systems and thus enable them to deliver graduates with knowledge and skills that meet the requirements of the labour market.

According to UNESCO (2013), a PPP is perceived as a mechanism to shift from a supply-driven to a demand- and supply-driven approach that is needed to address youth unemployment facing many States today. While supply-driven means producing skilled manpower needed for economic development without necessarily referring to employers needs, demand-driven is customised to respond to requirements of employers in the labour market.

Initiatives to include business representatives are also accompanied by an increase of TVET institutions autonomy from central ministries and agencies. Over the last decade, many TVET systems have devolved management responsibilities to the local level by providing institutions with greater autonomy. Autonomy of TVET institutions has often included shifting responsibility for management from centralised systems to local institutions thereby placing more responsibility on management of these institutions. Local management of TVET brings the institution closer to its labour market and private sector and is expected thereby to improve the effectiveness of TVET institutions.

This report will therefore aim to provide an overview and analysis on the status-quo of the partnerships and collaboration at the local institutional level between TVET institutions and the private sector, and in order to provide context, discussions on partnerships at the national and regional level will also be presented. This will be supported by case studies on institutional level PPPs in Egypt, Iraq, Jordan, Palestine and Lebanon.

2.1 Key challenges in TVET

In today's global economy with continuous changes in technologies and markets there are significant challenges related to designing and operating a national TVET system in which at all times will deliver relevant technical and vocational education and training of high quality.

> Access to updated information about skills needs in the various economic sectors

State ministries in general are well informed about the situation, needs and challenges in "their own" policy area. But ministries responsible for TVET provide education and training for many different production sectors. The dynamics in the industry is high, and it is not possible for civil servants and others outside the sectors to be continuously updated on the latest technological and market developments, and thus the training needs in all sectors.

> High economic costs

The cost of TVET is typically 2-3 times the cost of general education per student. This is due to needs for relative high investments in machines, tools and workshops, as well as recurrent costs for consumable training materials in many technical skills areas. Furthermore, in technical skill areas the number of students per teacher must be low primarily due to security reasons as many machines represent potential danger if operated incorrectly. A limited number of students is often necessary also for pedagogic and learning purposes, since one-to-one teaching is often required for thorough explanation of correct handling of machines and tools and optimal use of training materials, and supervision of students in the initial phase of new work operations.

Societal obstacles

In some societies traditional gender roles and norms for women's potential participation in working life affect and limit female participation in TVET. And in all types of societies there is a tendency to value theoretical and general academic education higher than TVET. The low(er) esteem of TVET in many States has created a significant and serious gap and mismatch between qualification needs of the labour market, and the output from the education and training system.

Access to qualified TVET teachers and trainers

A national TVET system financed and operated by the State, even in the wealthiest nations will fall short of keeping up with the pace of technological development and ensure frequent investments in workshops with the most recent equipment in all training areas.

Technical and vocational education without practical training is in general not good enough to deliver graduates with the required professional skills. Practical training must have a central place in all TVET courses unless we want graduates who are able to explain how to perform specific tasks but unable to perform them. TVET teachers and instructors must have practical experience from the trade they are teaching. Teacher training institutions cannot be expected to be fully updated at all times on the skills needs in all relevant industries or to be equipped with the most recent production equipment for preparation of TVET teachers. Infact, revision of curricula, training of teachers and trainers on key competencies should be provided regularly once the curricula have been introduced, revised or updated.

2.2 Contributions & Benefits

It is not unusual that large and wealthy companies make unilateral contributions in the form of professional advice, services or gifts, within the framework of what is often referred to as "Corporate Social Responsibility (CSR)". But most private companies expect some sort of benefits or gains in return for their direct and indirect costs incurred in the cooperation. "What's in it for me?" is a legitimate question for all parties in PPP. Thus all partnership arrangements should always ensure that partners' costs are balanced by specified or substantiated gains.

> Private sector partners

Contributions:

- Professional expertise in major decision-making processes at various administrative levels, supervision of TVET learners during workplace based training, and formal assessment of learners
- Updated information about labour market training needs
- Direct costs including travel and accommodation costs and salaries to individual staff for time spent on the cooperation
- Contribution to joint financing arrangement for TVET, e.g. in the form of a levy (ear-marked tax), e.g. based on the company payroll/salaries
- For commercial enterprises indirect costs include opportunity costs, i.e. the loss of potential income and profit that could have been generated if time spent on the cooperation instead had been spent on income-generating activities
- Indirect costs may also include additional maintenance and replacement of company equipment used for in-company training of TVET learners, and additional purchase of consumables used for training purposes, e.g. welding gas, shampoo or stationaries
- Potential salaries or allowances to TVET learners on long-term placement in the company who participate actively in the production as part of "learning-by-doing".

Benefits:

Depending on the organisation and content of the partnership arrangements:

- Better qualified TVET graduates with relevant skills and competences are found in the local labour market, and thus recruitment of new employees will be less time consuming and costly: less import of foreign workers and internal additional training
- Access to decision-making processes on policy, programs and training content that will improve relevance and quality of TVET graduates
- Travel, accommodation and meeting allowances for members of decision-making committees, advisory boards etc.
- Economic compensation for own contributions in work-place based training of TVET students, e.g. in terms of direct financial support or tax exemption
- Additional income/profit generated for the company by TVET learners in long-term placements and apprenticeships
- Enterprises accepting TVET learners for placements will get to know the individuals' skills and work attitudes, which can benefit them in recruitment of new staff and reduce internal training and costs
- Acceptance of learners for work-based training and general involvement in PPP in TVET adds positively to the CSR reporting of companies, which is becoming a common requirement
- Active involvement in PPP gives direct influence on important decisions in TVET and contributes to expansion of professional networks.

In many countries, TVET institutions owned and operated by non-government, non-profit organisations and private commercial companies can obtain government authorisation for delivering training according to national TVET policy and programmes. Also these TVET institutions will benefit from partnering with private enterprises, e.g. on work placements. But negotiations of the cooperation terms will be different from the public-private partnership cases, and not all the considerations regarding contributions and gains suggested above will be relevant.

> Public sector partners

Public authorities in general have a role in TVET at several administrative levels and PPPs may in principle be organised at all administrative levels, including:

- National level: formulation of policy and strategies, financing and development of legal instruments, decisions on qualifications, qualifications framework and TVET programs, issuing of guidelines for assessment/examination of students and approval of assessment teams, development of training curricula, overall coordination of the national TVET provision and national quality assurance of TVET
- **Regional level:** decisions on geographic distribution, types and volume of available TVET programmes within the region
- Local level: decisions on local budget distribution, investments in training facilities and equipment, and recruitment of TVET teachers and instructors
- Institutional level, if public TVET institution: management and implementation of training according to national policy and regulations, adjustment of curricula according to the needs of local enterprises, or development and delivery of new courses and curricula, according to national policy and registered qualifications.

What may be the potential contributions and gains of the various public sector partners? To some degree the public sector contributions will correspond with the gains of the private sector partners – and vice versa. However, some contributions of the public sector in general do not imply other costs than reduced public influence. Instead the end result of an improved TVET system and better qualified TVET graduates will be a gain also for the public sector partners in terms of overall goal achievement.

Contributions:

- Giving private sector partners access to major decision-making processes, including on national TVET policy and plans, TVET programme structure, and training curricula
- Allowances or covering of direct costs for private sector partners, including for travels and accommodation when attending meetings in committees, advisory boards etc.
- Economic compensation / direct financial support to companies that accept responsibility for workplace-based training of TVET learners
- Tax exemption for companies for costs related to their investments in training of employees, and to their provision of workplace-based TVET for learners
- State training funds are made available to employers.

Public employees in administration or TVET institutions have in general fixed salaries, and the opportunity cost issue is in general not relevant. But time spent by TVET teachers in joint planning and evaluation meetings may necessitate budget reallocations for TVET institutions, e.g. related to remuneration for teacher substitutes.

Benefits:

- Access to updated information about skills needs in the labour market, and to modern work operations, technologies and skills
- Access to highly needed professional expertise that is not available or scarce in the public sector, in major decision-making processes at all administrative levels
- TVET learners get access to training on modern equipment not found in the TVET institutions, and are introduced to modern work operations
- Reduced needs for public investments in new, expensive equipment, for recurrent purchase of certain training materials, and for renting or recruitment of new professionals, or upgrading of existing TVET instructors
- Improved relevance and better quality in TVET, and better qualified TVET graduates
- Improved financing of TVET if a joint financing arrangement for TVET is agreed by the partners, e.g. in the form of an ear-marked tax based on the payroll of companies.

2.3 Content and range of PPPs in TVET

The content and range of PPP in TVET can vary greatly. What are the options? The figure below is meant to illustrate the "ideal" TVET implementation process in a national education and training system. One could ask where, i.e. in which of the steps in the indicated process would PPPs and involvement and influence of labor market stakeholders most likely contribute to improving relevance and quality of national TVET provision?

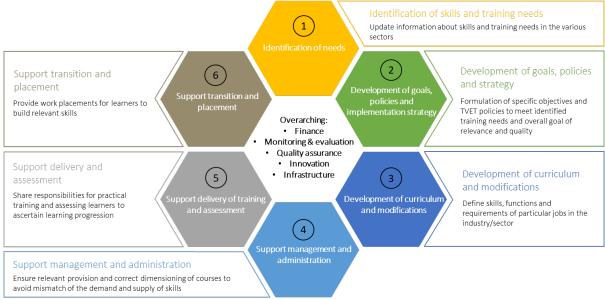


Figure 1. TVET implementation process

> Identification of skills and training needs

One of the challenges discussed above is about access to updated information about the skills needs in the various production sectors. Obviously, commercial companies are better informed about technological and market developments, and thus about changing training needs than civil servants responsible for the planning and implementation of TVET. Provided the involvement of relevant private sector partners and effective communication arrangements, PPP allows for rapid identification of new training needs.

> Development of goals, policy and implementation strategy

Opinions and contributions from the private sector through PPP may be useful also for formulating specific objectives and TVET policies to meet the identified training needs and overall goal of relevance and quality. Whereas government representatives are the best qualified to ensure the formal aspects of formulating training objectives and policy and governance, the private sector representatives will see things from a different perspective and may bring to the table new ideas and suggestions regarding practical approaches to the daily operation. Thus, there are strong arguments in favour of involving the private sector also in decisions and formulation of TVET policy and implementation strategy.

Development of curriculum and modifications

Modern and effective TVET systems deliver and operate their courses and programmes according to occupational standards (OS). Occupational standards specify what a person should know and be able to do in order to effectively carry out the functions of a particular job at the workplace. They are in general defined by private sector stakeholders, who know the skills requirements and conditions in the industry. Curricula specifying the learning outcomes should ideally reflect the content of the occupational standards. Thus the private sector partners would be logical partners for TVET institutions in the development of OS and curricula.

This also applies in the case of defining the content of qualifications and TVET courses, whereas public officials in general will have the experience in formulating and formalising them according to the general official demands and traditions. Development of qualifications and qualification units, and development of comprehensive or sector-specific qualification frameworks are areas where PPPs contribute to improved relevance in TVET.

Support management and administration

Many States have organised their TVET systems with several administrative levels: national, regional, district/local, and institutional. Depending on the national policy on decentralisation of decision-making, there is in general some flexibility regarding how to organise and administer TVET delegated to most levels. PPPs will in general be important for ensuring an appropriate structure of the TVET provision at regional, local and institutional levels. The production structure often varies between geographical areas. This means that the provision of TVET programmes and courses necessarily should vary accordingly.

Private sector representatives from each area will in general know the current situation and local skills needs. Their input may be important for ensuring a relevant provision and correct dimensioning of courses to avoid serious mismatch between demand and supply of TVET graduates. In Turkey, *"Provincial Employment and Vocational Education Boards"* with both public authorities and private sector representatives have been established for discussion and ensuring "local solutions for local problems" in TVET.³

Support delivery of training and assessment

Most countries in Europe, North America and Latin America, as well as Australia, New Zealand, and industrialised countries in Asia have public TVET systems that involve the private sector actively in the delivery of training.⁴ This also applies to many Sub-Saharan African countries, including The Republic of South Africa, Kenya, and Rwanda.

³ See Turkey country report: http://www.unevoc.unesco.org/go.php?q=World+TVET+Database

⁴ See references in notes 12, 15 and 16

Among the 19 Arab countries, Egypt and Qatar introduced PPPs in education already in 2003, with a general aim to improve quality in general education. Qatar's voucher program targeted parents of children, enabling them to enroll their children in private schools. From 2006, the Egyptian government also worked to establish PPPs with Sectorial Training Councils in the industrial and construction sectors with the objective of introducing reforms in education and training. Enterprise Training Partnerships (ETPs) were also established for the TVET Reform Program in 2005 through PPPs. A total of 12 sector ETPs and 19 local ETPs were established. Each of the ETPs was managed by a management board, two-thirds of whom represented private businesses and one-third of which came from education and training providers.⁵ But according to the Egypt 2012 country report in the UNEVOC database: "TVET training courses are still largely institution-based and bear little relation to the needs of the labor market."⁶

Public-private cooperation in TVET delivery in most cases implies that TVET institutions share responsibilities for practical training with individual or groups of companies. This is done by short or long placements at the workplace, whereby the students get the opportunity to train on and work with company equipment under supervision.⁷

If the primary objectives of TVET are to qualify students for work and provide qualified individuals for the labour market, there are apparent reasons for involving private sector stakeholders also in the assessment of students. It is usual to assess the students more or less continuously throughout the training program to ascertain that learning progression is satisfactory. The daily assessment during training in TVET institutions must obviously be conducted internally by the TVET teachers / instructors. But in most cases there is also a final graduation assessment / examination, which includes also one or more external assessors. If professionals from the private sector know best the requirements to TVET graduates, and the objective is to ensure relevance of training it will be logical to include such professionals in the final assessment team.

Seven out of the ten ASEAN countries include the business community in Assessments (2015).⁸ This also applies to countries such as the UK, Germany and Norway.⁹ PPPs can also be used in development and implementation of the tests and grading of results. But the public authorities at national or local levels are in general responsible for development of implementation criteria, and for selection and formal certification of the assessors.

Employers that appoint company staff for participation in the assessment in general find the arrangement beneficial. They will be able to influence the qualification level of graduates, give feedback and input to the student's TVET institution on potential improvements, and prevent unqualified candidates to enter the labour market. Furthermore, they get first-hand information about individual graduates, which can be useful for recruitment of new staff.

⁵ http://arabdevelopmentportal.com/?q=blog/public-private-partnerships-education-arab-world-egypt-and-qatar-%E2%80%93-part-ii

⁶ See http://www.unevoc.unesco.org/wtdb/worldtvetdatabase_egy_en.pdf

⁷ This is the purpose of placements and ideal situation, but students sometimes complain that they are given general tasks with no relevance to the TVET programme they are supposed to be trained in

⁸ See http://www.regional-tvet-conference-laos.org/kontext/controllers/document.php/59.8/5/5ba3e5.pdf

⁹ See individual country reports in the UNESCO-UNEVOC TVET database, and CEDEFOP national reports http://www.unevoc.unesco.org/wtdb/worldtvetdatabase_egy_en.pdf; http://www.cedefop.europa.eu/en/publications-andresources/country-reports

Support transition and placement

In addition to the learning of skills, placements let the students experience the culture of working life, which in many respects is very different from the culture of education and training institutions. This is a valuable "bonus" of placements that should not be under-estimated. The experience tends to mature the students and influence their work attitudes.

Apprenticeship is long-term placement, often 1–3 years, which combines learning and productive work for the company. In countries like the UK, Canada and Norway apprenticeship is an integrated part of all TVET programmes. Learning takes place according to a specified syllabus and is formalised in a written agreement between the public TVET authorities, the company or groups of companies, and the learner. The student takes part in the daily work in the enterprise under supervision of a professional and is gradually socialised into the defined profession throughout the apprenticeship period, which is finalised with a practical test and assessment.

If students make a good impression during placements, and particularly during the apprenticeship period it may lead to formal employment after graduation. Thus, PPP in delivery of training can contribute positively to the school to work transfer.

For the TVET institutions, work placements for students give opportunities for limiting investments in new equipment, if the students are trained on the latest production equipment of the company, and for new products. For the company the benefits are obvious if the TVET students – in addition to developing the required professional knowledge and skills – have developed improved work attitudes and a realistic insight in working life and enterprise culture when they graduate. And the employers get the opportunity to learn to know the students and get a better foundation for selection of the best candidates when recruiting new staff.

In cases where commercial companies have invested in new machines or introduced new work procedures, there may also be opportunities for the TVET institutions to agree with the company on placements of TVET teachers and instructors for updating training. Better qualified TVET teachers will in general contribute to better skilled graduates, and thus be to the benefit also for the companies. Similarly, as part of PPP local companies can contribute to better qualified students by sending some of their own professional staff for teaching classes in selected subjects or limited work operations.

> Monitoring and evaluation of the overall TVET system

Overall monitoring and evaluation (M&E) of the education and training system is in most States a government responsibility. It usually comprises of systematic collection and analyses of data on many different system elements, including administration at different levels, training entities, teachers, student progression, and outputs in terms of student results. For TVET, it will also be relevant to collect data on students after graduation in particular employment status.

When analysing such data over time it may be possible to detect and identify weaknesses in the system and changing trends in employment. Provided communication channels are facilitating the feeding of results of the analyses back to the relevant decision-makers, the findings will normally lead to discussions on how to meet these challenges, and potential adjustments of policy and practice.

Collection of statistical data is normally conducted by a government agency (National Bureau of Statistics or Agency responsible for implementation of education and training) or a contracted research institution or university. Employers and private TVET institutions will contribute data

from their own participation in training. Private sector stakeholders are sometimes involved in discussions of criteria and indicators for the data collection and analyses, but systematic PPP in M&E is not frequently used. However, once potential adjustments of policy and practice are considered necessary based on the M&E findings, PPPs will be highly relevant, as discussed above.

States with a modern TVET system have an arrangement for national Quality Assurance (Quality Control) performed by an independent government agency (Quality Assurance Agency).¹⁰ Quality Assurance is different from M&E. It implies a more *qualitative* approach, and focuses on different aspects of implementation, including the content and delivery of TVET courses, qualifications of TVET teachers and managers of institutions, decision-making and administration in the various parts of the system, and training results.

Implementation of quality assurance is usually based on criteria and procedures provided by the relevant public authorities, in most cases the national policy-setting institution or the institution responsible for the Qualification Framework. States with a modern TVET system usually include private sector stakeholders in these national decision-making bodies and will receive their professional inputs also during potential discussions related to Quality Assurance. Involvement of private partners directly in the activities of the Quality Assurance agency is not common except for sporadic consultancies.

> Strategic resources

Access to relevant and sufficient resources, such as updated training technologies, TVET teachers/instructors with updated qualifications, and funding is a prerequisite for successful TVET. PPPs that include work placements for TVET students can give access to training on modern equipment and reduce investment needs for the TVET institutions. Professional company staff with updated qualifications will supervise and train the students during placement. There may also be opportunities for having professional company staff taking classes in the TVET institution, and in-company updating training on new production equipment for TVET teachers.

Financing of TVET can be a challenge, not least for governments in low and middle income States. Even if PPPs can reduce investment and operational costs for the TVET institutions, smaller classes and practical training at school level still imply higher costs per student than in general education.

Government budgets for TVET are often too limited to meet funding needs. To overcome this problem many countries have introduced combined funding schemes. In addition to the government funds, other sources can include student fees, levies - often 0.5 - 2 percent - on companies' payrolls, and income-generation at institutional level. The organisation and management of levies and the distribution of funds vary greatly between countries. A system of payroll levies or other forms of private sector economic contributions to TVET is cost-sharing based on PPP.¹¹

¹⁰ The national quality assurance is additional to the quality control already performed by the ministries, TVET institutions and individual teachers and instructors

¹¹ See e.g.: ADB report from knowledge-sharing event in China, October 2014 https://www.adb.org/sites/default/files/publication/82793/sustainable-vocational-training.pdf; or report from the OECD Southeast Asia Regional Policy Network on Education and Skills, 8th Annual Expert Meeting, October 2016 http://www.oecd.org/employment/leed/Summary-Report-2016-SouthEast-Asia-%20FINAL.pdf, or report from the Africa-America Institute. http://www.aaionline.org/money-counts-financing-technical-and-vocational-education-and-training-in-the-post-2015education-for-all-agenda/

2.4 TVET institutions and the private sector

PPPs are found at all administrative levels of TVET, and the content is adapted to the level and governance arrangement. At the national level, PPPs in general focus on issues and questions of nationwide relevance, decided and handled at the ministry level or above. Examples are the development of national policies, curricula and financial arrangements. But PPP agreements made at the national level often also include issues and activities relevant to lower levels, e.g. partner representation in decision-making processes and joint efforts to recruit companies for apprenticeships. Such agreements can be considered framework agreements and are in general valid all over the country if not otherwise specified.

At the regional and local levels, the content of PPPs will depend on the overall governance system of the TVET sector. For example, which tasks and responsibilities have been delegated to lower levels, and how much flexibility has been granted to the local public authorities and institutions sets the limits for what can be agreed.

In TVET PPPs at regional and local levels can be organised with the purpose to reducing the mismatch of provision and demand for candidates with defined qualifications. Through regular meetings in an appropriate forum, established by formal decisions at the national level or as part of the PPP agreement, public-private cooperation with exchange of updated information can influence the distribution of specific types and volumes of TVET programmes and ensure a better compliance between provision and local demand of defined skills.

At the institutional level, each individual TVET institution is responsible for delivering programmes and courses that are relevant and of high quality. Involving local companies actively in the implementation of training in general strengthens the relevance and quality of the provision and thus benefits the students, the companies and the labour market in general, as well as the TVET institutions.

Co-Management of TVET institutions by the private sector

TVET institutions need to have operational powers to engage in partnerships with the private sector, becoming regulated and accountable service providers. The State sets the 'rules of the game' (how), TVET institutions are the players and management decision makers (what). Strategic considerations should include: the capacity for responsiveness to local needs; provision coverage; autonomy; multiple funding resources including co-financing from the labour market.

Autonomy at the TVET institution level includes:

- contributing to curriculum development and the design of short courses
- local and regional partnerships with industry
- selection of teaching methods and teaching materials development, Including qualification and minimum standards of success.
- organisational structures
- recruiting teachers (and support personnel) and contributing to their professional development
- the marketing of courses and enrolment of students
- additional resources, including equipment, materials and part-funding
- development planning and internal budget allocations
- reporting and accountability.

The autonomy of TVET institutions to partner with industry will in most cases include agreements on work placements of varying duration for learners, but can also include, for instance:

- In-company updating training of TVET teachers on new production methods and equipment
- Minor adjustments of the training content according to the company's particular needs
- Study visits to enterprises for groups of students
- Company representatives giving lectures at school on selected themes and issues
- Provision of consumable training materials by enterprises to support practical training in the school workshops
- TVET institutions organising tailor-made courses for company employees on e.g. ICT or English.
- Provision of career guidance, counceling and orientation for students.

For individual TVET institutions it can prove useful to establish an Advisory Board or similar, with local private sector representation. In meetings at the Board with administrative personnel, TVET teachers and students the exchange of updated information and discussion of ideas may lead to adjustments of curricula that will make the courses more relevant. Such forums have proved useful also for organising short or long work placements for students.

3. Egypt

3.1 TVET system in Egypt

TVET is widely recognised as a major challenge in the country's efforts to reduce unemployment, create social equality and enhance the it's global competitiveness. To understand the low quality and relevance of the TVET system, one must first look at the system as a whole, and understand its complex and malfunctioning governance structure.

> Governance

At present, the most important feature that characterises the Egyptian TVET system is its extreme complexity. The lack of clear leadership and high fragmentation of the institutional framework for education and training, with more than 30 ministries and entities involved in the governance and provision of TVET, leads to a high degree of mis-coordination and ineffectiveness of the allocation and management of limited resources. This includes the two Education Ministries (MoETE and MoHE), as well as around 17 Ministries active in vocational training. In addition, there are several other agencies operating in this sector, like the recently cancelled Supreme Council for Human Resource Development (SCHRD)¹², the National Authority for Quality Assurance and Accreditation in Education (NAQAAE), the sectoral Training Councils (Industrial, Building and Construction), the Education Development Fund (EDF), the National Training Fund (NTF), just to mention a few.

In addition to the fact that there is no clear leadership for TVET in Egypt, there is also no formal role occupied by employers from the private sector, although they are occasionally involved in boards or committees at all levels. The system looks as if it has all the elements and components of an effective TVET landscape, yet at the implementation level there is little coordination, almost no evidence-based impact assessment, and most pilots (including those related to WBL and apprenticeships) remain as such, with no attempt to mainstream successes.

By absorbing more than 52 per cent¹³ of young people at the secondary level, the technical secondary education pathway and its agricultural, industrial, commercial, hospitality and dual system streams (three- and five-year programmes) represents the larger part of the Egyptian education system at this level. The Ministry of Education and Technical Education (MoETE) is by far the largest TVET provider in the system, administering around 1,300¹⁴ industrial, commercial, agricultural and dual system Technical Secondary Schools (TSSs) with more than 1.8 million students enrolled in three-year technical diploma or five-year advanced technical diploma tracks.¹⁵ Most TVET graduates are directly obliged to enter the labour market and have very limited (around 5%) opportunity to access higher education.

¹² On paper and based on a prime ministerial decree and currently in the draft Labour law, it has been replaced by the National Council for Human Resource Development

¹³ EEDS Planning Workshop (GiZ), 2019

¹⁴ This number sometimes is quoted at 2000 schools when one considers the adjacent technical classes in non-technical schools.

¹⁵ MoETE, Technical Education Strategy Report, September 2011

Since the 1950s, although not under the MoETE, but under the Productivity and Vocational Training Department (PVTD) of the Ministry of Trade and Industry (MoTI)¹⁶ there exists a formal apprenticeship scheme. At the end of this three-year-long scheme, students receive a diploma, recognised by the MoETE and equivalent to the TSS diploma. There are around 22,000 students enrolled in around 45 VTCs across the country. In addition to this long term programme, considered as a type of vocational education, the PVTD also offers short courses for public and private sector employees and job seekers. Furthermore, it recognises the need to expand its marketing department, in order to create more awareness regarding its services, traditionally provided to the declining public sector.

At the higher education level, there were 45 middle technical institutes that were integrated into 8 regional technical colleges, administered by the Ministry of Higher Education (MOHE). The TVET system also includes four Industrial Education Colleges (IECs), supervised by the MOHE, offering four-year-long programmes to train technical teachers for technical secondary schools, leading to a Bachelor of Technology. The IECs accept graduates from technical secondary schools (both three and five-year systems) and graduates from the industrial technical institutes. Institutes of postsecondary vocational education in Egypt can be classified into eight different categories. All of the PVE institutes have two-year programs sanctioned by a diploma- an exception is the faculties of IECs, with four-year programs sanctioned by a Bachelor degree. Currently, the MoHE is finalising the approval of a draft law to establish Technological Universities which will open the educational pathway for technical education secondary school graduates to higher education. The initial plan is to establish eight such universities with three in Cairo, Quesna and Bani Suef.

It should be noted that graduates from the 5-year programme (under the MoETE) of the technical secondary education have the same degree and level as the graduates from the technical colleges (under the MoHE). Yet the curricula and requirements are not synergised or coordinated by both Ministries. The figure below illustrates the education and training structure in Egypt.

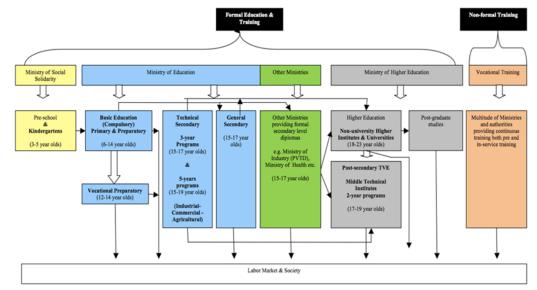


Figure 2: Formal and non-formal education and training system by responsible ministry

Source: World Bank SABER (2014) Workforce development report (Egypt)

¹⁶ In May 2015, the affiliation of the PVTD was transferred to the new Ministry of Technical Education and Training and then in September 2015 transferred back to the Ministry of Industry

While technical education provided by the Ministry of Education and Technical Education can be considered the most prominent, in terms of number of students and schools, it is at the same time the most inefficient in terms of outputs. It mainly (with some exceptions) focuses on the social inclusion function of TVET rather than its quality. On the other hand, TVET encompasses other middle-level technical institutions, affiliated to other ministries, providing technical education and training specific to their sector. Other forms include training through industry attachments or cooperative education (e.g. dual system and apprenticeships schemes under the PVTD), in-service training and re-training of both employed and unemployed workers in the labour force. Entry-level vocational training is provided to around 480,000 trainees a year in about 823 (600 public and 223 private or semi-private, owned by NGOs and regulated by the Ministry of Social Solidarity) vocational training centres (VTCs), managed by several sectoral ministries.¹⁷

The 600 public sector VTCs and institutes are divided into 317 formal or systematic training centres offering long training programmes (minimum one year) issuing technical diplomas, and 283 non-formal training centres offering short technical courses (less than one year). These centres served around 69,500 trainees in formal training and 359,500 in non-formal vocational training during the academic year 2009/10.¹⁸

The so-called 223 private sector VTCs include 219 non-formal training centres and around 5 formal training centres and schools. In 2010, they provided training to around 700 trainees in formal programs and 51,500 in non-formal courses.¹⁹ Most of these short courses target disadvantaged groups, particularly women, disabled and unemployed youth and are conducted within community-based centres, designed to meet community development needs.

> Financing

The TVET system is financed through²⁰:

- Student fees: secondary TVET education is generally free of charge. Some institutions may
 charge fees but these revert in their entirety to the Ministry of Finance. Institutions may also
 support students providing monthly allowances. In most cases, more is invested in a student
 rather than collected through tuition fees.
- Budget allocations: even though TVET funding is still comparatively low, it has increased in the recent years. "In 2003, for example, the Ministry of Industry and Technological Development secured almost a 25% increase in funding for its training centres. However, most of the increase was for capital investment, the recurrent budget increasing by only 13%, more or less in line with general cost increases."
- Donors and international partners: despite government involvement, there is little oversight and coordination of international funding for TVET. Funding is provided through grants and loans to government ministries and through internationally-funded TVET programmes.International donors include the:
 - 1. European Union;
 - 2. World Bank;
 - 3. National Governments (Canada, France, Germany, United States, etc.).

¹⁷ El-Ashmawi, A., TVET Profile – Background Paper on Assessing Responsiveness of Education and Training Systems to the Demand for Skills, World Bank, 2011

¹⁸ PVET in Egypt Country Background Report, 2011

¹⁹ PVET in Egypt Country Background Report, 2011

²⁰ UNESCO-UNEVOC. World TVET Database: Egypt, 2012

Given that the majority of TVET providers are from the (large) public sector, considerable investments need to be done to achieve the required reform. Given the large expenditures on wages²¹, the key challenge is related to the few resources available to cover developmental expenses and investments in reform initiatives (teaching and learning materials, equipment and infrastructure status). Without sustained additional mid-term funding, there will be no option but to put in most of the available budget into recurrent expenditures (wages) with almost no budget left for development of programmes to offer quality mainstream education. As a result, schools will continue to be under-financed, which has a severe effects on quality and equity. Another challenge for the Egyptian system is to use funds in a cost-efficient way. There is reason to say that the running of the education system as a whole costs more than necessary. The available capacity is far from being fully used due, among others things, to the management and pedagogical organisation structure, the official working hours of school, etc.²² The MoETE is currently embarking on an ambitious reform initiative called Technical Education 2.0 Transformation and a main pillars of the reform include partnership with the private sector to look into this issue of investment and funding.

Quality Assurance

- Although the figures above may indicate a positive trend in terms of diversity and number of TVET provision, the fact is that the quality and relevance of the TVET system at large is very low. In this section we summarise the main features of the quality assurance system in TVET.
- TVET has traditionally made an implicit choice for access rather than quality. TVET, being
 considered as a second choice option (in relation to general education which paves the way
 for university), fell in a vicious circle of low esteem, low quality, low results, which has yet
 to be completely overcome. In addition to working on its image and status, the system needs
 to have:
- A unified National Qualifications Framework
- A well-developed well communicated standardisation, accreditation and certification framework
- Standardised methods of updating and reforming curricula into competency based education
- Different and effective teaching methods, more practical learning
- Rationalising of the number and type of specialities
- Investments in upgrading the capacity of teachers, trainers and managers as well as their career conditions
- Upgraded infrastructure and equipment.

The establishment of the National Authority for Quality Assurance and Accreditation in Education (NAQAAE) as an independent quality assurance and accreditation body with administrative and financial autonomy linked to the Prime Minister, is seen as part of a greater emphasis on accreditation mechanisms and processes aiming at improving the delivery of education. NAQAAE focused on quality assurance in education covering technical schools as well as general education ones. Currently it does not cover vocational training centres affiliated to other ministries, including the PVTD.

²¹ The share of wages and salaries in total sector expenditure has steadily increased, from 71% in 2000/01 to 83% in 2006/07. At the same time the share of other recurrent expenditure (mainly student-related and school operation-related expenditure) has declined to 12% in 2006/07

²² ETF, Torino Process Report, Egypt, 2010

NAQAAE started its operations in 2005 and by the end of 2009 accredited 200 schools (mostly general education schools) from 270 which applied. This means that around 30% of schools didn't meet the requirements. In the academic year 2009/2010 about 800 schools applied for accreditation.²³ The work of this body has the potential for contributing to the overall quality assurance and accountability framework within which schools could be granted increased substantive and procedural autonomy. The accreditation framework developed and adopted by NAQAAE is in line with international benchmarks. There are 9 areas covered by the Quality Assurance Framework:

- 1. vision and mission of the institution;
- 2. leadership and governance;
- 3. human and financial resources;
- 4. civil society participation;
- 5. quality improvement and accountability;
- 6. learner;
- 7. teacher;
- 8. curriculum;
- 9. education environment.

Every area is then supplemented by specific criteria and described through specific set of indicators.²⁴ This indicates that there is a political commitment to support the quality assurance system and the institution leading this process. A clear evidence is the decision taken in 2010 by the Prime Minister to entrust NAQAAE in leading the work on the development of a national qualifications framework (NQF), although some stakeholders have expressed concerns regarding the absence of a participatory approach and the limited dissemination of information adopted by NAQAAE regarding NQF.

Taking into account the time and policy pressures, the lack of resources and expertise, there is a risk that NAQAAE will not be able to conduct more than a cursory investigation on most institutions, given the number of education and training institutions in the country. For example, in its report on education in Egypt, NAQAAE mentions as main challenges for its operations: legislative constraints, resistance of academic staff to change and the adoption of quality assurance concepts and regulations, shortage of financial resources and lack of engagement of NGOs and civil society organisations on education outcomes. Another major weakness of NAQAAE's institutional role concerns the organisational setup of NAQAAE and the lack of transparency of its reporting systems: reports on the accreditation of institutions are not published, nor shared with the MoETE and the schools. In this way, access to lessons learnt on proven processes, best practices and overall progresses are not shared and made available to other education institutions and stakeholders.

Furthermore, with regards to the assessment and awarding of qualifications, there is an ongoing lack of clarity about roles and responsibilities. In most cases accreditation and quality assurance mechanisms are not based on outcomes-based qualifications or competency standards, and have a far greater focus on more traditional aspects, which have come to be known as 'inputs', such as curricula and duration, qualification of staff, etc. This is the case for higher education and secondary education including TVET. Development of quality assurance is not linked to changes in qualifications development and validation, certification and assessment systems. In fact, certification currently happens through ministries, with separate systems for each awarding ministry, and this is likely to continue. There is only a unified certification system

²³ NAQAAE, Education in Egypt. Downloaded from www.naqaae.org 2010

²⁴ ETF, Review of Secondary Education in Egypt, July 2010

for secondary vocational education issued and organised by the Ministry of Education, which also approves the three-year diplomas issued by Don Bosco and PVTD.

In Egypt, the number, diversity and complexity of the qualifications offered is wide. This arises from historical attempts of ministries and other institutional bodies to respond to the needs of a broad range of learners (for example school drop-outs, low achievers, job seekers, adults, etc.). This diversity in qualifications leads to inconsistencies that reduce quality, confidence and trust. The bodies offering the qualifications are also diverse and this leads to weaker cooperation between them. The following table lists the key players within the Egyptian qualifications system dealing with technical education, vocational training or both:

Name of Function(s) Remarks **Organization/Initiative** National Qualifications Describes all qualifications and Still not extensively Framework (NQF) under other learning achievements implemented, only in a few NAQAAE and defines the relationships sectors and not very between these in a coherent participatory. way National Authority for Quality Provides quality assurance and Important institution however Assurance and Accreditation accreditation for all elements lacks resources to cover its of the formal educational mandate and it transparency is in Education (NAQAAE) under the Prime Minister process (TSS, etc.) sometimes questioned. Doesn't extend its function to vocational training institutions, just technical education. National Skills Standards Develop standards catering for Despite the great effort exerted Project (NSSP) Under ITC workers certification referring in this project and the current until 2017 and now IMC to their abilities and initiatives in involving chambers competencies; transferable and expanding these standards (MoTI) credits that carry students into PVTD and MoMM, there are still differences in terms of across education/training routes; and objective achievements in the different independent assessment sectors. Some sectors are not mechanisms and accreditation addressed as well as they have procedures not been "officially" recognised as the one and only national standards although they have been benchmarked with the SQA. National Council for Not adequately functioning. • Approves and issues Vocational Accreditation National Skill Standards (NCVA) under establishment Approves and issues under MoMM standards for jobs, occupations, trainers, exams, as well as licenses for testing regulations Sectoral Chambers (under Identifies the needs of industry Only involved if they are paid by the Federation of Egyptian in terms of jobs and ITC, otherwise they are not effective or active. Industries)

Table 1. Key institutions and functions in the Egyptian quality assurance landscape

Name of Organization/Initiative	Function(s)	Remarks
- 3	occupations, as well as the requisite skill levels for each.	
Enterprise-TVET Partnership (ETPs) under MoTI	 Provides work analyses and develops Job & Occupational Profiles Currently establishing certification units to certify personnel working in certain occupations in specific sectors of industry. ETPs are preparing to be accredited by EGAC as certifying bodies. 	The ETP concept as a link between industry and TVET providers linked with the chambers is a sound and needed function in the system; however the implementation of some of these ETPs needs review and the roles must be well defined. The certification units, although needed, have still to be agreed upon by most stakeholders especially the training councils.
Egyptian Accreditation Council (EGAC) under MoTI	Provides accreditation (based on ISO standards) for bodies that certify training workshops and personnel.	EGAC is the only Egyptian body mandated to accredit any national certification body. Although it has a good track record in these activities, it's still in the process of receiving international recognition in order to extend them to HR- related fields.
Technical Secondary School & VTCs under MoETE and many other ministries.	Implements all the education and training process (formal, non-formal and informal)	These are ministry-specific awards, not subject to accurate or external validation processes (with the exception of MoETE).

Source: Adopted from the table on Egyptian Institutions involved in Standardization, Accreditation and Certification from the TVET Reform Programme's study on National Occupational Standardization, Accreditation and Certification System, 2011

The table above outlines the number of institutions affiliated to the different stakeholders. One can conclude that the TVET system has all the components, yet it lacks coordination and clarity in determining the responsibilities and mandates of all its players. To address this issue of fragmentation in the TVET system, President El Sisi announced in July 2018 the intention to establish a quality assurance and accreditation authority for TVET. The new authority is intended to take over all issues related to quality from all the above initiatives. The draft law for this new authority is currently under review.

3.2 Key challenges in the TVET sector

Egypt is represented not only by the low number of jobs, but also by their specific characteristics. Especially in the formal sector, despite expectations, only a limited number of job opportunities have been created. This is primarily the consequence of the current structure of the Egyptian economy. It is estimated that only 10% of the labour force is employed in the modern sectors, vis-à-vis 90% in traditional and government sectors, this also presents even further challenges for the education and training sector to introduce and expand work-based training and apprenticeship initiatives as these companies are less motivated to do so than the larger companies

- There is a very strong and negative attitude within the Egyptian society towards manual bluecollar work and technical education (including WBL and apprenticeship). This type of work and education is considered a last resort option for students and parents, preferring academic streams, university degrees and government or desk jobs even if the demand for some of these disciplines in the labour market is limited. Despite the increasing need for more technical and vocational skills, TVET careers are not considered attractive for both social and economic reasons, and students with high grades opt for general and academic education rather than vocational or technical streams. The unattractiveness of TVET is due to the poor image of technical and vocational careers, the wages and working conditions, and the expectations that young and unemployed people have regarding wage levels and professional careers
- The TVET landscape in Egypt is complex and highly fragmented with many players. The Ministry
 of Education and Technical Education has the responsibility for the largest number of TVET
 schools, 1.8 million students, while vocational training is divided between a multitude of
 ministries and authorities
- The TVET quality assurance system in Egypt is fragmented and thus weak, with many of the features like accreditation, standard setting, and certification still underdeveloped and uncoordinated
- The Labour Market Information System (LMIS) is weak and underdeveloped despite on-going initiatives at the local or sector level, there is no active national body responsible for this.

3.3 Evidence of PPP initiatives in the TVET sector

> Sectoral Enterprise TVET Partnerships (ETPs)

The EU-funded TVET Reform Programme (TVET 1) which started in 2006 and currently in its second phase, established 12 ETPs as independent sectoral bodies to link employers and education providers with the main objectives of bridging the gap between the supply of and demand for skilled workers in the different priority sectors. The ETPs were directly linked by the relevant chambers and covered industry engineering, RMG, furniture, food processing, building materials, leather, printing, chemicals, tourism (2 ETPs) and construction (2 ETPs). The ETPs were modeled after the British Sector Skills Councils and their boards were composed of two thirds from the private sector including the Chairperson all nominated by the relevant chamber and one third from the public TVET providers appointed by the relevant Minister.

Their main role included supporting the development of TVET providers to meet the needs of employers in the sectors through providing labour market information, training of trainers, participation in setting occupational standards, qualifications and curricula development. Part of their functions also included support in managing the apprenticeship programme known at the Alternance Programme.

Unfortunately since 2017, the ETPs ceased to exist (except the ready-made garment ETPs called Traintex) due to several reasons with the most important reason being their legal status which was not clear and there was no specific legislation to guarantee their sustainability even among the ministries that supported their establishment and thus once the TVET 1 project ended, they also ended shortly after.

The role of the ETPs is still important and relevant the TVET landscape and in particular when it comes to setting skills standards, market intelligence for the sector and validation of TVET programme provision and assessments. Therefore, the TVET 2 project is currently trying to reestablish them with the needed legislation in cooperation with the Federation of Egyptian Industries and to rebrand them under Sector Skills Councils. If established their role will also enhance the implementation of PPP and

WBL in TVET as they would be the voice of the employers in the sector when it comes to TVET. While the TVET 2 project and Federation of Egyptian Industries (FEI) are taking a to-down approach trying to look at the national governance and funding structure of the new sector skills councils, the European Bank for Reconstruction and Development (EBRD) is currently investing in the electrical tools and cables sector and is supporting the Chamber of Engineering Industries within FEI to establish and operate a pilot Sector Skills Platform for this sub-sector as a bottom-up approach to test the concept. Some collaboration is underway between both parties.

3.4 Evidence of PPPs at the TVET institutational level

Egypt has a long history of providing apprenticeship and work-based learning schemes both informal and formal and is currently providing a variety of models mostly for young learners with limited pilots for adult apprentices. In the following subsections we highlight some of these schemes that could be considered close examples of public private cooperation or partnerships in TVET.

> Dual system under the Ministry of Education and Technical Education

Formally known as the Mubarak Kohl Initiative (MKI-DS)²⁵, the Dual System (DS) was introduced to Egyptian technical secondary schools in 1994, with the support of the German Federal Ministry for Economic Cooperation and Development, through a bilateral Egyptian-German technical cooperation programme²⁶ which kept providing technical assistance until 2007. It is highly influenced by the German model of dual system and it is the largest formal WBL scheme in Egypt in terms of number of students and schools. The Dual System in Egypt combines two days of formal schooling at the school with four days of in-company training, giving the students the necessary theoretical understanding²⁷ and the hands-on experience demanded in the market.²⁸ Today, the DS is a fully integrated scheme within the Egyptian education system, with both corporate and public sector institutions responsible for its governance and outcomes. The three-year apprenticeship scheme is offered in 24 out of 27 governorates in Egypt, with 21 dedicated DS schools and 198 DS classes within traditional technical secondary schools.²⁹ Around 4,000 companies (out of 25,000 registered companies) accommodate and train students every year. In 2017, almost 42,000 students were enrolled in 47 different occupations (covering the four main sectors: industrial, commercial, tourism and agriculture).

The programme encourages collaboration between education and world of work. Private companies (mainly medium and large) join an investors' association that participates in the implementation of a technical education programme through the Regional Units of the Dual System (RUDS). Participating companies are responsible for the practical training component during which students spend four days a week in factories/enterprises and two days at school. Apprentices receive a monthly allowance of around EGP300 (USD 17) during the first year, EGP400 (USD 22) during the second year and EGP500 (USD 28) during the third year of study. Companies pay administrative fees to the RUDS (up to EGP40- USD 2.27) per student per month, and many also cover apprentices' transportation. Tuition is free, students only pay minimal registration fees as in other public schools. Although there is no direct profit, the private sector makes out of this partnership, many consider the trainees on the production line as cheap labour since they are paid much less than the minimum wage especially in small size enterprises.

²⁵ The name was changed after the January 2011 revolution that was considered an uprising against President Mubarak and what he represented

 $^{^{\}rm 26}\,$ Amin G., Legal Review of Apprenticeship in Egypt, ILO, 2013

²⁷ In addition to compulsory cultural subjects like Arabic and some English languages, religion and social studies

²⁸ Amin G., Legal Review of Apprenticeship in Egypt, ILO, 2013

²⁹ Interviews with Deputy Ministry of Education for Technical Education and the Head of the Dual System at the Ministry of Education

At the end of the three years, graduates receive a certificate from the National Centre for Human Resource Development (NCHRD) affiliated to the Egyptian Federation of Investors Associations (EFIA) and a diploma from the Ministry of Education.³⁰ It has been reported that over 56% of the trainees have been offered jobs in the companies involved in their training, however because the DS students are generally better performers than their counterparts in the traditional technical secondary school system, the majority (around 80%)³¹ opt to transition to middle technical colleges and universities thus exiting the blue-collar labour market for a white or even pursuing university degrees outside their original specialisations. According to a 2009 tracer survey conducted by CID consulting for GiZ, 56.8% of the sample were pursuing further studies with a high percentage of those doing this while working. The discrepancy between figures indicate the lack of systematic data collection and analysis.

According to a number of focus group sessions conducted by the author of this current report for the World Bank in 2011 between students and graduates of the DS and the traditional technical secondary school system with no WBL components, it was clear that the DS yielded better results. This included:

- 1. better links with labour market needs,
- 2. better character building for students who were more confident and had a better idea of what they wanted for their careers and addressing their needs even within the workplace,
- 3. companies were more content with the skills of DS students,
- 4. DS graduates had better work opportunities as well as further learning options,
- 5. better understanding by DS students and graduates of working ethics and conditions (El-Ashmawi, 2011).

However, the system is not perfect and has its limitations often sighted by experts. First, the number of participants remains quite small compared to the total number of potential students (representing only 1.9% of all secondary technical education students), which raises questions about the critical mass of the programme and the feasibility of extending it to the rest of the system. An assessment in 2010³² projected that an increase to cover 60,000 students should be possible until 2020, however there are no indications that this will happen despite the MoETE's plans to expand this system by 10% (around 200,000 students by 2030).³³ Second, there are historic and on-going tensions between the MoETE and the RUDS in managing the system, not enough sharing of information for planning and in most cases MoETE assessors and supervisors are not welcomed at the enterprises. Third, there are a lot of question marks about the quality assurance process, especially those related to assessments taking place at the enterprises. Fourth, there are no established qualifications and training for in-company tutors and mentors despite the agreement on standard curricula. Finally, some companies do not comply with the agreed study plans and durations sometimes asking students to undertake tasks outside the agreed curricula.

Although the Dual System is not a typical PPP example when compared with the PPP law as there is no formal contract with the government and the private sector is supervised by the PPPCU in the Ministry of Finance, there is a tri-partite contract that is signed between the school, the company that trains the student and the legal guardian of the student.

³⁰ Successful completion is assessed on the basis of a national examination that includes both theoretical and practical work

³¹ Based on the interview with the Deputy Minister of Education for Technical Education, October 2017

³² Adams. 2010. The Mubarak Kohl Initiative-Dual System in Egypt. An assessment of its impact on the school to work transition, GIZ ³³ Ministry of Education Tachaical Education Transformation Pillow (2010)

³³ Ministry of Education, Technical Education Transformation Pillars (2019)

Productivity and Vocational Training Department (PVTD) administered by the Ministry of Industry

One of the main Egyptian apprenticeship schemes, the Productivity and Vocational Training Department (PVTD) was created by the Ministry of Industry, through enterprise-based work and training within the industrial sector. The operation of the PVTD is covered by the presidential decrees of 1956 and 1964.³⁴ According to Amin (2013), in Arabic its title is "Talmaza Sina'eyah" (closest translation to apprenticeship) "but it is commonly referred to by the acronym of the organising department PVTD." These 45 centres, geographically distributed among 17 governorates across the country, were originally designed to meet the needs of large public enterprises, from the industrial sector. However, since the private sector started to gain ground as an important employer, it has also been able to participate in these schemes.³⁵

Students enter the programme, typically at the age of 15.³⁶ The programme lasts for three years, of which the first two are spent in a vocational training centre and during the third year the majority of the time is spent in an enterprise with one or more days a week spent in a training centre (the number of days vary according to vocation). The content of the programme is heavily vocational and practical, with roughly one-third of the total time represented by enterprise-based work and training, one-third by practical work in the training centre, one-fifth by vocational theory, and slightly less than 10% being general education.³⁷ Apprentices sign a training contract devised by the PVTD³⁸, to which the employer and the training centre are also signatories. According to Amin (2013), "apprentices are paid a small allowance, around 15% to 25% of the wage of an adult worker (negotiated between the PVTD and the employer), to help them with transport and food costs". Off-the-job costs are covered by the PVTD.

The in-company training lasts for 44 weeks, each for 5 days during the third year. Training curricula is designed and monitored in cooperation between PVTD and the training company. Curriculum covers general subjects, general technology and occupation-specific technology (Badawi, 2012). PVTD organises its own annual examination for all third year apprentices over its 45 centres. Although the programme is not administered by the Ministry of Education, it still leads to a certificate issued by the PVTD that has equivalent legal status to a technical secondary school certificate. Thus it can qualify a small percentage of best performers in the final exam for higher education, and it can shorten the duration of military service and lead to defined pay grades in the civil service. Successful completion is assessed on the basis of a national examination that includes both theoretical and practical work.

The capacity of the PVTD is slightly over 22,000 participants (10% female³⁹), representing around 1% of all students in secondary vocational education, which remains a very small programme in the Egyptian context. PVTD offers 40 occupations in the industrial sector (engineering occupations, ready-made garments, automotive, printing, leather just to mention a few) and it has its own Staff Training Institute (STI). In the past (until the mid 1980s) all instructors were formally required to have a minimum of three years practical experience in industry, although still being articulated in regulation, this is no longer applied at the recruitment phase. There is a

³⁴ Amin G., Legal Review of Apprenticeship in Egypt, ILO, 2013

³⁵ Ibid

³⁶ According to Child law No. 126, the minimum age for work is 15

³⁷ Amin G., Legal Review of Apprenticeship in Egypt, ILO, 2013

³⁸ Although training contracts are signed between the apprentice and the training company in the 3rd year of study, the role of PVTD in organizing this process makes it more of a placement than a contract as classified by Smith 'in training-provider-based apprenticeships, on- the-job training takes place in work placement rather than as a formal employment contract' (Smith, 2010)

³⁹ Badawi, 2012

general shortage of qualified trainers as the most qualified are on long-term leave working in the private sector or abroad and government recruitment is very limited (El-Ashmawi, 2016).

Another model within the PVTD relevant to PPP is known as the "Training Station." The model was introduced to the PVTD in 1982, via a ministerial decree, allowing the PVTD to form collaborations with both public and private enterprises for the delivery of a 3-year programme. This programme, similar to that offered by the PVTD VTCs; targets youth, typically at the age of 15, who have just acquired the preparatory degree. However, in this model, the students spend 100% of the programme within the enterprises, who are taking the responsibility for the provision of both theoretical and practical curriculum, while also adopting the PVTD's system of theoretical vs practical skills.

Similar to the programme offered by the VTCs, it leads to a certificate issued by the PVTD and is acknowledged by the MoETE as equivalent to a technical secondary school certificate. Successful completion is also assessed on the basis of the national examination that includes both theoretical and practical work, administered and monitored by the PVTD.

Since 1982, the model has been expanding, however, in the first 20 years (from 1982 to 2002), the PVTD was very conservative in pursuing the establishment of more training stations and therefore by 2002 there were 6 training stations in total, mostly established within public sector enterprises. Between 2003 to 2017, the number of training stations increased to 46, where 50% of which were introduced in the academic year 2016/2017.



Figure 3. Number of PVTD training stations, 1982-2017

Source: Amin (2018)

The main characteristics of the Training Stations Model (Amin, 2018):

- Private or public sector companies may apply to the PVTD expressing interest in establishing and operating a training station within their premises. The request is assessed by a specialised committee, operating at the central level, composed of PVTD staff⁴⁰
- A protocol agreement is signed between the PVTD Director and the company's management. This protocol sets the operating procedures for the training stations
- Students are admitted according to PVTD's admission procedures and regulations, after reviewing students' documents and conducting standard physiological assessment for students
- The company is responsible for hiring and paying for teachers and trainers capable of delivering the programmes developed by the PVTD for each specialisation, including both

 $^{^{40}}$ Note that this is different from the general PPP legal framework which required a formal bidding process administrated by the PPPCU

theoretical and practical curricula. Some SMEs are collaborating with NGOs to administer the teachers where the cost is shared among a number of SMEs

- The PVTD, through its regional offices (supported by the central level), plays a supervisory role for administrative and technical issues
- PVTD is responsible for conducting and administering examinations at the company premises, correcting exams and producing certificates
- Students are tested/assessed in compliance with the general PVTD testing/examination systems (exams are sealed and PVTD exam observers are present during theoretical and practical exams/assessments)
- Certification is produced by the PVTD
- Depending on the programme/specialisation, students either pay tuition fees that are considerably higher than PVTD's, or are paid a monthly allowance during their three- year enrolment in the training station. This depends on the objectives of the private sector partners, whether to make a profit (or at least cover the cost of training in most cases and depending on the initial investment made by the company and the specificity of the sector) or to ensure a supply of trained workers for their business.

The following are the main concerns and observations from the field visits conducted by Amin et al. in 2018 during the study for the Institutional Strategy and Organizational Restructuring of PVTD:

- The protocols⁴¹ between the companies and the PVTD do not set standards for the teachers and trainers qualifications, nor does it require the teachers and trainers to be trained or assessed by the PVTD Staff Training Institute nor any similar institute as a prerequisite for working in the training stations
- Programmes offered within the training stations are not necessarily related to the companies' main industrial activities, raising concerns regarding these companies' ability to equip students with the relevant technical competencies (example of a weaving company offering diploma in car maintenance)
- Some training stations have developed into purely academic institutions delivering services against relatively high tuition fees, however this may raise a concern regarding graduates' accessibility to labour market and the legality of such institutions who are deriving their legal status from the PVTD's protocol
- There is inconsistent quality among training stations, offering the same vocational diploma with varying quality. The variation in quality of services could surely be attributed to the qualifications and level of involvement of the company's management.

On the other hand, there were a number of positive observations:

- Companies operating training stations are not obliged to apply the PVTD staff grading systems nor their salary scales, therefore are capable of attracting and recruiting higher caliber of teachers and trainers. Monthly salaries in training stations were found to be double that of the VTCs: LE 8000 (\$444) for training station management compared to LE 4500 (\$250) in VTCs and LE 6000 (\$333) for teachers and trainers in training stations compared to LE 3000 (\$166) within the PVTD
- Through the training stations some companies, triggered by their skills needs, have initiated and supported the development of new specialisations, examples of such new specialisations are: computer programming accredited by Oracle, optical technician operating fishing gear, metallurgical laboratory assistant, and printing machines repair
- The fact that some of these stations are receiving comparably high tuition fees for vocational education (between LE 2500 and LE 5000 annually) to cover the cost of what is perceived as

⁴¹ Copy of the standard protocol for training stations provided by the PVTD

higher quality education. This may serve as an example to the reform the Egyptian TVET system and encourage the concept of PPP in TVET where profits are one of the driving factors to motivate more private sector partners to be involved.

Integrated TVET scheme under the Ministry of Education and Technical Education in collaboration with public and private companies (Joint School Initiative) The Integrated TVET Scheme, also now known as the "School within Factory" is usually regulated

through protocols and collaboration agreements drafted between MoETE and individual private or public companies, where joint schools are established within the premises of the partner company or as a part of the company training centre. Although this type of WBL models started in 1972, with a limited number of public sector⁴² companies and then in 2008 the private sector was introduced through one of the largest ready-made garments companies. By 2012 there were 12 private sector agreements and in 2017 there were around 50 schools within factories teaching around 8,000 learners (6% female⁴³).

The number of trainees is matched to the needs of the participating companies, which limits the enrolment capacity of the initiative compared to that of TSSs. Joint schools are usually three years leading to a TSS diploma, level 3 or five years for level 4. The training is, in most cases, organised following the dual system model (4 days in the company and two days in school), yet the company-based training is not governed by the RUDS, but by ETPs (when they existed), construction and building authority, power stations, water stations, or the individual employer. As all other secondary school programmes, admission is limited to students who have successfully completed the 9-year basic education. Specialisations and curriculum are jointly designed and implemented between MoETE and the company. Students gain practical experience through training in various company workshops and sites, as part of their educational offer, and, according to their programme, sit for national diploma examination before graduation with a 3-year diploma. When graduating students receive a diploma certificate from MoETE and a practical experience certificate from the company. Students sign contracts with the company for the full duration of the programme and, in many cases, almost all graduates are offered contracts in the same company.

Financing arrangements are also similar to those of the dual system. The training company covers the cost of their on-the-job training and that of the trainee, while MoETE (the school) covers other costs. In some cases where the training company does host the school on its premises, they also cover its costs, not including salaries of staff that must be provided by the MoETE like general subject teachers and the school principal, however some companies top-up these salaries.

Contracts are signed for the total duration of the programme (3 or 5 years), yet learners are considered students rather than apprentices, and receive at minimum the same as dual system students but some companies pay more per month.

When this model was introduced to the private sector in 2008 it was a natural transition from the dual system as most of the companies involved were involved in the DS but were not able to get the number of students needed so they decided to establish their own schools in cooperation with the MoETE. This has benefited the companies a lot in sourcing the needed workers with the required skills, however there are some challenges mentioned by stakeholders. These are listed below:

⁴² The first was the Ministry of Transportation (railways and river transportation occupations) and extended to a number of public sector companies and governmental bodies

⁴³ Badawi, 2012

- The need to reduce the time between any initial theory input and starting to undertake practical work for students
- The fact that in Egypt you cannot delay going to higher education for secondary school students. If they do not take up their place at the time it is offered, which is age related, they lose the chance and have to apply/qualify again. It would be better to allow a system where higher education could be delayed to allow trainees to gain more practical working experience
- There is no culture of acquiring a range of skills in Egypt. Examples in Germany show trainees experiencing a number of technical disciplines but students in Egypt resist this so currently they are moved only on a yearly basis to a new discipline e.g. from welding to elsewhere. The reluctance of students to move is partly based on not wanting to switch supervisors/trainers and partly because once they are skilled in one trade they can get a job in that area outside of the company
- There is a need for a quality assured education certificate
- On-the-job training is not a familiar concept to Egyptians and in-company trainers are not skilled in this area; there is a need to provide training to the trainers so they can offer a step by step learning process for the tasks required.

Companies in this scheme do not charge fees, they pay students during the on-the-job training which means the scheme is not a typical PPP model which puts a question mark on the sustainability especially if the company meets its needs of skilled workers they may stop operations.

Applied Technology Schools (ATS) - The New Flagship Brand of Schools by the Ministry of Education and Technical Education

The Ministry of Education and Technical Education is currently establishing a new brand of schools called Applied Technology Schools (ATS) in partnership with large private sector companies. Three ATSs⁴⁴ started operations during the academic year 2018/19, a further seven are in the pipeline to operate in the near future and the plan is to establish 100 such schools by 2030.⁴⁵

The main features or guiding principles on which this model was built include the following:

- Quality. The system is built on an uncompromised focus on quality through partnership with international awarding bodies which the private sector partner contracts
- WBL. The new system maintains a balanced equation between work-based learning and classroom learning to produce a competitive human being with a balanced personal character and skills foundation
- **Demand-driven**. Employers become a real and committed partner in the system to ensure it continues to be driven by first hand local and global industry demands trends and priorities
- Learner-centered. The new system will produce a productive worker, competitive locally and internationally, as well as a good leader in his/her community
- **Real change**. Industry enhances the management of the school to promote a culture change in the system where work ethics of productivity, efficiency and quality are the norm
- Partnership with industry. This new competency based partnership model will play a major role in enhancing the business environment itself with a new developed workforce that targets transforming Egypt into a global manufacturing destination.

⁴⁴ The first is Al Araby Applied Technology School in Quesna, the second is Metwaly Shaarawy Applied Technology School in New Cairo in partnership with Talaat Moustafa Co. and the third is Badr Applied Technology School in Badr City with Elmaco and Egytrafco who formed a consortium to manage the school

⁴⁵ Ministry of Education, Technical Education Transformation Pillars (2019)

The partnership is based on a protocol agreement signed between the Minister of Education and Technical Education and the private sector company for a duration of between 6 and 10 years (with possibility of extensions for the same period as the initial contract duration). Based on this agreement, the responsibilities of each partner are as follows:

Responsibilities of the Ministry of Education and Technical Education:

- Provide existing or new schools training equipment and labs in good condition
- Continue to cover basic utility costs for the school
- Provide pool of teachers and administrators for selection by a joint committee from the MoETE and the partner company. Including an academic manager for the school
- Cover current salaries for selected MoETE teachers and administrators
- Facilitate all bureaucratic processes and permits, issue relevant laws and decrees to empower the new system
- Partner with international accreditation bodies to provide international level accreditation and certifications for the new schools and their graduates
- Partners to set up qualification units to help qualify the teachers and staff to the required standards
- Create new branding and communication identity for the new brand of Applied Technology Schools to improve the image of technical education to attract the best students.
- Responsibilities of the Private Sector Partner:
 - Recruit an executive to manage the operation with the school manager which is provided by the MoETE
 - Develop a business plan in collaboration with the school management council that ensures the financial sustainability of the school while maintaining its not-for profit nature
 - Cover running costs of operations according to the business plan (including bonuses and incentives for the MoETE teachers, salaries for new teaching personnel according to performance)
 - Facilitate the work-based learning and on-the-job training portion of the study programme for all students, whether at their own establishments or at others within school's geographic vicinity
 - Support and promote the employment opportunities and networking for the school graduates
 - Upgrade the school facilities, educational resources and equipment if needed to meet the appropriate standards of operation
 - Promote the school amongst the business community and other stakeholders to secure on-the-job training placements and scholarships for the students
 - Support HR development and capacity building of school teams (e.g. teachers and administrative personnel certifications, periodic training and professional development, etc.)
 - Cover the cost of international accreditation.

The private sector partners may employ professional staff (e.g. executive school manager) or professional educational entity (another experienced school, NGOs, educational funds, education associations or private sector service providers) to undertake the operational and management responsibilities which include:

- Institute a management and operational structure for the school that follows the business plan and the required quality standards
- Qualify the teachers and manage their continuous development

- Provide the management oversight to ensure the school maintains it accreditation
- Prepare and manage the evaluation of the students in cooperation with the MoETE Assessment Unit
- Manage and operate the school training facilities according to approved business
- plan
- Manage the employment unit of the school to link graduates with work opportunities.

The new Applied Technology Schools model has three implementation options depending on the size of the partner(s), also the partner does not have to be from the private sector but large public sector organisations with the need for technical education graduates can also take part in this type of agreement.⁴⁶ The three implementation options are as follows:

- Full Partnership Agreement: The private sector partner undertakes the full scope of responsibilities stated above including those of the school management. The industry partner has the option between utilising one of their qualified employees as the executive supervisor/manager of the school or select and hire a professional school management entity to undertake this responsibility in cooperation with the school principal who is affiliated to the Ministry of Education. The appointment of the executive supervisor in both cases will be approved by the Ministry of Education. This option is suitable for large and labor-intensive companies as well as with mega national projects
- Consortium Partnership: This option works well for medium size enterprises that could cooperate together as a consortium from same the sector. The consortium of enterprises enter into an agreement to distribute responsibilities of the industry partner(s), cost sharing rules, and leadership roles. The consortium of enterprises can choose to appoint an executive supervisor or a professional service provider to undertake the operational and management responsibilities on behalf of the consortium in partnership with the school and MoETE
- Associate Partnership: This option allows small and micro enterprises that are interested to participate and take advantage of the apprenticeship programmes but do not have the resources or capacity to take on the responsibility of managing a school. They thus become associate partners in one of the Applied Technology Schools in their geographic vicinity by providing on-the-job training for the students and paying for the students during the training thus sharing in the cost.

Students in the model do not pay fees and receive an allowance during the on-the-job training (the value depends on the company but a minimum is set in the agreement). The following are some of the photos from the three current ATSs that illustrate the branding and transformation of the schools:

⁴⁶ Negotiations are in process with the National Railway authority to partner with their technical school and another one with the Ministry of Military Production



The Applied Technology Schools model is the closest model to the general PPP model in terms of scope and procedures. However, there are some missing elements in terms of the sustainability and business model for the private sector.

3.5 Key challenges of PPPs in the TVET sector

- No TVET law is in place and existing legislation is fragmented and sometimes contradicting. The lack of regulations for a national system leaves current PPP and WBL schemes as isolated initiatives
- Some legislation, regulation and policies of PPPs in TVET are not aligned and there is no unified law for apprenticeship (as part of the TVET law) in Egypt
- Despite the availability of a PPP law, this has not been implemented in the TVET system due to the relatively small scale of the current projects in PPP in TVET
- The complexity and fragmentation of the TVET system as a whole does not allow for unified strategies for implementing PPP and WBL which is characterised by low coordination, low quality assurance mechanisms and weak information and analysis for adequate planning
- The structure of the Egyptian economy with a large proportion of employers either very small scale or informal makes it very difficult to convince these employers either to invest in TVET or to benefit from WBL
- PPP in TVET is still limited in numbers compared to the potential in terms of the size of a country like Egypt
- The main challenge facing PPP in TVET is the sustainability and the formulating the right business model for both partners
- The quality assurance system especially during on-the-job training is weak and very few apprenticeship models involve the training of in-company tutors and mentors

- There will be challenges in Egypt regarding how the government will achieve the scaling-up of WBL and PPP in TVET form the current 3% to 10% of the system
- Lack of relationships and cooperation between government bodies responsible for delivering off-the-job and employer organisations responsible for monitoring on-the-job training is weak
- Monitoring learners during on-the-job training is weak and inconsistent and requires a lot of self-discipline on part of the employer especially in complying with the agreed study plans
- Training and qualifications of in-company trainers is still underdeveloped and often overlooked in the current system
- Employers pay stipends for apprentices however there is no set level of stipends during on-thejob training although the MoETE and other government bodies try to set these levels differently and it is usually much less than the minimum wage for starting employees.

4. Iraq

4.1 TVET system in Iraq

> Governance

The Iraqi TVET system comprises both formal and non-formal components administered by different government ministries. The figure below provides the overview of provision of TVET by the Ministry of Education (MoE), Ministry of Labour and Social Affairs (MoLSA), Ministry of Higher Education and Scientific Research (MoHESR) and other ministries.

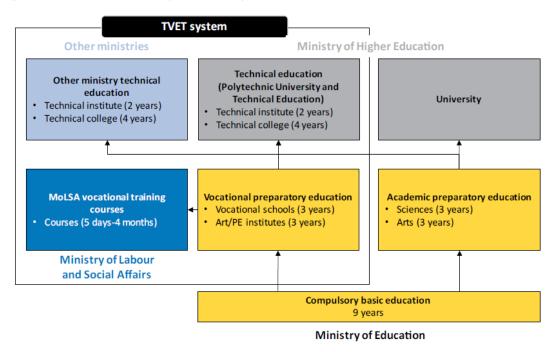


Figure 4. Structure of TVET system in Iraq

Vocational preparatory education is provided to secondary students by the MoE in Iraq and Kurdistan Region-Iraq (KR-I). Vocational education is offered in 3-year programmes (equivalent to years 10, 11 and 12) in vocational schools and institutes. Due to capped numbers, a very small percentage of vocational education graduates are eligible for entry to tertiary technical education in the polytechnic universities and technical universities. In Iraq, there were 315 vocational education institutions. The total number of all vocational students enrolled in specialist vocational programmes was just over 50,000 in 2016-2017. In the Kurdistan Region-Iraq (KR-I), there were 33 vocational schools and 28 institutes (for a total of 61 institutions). The total number of students enrolled in all three years of the programme in 2015-2016 was nearly 8,000.

The MoE is responsible for establishing and managing vocational schools and has responsibility for elaboration of the educational policy; planning and monitoring of implementation; curriculum development; management of teachers and other educational personnel; educational research and innovation; development of standards for vocational guidance and counselling; development of standards for assessment and examinations; and coordination and cooperation with local, national and international partners and stakeholders.

The General Directorates of Education in the 18 governorates are in charge of the delivery of educational services, teacher training and employment, rehabilitation and maintenance of schools, and coordination with the Provincial Education Committees. There are also Education Offices at the district level.

The Ministry of Labour and Social Affairs (MoLSA) runs a large number of training centres in specialised centres all over the country. In Iraq, there are 38 MoLSA training centres with an average annual MoLSA cohort size of 16,659. In KR-I, there are 7 MoLSA training centres with annual enrolment of approximately 1,500 learners. It is responsible for all aspects of labour market training delivery and management in a large number of training centres workshops in specialised centres all over the country.

Technical Education is provided by Ministry of Higher Education and Scientific Research (MoHESR) through the Technical Institutes which offer two-year programmes leading to a technical diploma and the Polytechnic Universities which offer 4-year programme leading to a technical Bachelor (BA, B.Sc. and B.Eng.) In Iraq, there are four technical universities with 29 institutes and 16 colleges (for a total of 45 institutions) with an annual admission of approximately 30,000 students. In KR-I, there are three polytechnic universities with a total of 36 institutes and colleges, and a total estimated annual enrolment of approximately 12,000 students.

The MoHESR sets higher education policy and supervises the administration and organisation of the higher education system. In KR-I, the MoHESR also administers Polytechnic Universities and Technical Institutes.

A number of other ministries and institutions such as the Ministry of Industry, the Ministry of Defence, the Ministry of Health, the Ministry of Transport and Communications, the Ministry of Agriculture and Irrigation, and the Ministry of Oil either operate institutes or run vocational courses dedicated to different purposes and target groups.

> Financing

Interviews held in Iraq and KR-I suggested that specific budget allocations for education and training are subsumed within the overall budget for ministries' running costs.

Each ministry negotiates its annual budget based on its own perceived short term operating and capital development needs, within parameters which are based on previous budget usage. The MoHESR, for example, will negotiate for a budget slightly larger than the previous budget, irrespective of the development plans of other ministries, which may have implications for HRD. Ministries (such as MoE, MoHESR and MoLSA) have a budget for the delivery of their core business services, irrespective of the number of students trained. Interviews in Iraq and KR-I suggested that the allocation of funding from the ministries to their education and training institutions is based on historical operating costs, with no mechanisms which enables budgetary consideration to be given to changes in the number of students, or running cost implications of delivering new or amended programmes. There is no per full-time-equivalent student cost formula which provides a baseline for different types and specialisations and levels of education and training.

There is no TVET levy fund in Iraq or KR-I. In many countries education and training is partially funded by a levy on private sector business. Different countries have developed different

approaches, and the levy can be based on a percentage of taxable income, payroll or work permits. Contributors to the levy fund also have access to education and training for their local staff.

Education and training at all levels is fully subsidised by the state for those students who meet the required academic entry criteria. Students receive living allowances and other subsidies. MoHESR is able (by decision of the Council of Ministers) to supplement the state budget allocation through the 'parallel system' of fee-paying students who did not quite meet the criteria for state sponsorship. This provides another source of income for polytechnic and technical universities. Separate streams of government funded students (who got good grades at school) and privately funded students (who did not get good enough grades to meet the entry requirement) are common in some post-Soviet countries. This practice is associated with some risks such as compromising the quality of the qualification by lowering the entry requirement, and institutions may be tempted to raise the official entry requirement for the purpose of generating more income. There may be other ways for institutions to generate income (such as education with production) which are less discriminatory and less compromising.

The mandate of MoLSA is to provide training to people who are registered umemployed. Nevertheless, there is some evidence of private sector companies requesting professional development training for their employees on a per-student fee basis from MoLSA training centres, such as the Swedish Academy in Erbil. Engagement of the private sector in requesting and paying for training seems to be uncommon. In general, social demand, rather than labour market demand, is the driver of enrolment. Numbers of students enrolled are only constrained by space in the classrooms.

Quality Assurance

A Quality Assurance and Accreditation (QAA) unit has been developed and endorsed within the reformed governance model under the UNESCO TVET Reform Project. A QAA manual for Iraq was developed by leading QAA international experts which includes information on the QAA approach, evaluation questions, and a set of quality standards and methods that have been developed based on the European Framework for Quality Management (EFQM) to support a model of institutional accreditation with developmental features.

During 2018 capacity building workshops were delivered to 20 TVET institutions across Iraq to prepare for pilot external accreditation through self-evaluations.

4.2 Key challenges in the TVET sector

The Government Iraq has strongly established traditions and institutional arrangements that define how the different strands of the TVET system are managed. Government rules and regulations tend to be rigid and based on highly centralised approaches to management with little autonomy devolved to more local levels. Furthermore, management procedures often lack transparency and are not sufficiently well developed to serve the TVET planning and decision-making process. There is lack of coordination between the different ministries operating in the TVET sector with regard to policy setting and strategy development. The private sector, social partners and civil society are largely absent from the TVET sector and there are not appropriate mechanisms to facilitate their participation.

Besides a dysfunctional governance structure, the TVET system in Iraq suffers from many years of insufficient policy development and limited budget allocation. Some symptoms of the current situation are poor and obsolete educational infrastructure and equipment, irrelevance of curricula in relation to

labour market requirements, lack of substantial practical training, fragmentation of responsibilities into different ministries, very low quality of teachers/trainers with no updated knowledge and skills, decreasing number of students, weak or inexistent vocational career guidance orientation and counselling, inadequate opportunities for youth and adults in life-long professional education and training, weak organizational structures and partnerships, and inefficient resource mobilisation, distribution and utilisation.

In order to address these issues, over the past few years the Government of Iraq (GoI) has shown renewed interest in improving the TVET system and adopted several national policies that support the expansion and improvement of TVET opportunities.

In 2010, the Cabinet established the TVET Permanent Advisory Higher Committee headed by the Deputy Head of the Prime Minister's Advisory Commission. This committee includes high ranking representatives of the line ministries (MoE, MoHESR, MoLSA, and MoP) and the private sector but it plays only an advisory role with no decision-making power or authority and no allocated budget.

To support the GoI on these on-going efforts, UNESCO with funds of the European Union had implented the project 'Reforming TVET in Iraq' which aimed at increasing access to and improving the quality, relevance and responsiveness of the TVET system to the needs of the labour market and transform TVET in a key driver for Iraq's economic growth, increased employment and improved social cohesion.

TVET is a complex policy area, situated at the intersection of education, training, social, economic and labour market policies. It is expected to address a range of issues such as the present and future skill demands of the economy; individual citizens' needs for short- and long-term training and lifelong learning opportunities, employability and personal development; and society's requirement for active citizens among others. As such, successful TVET systems and their reforms should be based on the implementation of a whole series of interconnected policies, rather than a single-policy solution.

Accordingly, UNESCO has developed a multi-dimensional Reform Project with four specific objectives:

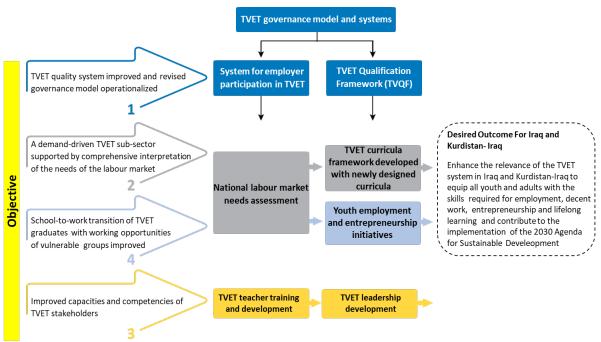


Figure 5. Objectives of TVET Reform Project in Iraq

4.3 Evidence of PPP initiatives in the TVET sector

Most of the TVET sector's instituations do not have any kind of partnership with the private sector such as sector councils which advise on occupational standards as seen in other countries of the region however small PPPS exist at the institutional level and are limited to training and providing material.

> Sector Skills Advisory Coordination Services' (SACS)

Under the UNESCO-EU TVET Reform Project, pilot sector councils ('Sector Skills Advisory Coordination Services' (SACS)) were established for the purposes of collecting information about employer demand for the development of eight sector labour market survey reports for the country and to create a model for employer participation in TVET.

Eight pilot Sector Councils were established to represent the public and private leadership of each of the selected seven economic sectors and the informal sector. Private sector representatives included the Chamber of Commerce and Industry and relevant professional federations, unions and associations.

Formal establishment of permanent Sector Councils will take time as the concept needs to be widely discussed and agreed upon, and policy and legislative implications need to be considered. Thus, for the purposes of this project, 'pilot' Sector Councils were constituted to act as 'think tanks' for the sector; to provide a forum for strategic discussion about sector growth and development; to identify challenges and opportunities; and to develop goals to address challenges and exploit the opportunities and achieve its goals.

4.4 Evidence of PPPs at the TVET institutional level

Unlike most other countries, the involvement of private sector employers or unions in the governance, content, or management of TVET programs is not established in Iraq. Nevertheless, informal interactions with the private sector exist.

For example, the Council of Ministers in KR-I had taken the initiative to the involve regional KR-I Farmers Union, with the collaboration of Toyota and Nissan and the support of the government, distributed over 100,000 pickups for farmers with very competitive price and free registrations from 2008 through 2013. Due to the economic situation in KR-I this kind of initiative has been put on hold.

> Mobile companies and polytechinic universities in KR-I

Iraq is heavily dependent on mobile phones, and very few people have landlines. There are three primary mobile phone providers in Iraq: Zain, Korek, and Asiacell. Of the three, two are known to have apprenticeship programmes with local TVET institutions in the respective governorates of business. These programmes have been found in the Kurdistan Region-Iraq (KR-I) and have an intake of about 30-50 students per year.

Company name	Partnership kind	Province	# of students/year	Start date
Asia Cell	Training	Sulaymaniyah	30 -50	2014
Asia Cell	Training	Erbil	25	2012
Korek	Training	Erbil	30	
Korek	Training	Sulaymaniyah	40	2016

Table 2. Examples of PPPs with mobile companies

Basra Academy for Training (BAT)

This initiative was launched by two international training companies, Pigier and Trema & Techma supported by the Basra Governorate and by the Southern Technical University. It is backed by reputable liternational awarding Bodies (NFPA, JOIFF, NEBOSH an IOSH) and international training partners (TECHMA, PIGIER, MBWay, MyDigitalSchool). The Academy offers international-level accredited and non-accredited training courses conducted in facilities located at the Basra Technical College. The population and the employers of the region are offered international quality programmes which, until the creation of the Academy, were available only outside Iraq. By offering them in Basra, the Academy makes these international programs accessible to many more Iraqis.⁴⁷

Swedish Academy for Training (SAT)

SAT is owned and operated by the Kurdistan Regional Government's Ministry of Labor and Social Affairs (MoLSA). It is located in Erbil. SAT specialises in Mechanics for Heavy Automotive Equipment and English Language.The training center provides up-to-date technology and equipment for the students to practice on. Through SAT MoLSA supports students to be part of the modern workforce. SAT was established and is supported by the United Nations Industrial Development Organization (UNIDO), the producer of heavy vehicles Scania, the Swedish International Development Cooperation Agency (Sida), and international initiative Education First (EF).⁴⁸

4.5 Key challenges of PPPs in the TVET sector

The challenges related to PPPs are:

- No policy encouraging the private and/or the public sectors to engage in such partnerships
- Private sector is in a poor condition due to the unstable state of the country for a long time which affects its capacity in supporting the public sector
- Mismatch between the labor market and TVET programs (supply side). The TVET sector is not
 providing skills that are useful for the industry
- No participation of industries or private sector in the policy formulation/review process
- A significant lack of coordination between the TVET and private sectors
- Bureaucracy discourages the private sector from doing business with the government thus decisions may take long time
- There's no comprehensive framework for PPP to encourage private investors to collaborate with the public sector (to note UNIDO's developed draft PPP law (2011) is still in draft form therefore cannnot be implemented or considered until it is endorsed officially by the government of Iraq)
- There is no current and reliable labor market data on which to base decisions on skills needed and strategies to attain them
- There's lack of trust between the private and public sectors based on unsuccessful experiences from both parties
- Public sector providers do not have the appropriate capacity such as teacher quality and experience, the equipment, resources, to deliver the training that the private sector requires.

⁴⁷ http://www.basra-academy.training/

⁴⁸ http://www.swedishacademy.info/

5. Jordan

5.1 TVET system in Jordan

> Governance

TVET in Jordan remains a fragmented responsibility. Currently, TVET remains a common subject of three different Ministries – Labour, Education, and Higher Education and Scientific Research, with the E-TVET Council acting as a coordination entity. The division of TVET mandate between these ministries also includes a division of their respective responsibilities in design, delivery, financing, accreditation, certification and quality assurance.

The Vocational Training Corporation (VTC) is responsible for formal and non-formal vocational training, Ministry of Education (MoE) for secondary vocational education and the Al-Balqa Applied University (BAU) for post-secondary technical education in addition to non-formal technical/vocational education/training. The Ministry of Higher Education and Scientific Research (MoHESR) oversees the BAU technical colleges and the tertiary education system, including TVET.

The E-TVET Strategy put the E-TVET Council as the apex steering body for TVET in Jordan. The E-TVET Council is a governance body chaired by the Minister of Labour (MoL). As a tripartite entity, the Council has representatives from all important stakeholders including training institutions, chambers of commerce and industry, army, trade unions and employers.

The E-TVET Council is aimed at promoting cohesion between the three ministries by setting policies and plans for the development and coordination of programmes, activities and efforts. The Council also supervises the Centre for Accreditation and Quality Assurance (CAQA), which has been established as the national authority for the accreditation and qualification of TVET providers as well as trainees in the vocational stream. The accreditation and qualification of TVET providers in the technical stream is under the Al-Balqa Applied University and regulated by the Higher Education Accreditation Commission. However, the major influence of the Council and CAQA is directed towards VTC institutes and the private institutes, due to the fact that MoE vocational schools and BAU technical colleges are subject to the laws, regulations and standards applied by their relevant Ministries.⁴⁹

Vocational secondary education in the MoE is managed by the Vocational Education and Production Department within the Ministry. Vocational education is provided through 23 specialised vocational education schools as well as in 187 general comprehensive education schools that provide vocational education together with the general education stream (MoE, Education Strategic Plan 2018-2022). Vocational students looking to continue their higher education at universities or community colleges are required to follow specific study plan which include additional topics (mathematics and physics). However, this will change as the study plan will be the same for all vocational education students (no additional topics), and higher education will be open for only a percentage of students in specific areas based on the vocational stream (based on meeting with the Director General of Vocational Education at MoE). Secondary vocational education streams provided by MoE schools include:

- Industrial Education
- Agriculture Education

⁴⁹ UNESCO-UNEVOC. World TVET Database: Jordan, 2019

- Hotel and Tourism Education
- Home Economics Education (moved in 2016/2017 to the applied secondary vocational education stream which doesn't end with the general secondary certificate exam (Tawjihi) in VTC but returned back to MoE as a secondary vocational education stream).

All teaching, learning and training activities, including both theoretical and practical parts of vocational education programmes in MoE, are conducted within equipped vocational schools. Vocational education students in MoE schools are required to practice their specialisation for 24 days in either the workplace or in their schools' workshops during the summer holiday.

The Vocational Training Corporation (VTC) is a governmental institution, semi-autonomously governed by a Board of Directors comprised of representatives of government, civil sector organisations and private sector. The Board is headed by the Minister of Labour. The VTC is mandated with:

- Providing vocational training opportunities to prepare the technical workforce and raising its level of efficiency in the various non-academic vocational training levels and specialisations, and working on diversifying vocational training, inclusive of:
 - 1. Vocational apprenticeship that allows youth and adults to undertake long-term organised training
 - 2. The training of enterprises' employees in specialised training centres and in their work locations in order to raise their level of efficiency
 - 3. Extensive and speedy training for various professions
 - 4. Training in the fields of occupational safety and health.
- Providing supporting guidance services for the establishment and development of smalland medium-sized enterprises
- Regulating the practice of occupations in the labour market by classifying working sites and workers.

Occupational skill levels currently adopted in Jordan is comprised of 5 categories/levels: semiskilled, skilled, craftsman, technician and professional levels. VTCs main role is to prepare a workforce in the three basic occupational levels (semi-skilled, skilled and craftsman levels) through its vocational training programmes which usually range between several hundred hours to two years. In some cases, VTC cooperates with BAU to offer technician level programmes. VTC implements its training programmes through 42 vocational training institutions mainly in cooperation with the companies in the labour market through apprenticeship and other workbased training programmes.

BAU is the main provider of technical education through its colleges in different areas of Jordan. It has 13 colleges under its direct authority, while supervising technically other 28 community colleges belonging to the private sector, United Nations Relief and Works Agency for Palestine Refugees (UNRWA), military and other governmental institutions/ministries. In addition its 2-3 year technical education programmes, BAU/CC provides short term training courses for individuals to develop their skills.

In addition to the main TVET providers mentioned above, other institutions providing TVET programmes, but at lower scales in regard to numbers of trainees, include the National Employment and Training Company (NET) and UNRWA.

> Financing

The primary source of financing vocational education/ training in MOE and VTC is public finance routed through the Ministry of Finance (MoF) where the two institutions deal directly with the MoF.

For technical education, financing sources come mainly from BAU's budget with additional support from MOHESR. There is no central body that allocates the funds based on needs or decides on the priority of certain projects. The budget decisions are not based on performance of the programmes or organisations which reduces the incentive for the providers to make their programmes more attractive. As of 2016, public financing to all TVET programmes and TVET institutions under all relevant ministries amounts to 3.6% of the total public expenditure on education.

Furthermore, an E-TVET fund was created to support the funding for TVET based on demanddriven skills training apart from the national budget. Envisaged as a 'skills development' fund, it could foster the collaboration between the private sector and the TVET providers. In Jordan, the budget is allocated from a percentage on fees of foreign workers' work permits and through a budget by the MoF and yields annually about JOD 20 million (US\$ 28.2 million). Under the ongoing reforms, diversification of financing of TVET through public-private partnerships is also being pursued.⁵⁰

Quality Assurance

TVET provision in Jordan is currently lacking the collaboration with the labour market and employers. This results in graduates who do not necessarily have the right skills for their profession. Quality assurance processes in TVET in Jordan differ according to the type of programmes and the responsible ministry. Each have their own mechanisms for the collection of data, monitoring, and evaluation. The Centre for Accreditation and Quality Assurance (CAQA) was established as the national authority for the accreditation and qualification of TVET providers as well as trainees. Private institutes, vocational schools and BAU technical colleges remain subject to the different laws, regulations and standards applied by their respective Ministries (CAQA, the MoE and the MoHESR).⁵¹

5.2 Key challenges in the TVET sector

According to the National Strategy for Human Resources Development (2018), some of the challenges Jordan is facing to the TVET system include:

- Access. Limited opportunities of pathways between streams or to higher education resulting in decreasing attractiveness of TVET
- Quality. The TVET system needs regulated funding to be able to provide quality pre- and inservice teacher training in order to achieve good results. Involving the private sector in the development, quality assessment and control of TVET curricula could support the reversal of the skills mismatch that makes this pathway unattractive to both students and employers
- Accountability. The three ministries responsible for TVET MoL, MoE, and MoHESR are, despite ongoing efforts, not coordinating on all major aspects of TVET which complicates the provision of satisfactory education in the sector
- Data based policymaking. Data collection on TVET and related employment is fragmented. The data that is available is often outdated or inaccurate and it is not used effectively. As it stands, labour market information is gathered by a number of sources the Department of Statistics (DoS), MoL, Social Security Corporation (SSC), CSB, MoHESR, and the National Aid Fund (NAF). The absence of a comprehensive, coordinated and accurate labour market information system inhibits development of the TVET sector and its responsiveness to the labour market demands. There are also challenges in obtaining and maintaining reliable and consistent data on the sector as a whole.⁵²

⁵⁰ UNESCO-UNEVOC. World TVET Database: Jordan, 2019

⁵¹ Ibid

⁵² Ibid

5.3 Evidence of PPP initiatives in the TVET sector

Sector Skills Councils (SSCs)

SSCs are advisory committees consisting of representatives from related public sector institutions and private sector employers. The majority members of those councils are representing private sector employers and are required to have long work experience in the targeted sector. Councils aim mainly at proposing the main policy for TVET in the sector, identifying skills needs and developing occupational standards. SSCs are currently formed by the ETVET council with support from international organisations including GIZ, ILO and EBRD. SSCs are in its early stage, and the number of established or under establishment councils is 7 in the sectors of: water and energy, ICT, Logistics, tourism, garments, furniture and chemicals. Occupational standards developed by sector skills councils are provided to CAQA for accreditation (Interviews with SG/ MOL and CAQA director).

5.4 Evidence of PPPs at the TVET institutional level

> Vocational Training Corporation (VTC)

For implementing its apprenticeship and other training programmes, VTC cooperates with about 2,400 enterprises ranging between micro-enterprises of less than 5 employees up to large-scaled ones with hundreds of employees (VTC Employers Guidebook 2017). In addition to private sector enterprises, VTC implements apprenticeship training programmes with public sector institutions such as the Amman Municipality and the Water Authority (Rawashdeh/UNESCO, 2018).

The private sector has to sign agreements with the VTC for implementing apprenticeship training. However, such agreements with companies are usually limited to large-scaled ones on an individual basis with each individual company. Agreements specify responsibilities for both sides including allowances/wages to be paid by the employer to trainees. Trainee allowance is usually very small (pocket money) and paid during the practical training stage. For the majority of trainees, particularly those in SMEs, no official training agreements or contracts are signed with employers but rather the relevant parties have verbal/undocumented agreements.

In addition to signing agreements for implementing apprenticeship training with companies, VTC signed several partnership agreements with associations/companies in the private sector. Following are examples of these agreements:

- Jordan Hotels Association for implementing apprenticeship training in hospitality fields where association members provide work-based training for apprentices
- Jordanian Association of Pharmaceutical Manufacturing (JAPM) for the establishment and management of a Pharmaceutical Center of Excellence. According to the agreement, JAPM's involvement includes developing related training curricula, management of the Center, and provision of work-based training and employment opportunities for trainees and graduates available in its members companies
- Zain Communication Company for training on cellular phones maintenance. After renovating and equipping one of the workshops in the Jordan-Korea Vocational Training Institute, Zain is delivering the cellular phones maintenance training courses for enrolled participants.

In 2017 a Memorandum of Understanding (MoU) was signed between VTC and the Jordan Chamber of Industry that enables the Chamber to operate and manage 4 VTC vocational training workshops/sites in the areas of printing, chemical industries, wood working/furniture and

leather works. The signed MoU is not in effect as of yet due to financial constraints. However, the Chamber, with support from a GIZ project in Jordan, is about to start operating wood working workshops as a pilot. This pilot would serve as a model to encourage Chamber Members in providing required financial support if successful (interviews with the ADG for Training Affairs, VTC and Projects Coordinator, JCI).

Saltus training hotel

The training hotel is located in Balqa governorate at the outskirt of Salt city. Cooperating partners in the hotel, which was opened in 2014, are VTC and the National Hotels Company owned by the ZARA Holding Company. The roles of the partners are according to the partnership general framework approved by the cabinet. They are:

VTC:

 Provision of the already existing buildings which consists of 23 guest rooms and other service facilities. The provided building used to be part of the VTC training institute for hospitality.

ZARA Co.:

- Renovation of the buildings/facilities and provision of required equipment necessary for appropriate operation of the hotel
- Marketing, operation and management of the hotel to receive guests as a three stars hotel
- Providing on job training for the VTC tourism training institute trainees in food production, service and housekeeping for 6 months at level 1 and 2.

The hotel is managed by a board of directors consisting of 6 members representing the two partners. The income generated is used solely to cover the operation costs as well as developing its infrastructure as required for improving the hotel services. Intake capacity of the hotel is 120 trainees.

National Employment and Training Company (NET)

In 2008, the Army established the National Company for Employment and Training (NET), and it is currently owned by both the Army and VTC. When established, NET was aiming mainly at training unemployed Jordanian youth in construction occupations to respond to labour market needs. However, it is currently providing training in other areas such as mechanical maintenance, furniture carpentry, solar energy and auto electrician in addition to hairdressing and beatification and dressmaking training for female.

Training programmes are conducted in cooperation between NET and private sector enterprises. The training duration for all specialties (construction and other occupations) is 8 months. It consists of 1 month for all learners in national military training, plus 4 months of vocational training for construction occupations (5 months for other occupations), and then finally 3 months of OJT in construction (2 months for other occupations).

Training in NET is open for literate youth. Ages of trainees range from 17 to 29 years old. They get JOD 75 monthly for personal expenses and transportation cost during the training. Also, they get a work uniform, personal safety equipment, health care, and insurance for work accidents. Upon successful completion of the training, graduates get a training certificate from NET as well as a work license issued by the Center for Accreditation & Quality Assurance (CAQA).

> Ministry of Labour (MoL)

Model Skill Centers of Excellence (MSCoEs)

In 2010, a conceptual framework for the Model Skill Centers of Excellence (MSCoE) was developed by the Ministry of Labour. MSCoEs are "TVET Training Institutes developed through Public Private Partnerships (PPPs) between the Government of Jordan, training Institutions and industry." They are "sector-specific and geared towards identified needs for employment within that sector." The goal of MSCoE is to produce highly skilled graduates equipped with the skills and qualifications demanded by today's labour market both locally and internationally (ETF, 2016).

Partnership in MSCoEs includes cooperation in developing the training programmes, curricula, learning materials and textbooks, training equipment, training implementation (off and on-job), staff training and management of center, in addition to provision of employment opportunities for graduates.

VTC had established MSCoEs in three priority sectors of the Jordanian economy as defined by the Government of Jordan covering pharmaceuticals, water and environment and renewable energy.

EU supported development of curricula and learning materials as well as operational plans for the three established MSCoEs. Other international development organisations also involved in supporting those centres were: GIZ through its TWEED project (supported the water and environment CoE) and USAID through the WFD project (supported renewable energy MCoE). Annex 1 highlights an example of a partnership between different stakeholders in the establishment and operation of the pharmaceutical MSCoE.

Satellite factories initiative/project

The initiative was launched in 2008 as part of the National Training and Employment Project (NTEP) in the Ministry of Labour in an effort to reduce unemployment particularly among females in the rural areas of Jordan. It aims at encouraging companies/investors to establish sub/new factories in the targeted areas to provide employment opportunities mainly for females.

Main partners in this initiative are NTEP/MOL, ETVET Fund, Royal Court and companies/ investors. In addition, other partners could be involved according to each individual case, such as the municipality within the targeted area and VTC.

Public sector partners in general provided the building for the factory for free during the first 5 years and at 75 per cent of the prevailing rent price after that period. In addition, public sector partners contribution include up to 50% of wages, transportation, one meal and social insurance costs of the new hired employees for the first 12-18 months of their employment.

On the other hand, the company/investor is responsible for provision of the machines and equipment, wages, incentives and other operational costs for running the factory as required. While the ETVET Fund is the main resource for financing, other funds came also from the Royal Court and MOL, and in one case (at least) a municipality paid for the cost of the factory land. Contribution of VTC was in basic training for the new employees if requested by the company.

The MOL, within the NTEP project, was responsible for the planning, organisation and follow up of the implementation of the satellite factories initiative until about 6 years ago when NTEP was stopped and the initiative become under the responsibility of the employment directorate

within the MOL. A training and employment agreement was usually signed between the involved partners that mainly identifies each partner roles and responsibilities, number of employees to be trained and employed, wages and incentives provided for the trainees/employees and duration of each stage of the training and employment.

The number of satellite factories established and operated until 2015 was 15 factories distributed in different governorates in Jordan in which from the 3,500 employees mostly were female (91%). All the established factories were in the garment industry (Al Khasawneh, 2016).

> Al-Balqa Applied University (BAU)

BAU has about 25 agreements with the private sector. Most of these agreements aim at providing job training opportunities for diploma-seeking community college students. OJT is required for one semester during the summer for 2-year diploma students, and 2 semesters (one during the summer) for 3-year diploma students. Agreements cover training areas, payments for students (pocket money) and follow-up and evaluation of training.

Other agreements include developing study plans, provision of business incubators, participation of experts from the private sector in delivering training in specific topics and employment of graduates. Examples of agreements with companies from the private sector include but are not limited to: Orange Jordan Communication Co., Al-Emlaq Giant Industrial Group (chemical industries), Association of Employers (for mechanical occupations) and Amman Chamber of Industry (meeting with BAU Vice- President).

> Employer-specific training programs in BAU/Al-Huson University College

The programme was launched in 2009 in Al-Huson University College in Irbid. It is a 6- month training programme typically in production engineering, targeting participants having an associate degree, or alternatively a two-year programme in piping technology targeting participants having general secondary certificates. The programme aims at training participants as piping supervisors (Al-Wedyan, 2009).

Partners in the implementation of the programme include: Al-Huson University College through its center of career development (Al-Huson CDC), Consolidated Contractors Company and the Morganti Group Inc. (CCC/MORGANTI) and the USAID Jordan Economic Development Program (SABEQ).

Roles and responsibilities of partners: AHUC/Al-Huson CDC:

- Providing classroom and laboratory space and covers the costs associated with renovation, rent and utilities
- Recruiting and enrolling programme participants
- Providing instructors to participate in a Train-the-Trainers programme conducted by CCC/ MORGANTI staff to become permanent instructors in the programme in the future
- Providing computer skills, workplace preparation, and English proficiency training.

CCC/MORGANTI:

- Providing training equipment, curricula and learning materials and instructors
- Training for AHUC instructors so they will be able to take over the program in the future
- Conducting field trips to demonstrate the work of "piping supervisors" at actual construction sites.

USAID/SABEQ:

- Preparation of Memorandums of Understanding
- Convening in regular partners' meetings for progress review
- Establishing benchmarks for progress and indicators of performance
- Managing, monitoring, and evaluating.

The annual intake capacity of the programme is (25), and the number of graduates during the period from 2009 up to now is about (250) (meeting with BAU Vice-President).

> Initiative forwork based training in BAU/AI-Salt Technical College

Programmes offered by the College include water treatment engineering, energy engineering, intelligent buildings engineering, intelligent systems engineering and artificial intelligence engineering and robotics. The duration of these programmes is three years for the associate degree and two years for the technical diploma which is comprised by technical education from the College and practical training in the labour market work sites through active partnerships with the private sector.

Programmes currently run in the college are in two specialties: energy engineering and intelligent systems engineering with a total number of students of 33 in the two programmes who just started their 2nd semester in the College (meeting with BAU President Assistant).

Minstiry of Education (MoE)

Cooperation with the private sector is limited in vocational education since both theoretical and practical training is implemented within the premises of the schools, with summer training also implemented mainly in vocational schools. However, in line with its strategic plan (2018 – 2022) concerning the establishment of effective PPPs in vocational education, in December 2018 MoE signed an agreement with the Amman Chamber of Industry. This agreement includes mainly cooperation and coordination between the two partners in regards to financing trades skills competitions, providing training and employment opportunities for students and graduates, conducting studies on needs assessment of graduates and establishing partnerships between vocational schools and industrial companies. Other two agreements are currently still in the development stage and is expected to be formalised in the near future. The first agreement with the Jordan Industrial Estates Company (JIEC) and the second one with the Hotels Association (meeting with the Director General of the Vocational Education Department, MoE).

5.5 Key challenges of PPPs in the TVET sector

PPPs in Jordan's TVET sector witnessed some progress through the involvement of the private sector in some governing bodies within the sector as well as in some partnerships initiatives/projects. However, many challenges and constraints are still facing the sector and consequently hampering the achievement of an effective and integrated partnership in the sector. Such challenges and constraints include:

- Insufficiency of laws and regulations required for providing an appropriate legal environment for building effective partnership at different levels
- Weak capacity of the private sector and civil society institutions required for enabling them to play key roles in TVET in partnership with the public sector, particularly, in identifying training needs, developing occupational standards and learning materials and evaluation of training
- Shortage of financial resources for funding PPPs initiatives/projects and for providing incentives to encourage employers involvement in TVET activities including offering work based training opportunities, development of training curricula and learning materials and evaluating of

trainees/graduates. However, even with extra resources available from the ETVET Fund there is a lack of a strategic framework for distributing the available funding. It mostly spent on the supply side of government training programmes instead of funding training according to private sector needs

- Structure of labour market enterprises where about 98% of enterprises in Jordan (less than 20 workers) are of small scale and have 37% of all employment in the private sector (NHRD strategy 2016-2025). Accordingly, their engagement capacity in different levels of partnership in TVET is limited. Also, the size of the informal sector which is estimated by the International Monetary Fund (IMF) in its last report "Regional Economic Outlook, Middle East and Central Asia" at 26% of Jordan's economy represents another constraint for PPP development (Social and Economic Council, 2012)
- The prevailing weak economic situation in Jordan after 2009, where the annual GDP growth is
 relatively low (about 2.5%) (Rawashdeh/UNESCO, 2018). This led to less development and
 expansion in business in general and consequently the ability of economic sector to generate
 new jobs. Such economic circumstances affect negatively on the willingness of the private
 sector to partner in TVET
- Private sector employers perspective on the weak capabilities of TVET providers to cooperate and respond to their actual training needs. This perspective was developed through years of employers experience in receiving graduates not having the right competencies as required by the labour market naturally as a result in the absence of coordination and cooperation between the two parties in regards to identifying training needs, developing curricula and learning materials and implementing of training programmes
- The centralised management style applied in TVET institutions in Jordan which impedes training institutes at local levels of developing and implementing training initiatives / projects / programmes in partnership with the private sector
- Insufficient interactive capabilities of the TVET institute/college required for establishing and promoting sound partnership relations with private sector companies at the local level.

6. Palestine

6.1 TVET system in Palestine

> Governance

Currently, there is no specific law governing the TVET system. Although there are a number of policies for the various aspects of the TVET system including private sector partnership and involvement, nearly all of these have only been endorsed by relevant governing bodies but have yet to be institutionalised.

The institutional setting for the TVET system is rather complex due to the fragmentation of TVET providers and services in the country. The actors in TVET provision are the Ministry of Education and Higher Education (MoEHE), the Ministry of Labour (MoL), Ministry of Social Development, UNWRA, NGOs and private providers. However, as of 2019, the Ministry of Education and Higher Education, has split into two: Ministry of Education (MoE) and Ministry of Higher Education and Scientific Research (MoHE and Scientific Research).

For the main areas of TVET provision, the three key ministries: MoHE and Scientific Research, MoE and MoL, are the ones to maintain systems of providers, for most of whom they make the main decisions, and provide central administration and funding.⁵³ At the local level, and with the exception of the private community colleges and to some extent the not-for-profit public colleges, providers have little if any autonomy to take initiatives, to make significant local management decisions, or to raise significant additional finance.

TVET is set as one of the national priorities within the National Policy Agenda which the Ministries are translating to promote TVET as part of its priorities within their sector strategies (2017-2022). As part of the National TVET Strategy, a governance structure for the TVET system has been set up. The establishment of two management bodies marked a very important step in establishing cooperation and coordination in TVET. The Higher Council for TVET was established made up of representatives from the private and public TVET bodies. In addition to the Higher Council, the Executive Board consisting of technical and decision-making members of the Council were delegated to be in charge of implementing the National TVET Strategy, coordination with the different training providers and relevant stakeholders, and proposing regulations, procedures and standards.

After years of ineffectiveness and stagnation, in September of 2018, the Higher Council was officially reactivated and designated as the sole responsible body for the development of the TVET sector and to pursue coordination with international organisations. The Executive Council and Development Centre (the technical arm of the Higher Council) are planned to be the implementing bodies within the Higher Council.Subsequently, workshops to discuss and prepare a first draft of the TVET law were held during 2019 and it is expected to be adopted in late 2019 or early 2020. The intention was to have the Development Centre as the only recognised national official body and become fully operational when the new TVET law was to be adopted. Its overarching mission is promote the role of TVET within Palestinian Society and to contribute to achieving sustainable development by matching supply and demand in the labour market

⁵³ It is worth mentioning here that other ministries and bodies are involved in the supply of TVET sector (e,g ministry of social development, UNRWA, Commission of the Ex- detainees and others).

locally, regionally and internationally. Its responsibilities include monitoring and evaluation of the performance of the different components of the TVET system, such as preparation of studies and reports and projects as well as developing the necessary proposals to ensure the smooth functioning of the system while ensuring its quality, efficiency and effectiveness.

However, when the new government took over recently a new vision is seen for the governance structure of TVET within what is now called TVET Agency - which will unify all TVET policy makers and stakeholders efforts. The Agency is foreseen to have representatives from the Ministry of Labour, Ministry of Education, and Ministry of Higher Education and Scientific Research. However the Agency has yet to receive approval on an official orangisational structure. The process and timeline of establishing the new TVET Agency and its division across three Ministries remains unclear.

TVET Provision. Twenty-eight community colleges (some are technical colleges) are operating across Palestine. Most of the community colleges are public or not-for-profit, being established by civil society organisations. The private colleges are responsible for raising their own funding. The five governmental community colleges come under the management responsibility of the TVET directorate of MoEHE. The ministry is responsible for management, funding, appointing the dean and all staff and equipping the colleges under the regulations and norms that are laid down. In practice, significant funding is also provided by a range of international donors, who may be involved in particular initiatives.

Vocational schools come directly under the management responsibility of a directorate in MoEHE. The Ministry manages, finances, staffs and provides facilities and equipment including textbooks and curriculum. They must follow the quality control and auditing systems set down by the Ministry and have, in practice, very little local autonomy.

The VTCs come under the direct management responsibility of the Directorate General for Vocational Training of the MoL. In most respects their management mirrors the situation found in the vocational schools.⁵⁴ Many VTC programmes target students at the age of 16 and are considered as an alternative to formal education. The VTCs that currently offer non-formal training have a limited absorption capacity and need to refuse students, while most vocational schools are not used to their full potential as there are no classes in the afternoons. As a result of good cooperation between both ministries, it has been agreed that VTC programmes can be offered in the vocational school classrooms in the afternoons.⁵⁵

For the refugee population, UNRWA is the UN organisation that manages and organises TVET provision. Although somewhat separate, UNRWA co-operates on many occasions with the ministries and with the international donors. It has also been able to form quite strong links with some of the employers' organisations at the local level, for example in the recent signing of six memoranda of understanding with the local chambers.⁵⁶

> Financing

Apart from the private community colleges, which are self-financed through fees and the patronage of the owners to a considerable extent, almost all the funding for initial TVET comes either from the Finance Ministry through the general budget or from donor activity. There are no levies or other requirements placed on employers to fund provision, and student

⁵⁴ ETF. Mapping Vocational Education and Training Governance in Palestine, 2014

 $^{^{\}rm 55}$ ETF. Palestine: Education, Training and Employment Devleopments (2018), 2019

⁵⁶ ETF. Mapping Vocational Education and Training Governance in Palestine, 2014

contributions through fees produce only limited income. The students in the colleges pay some fees, but the UNRWA students are not required to pay, while students in the not-for-profit institutions only pay some of the fees, with the donors contribute to facilities, equipment, etc. Some fees are collected in government establishments, but many students are entitled to pay only a small proportion of the fees.

Usually it is government funding that covers the fixed expenses including permanent salaries, running costs and some of the developmental expenses. On the other hand many of the funds used for both initial and continuing training are provided by donors. These may be international organisations, other development agencies involved in technical cooperation and the international co-operation agencies of some national governments.

With the exception of the private community colleges, TVET providers have very little autonomy over their budgets, and very little opportunity to raise income. Because budgets are allocated on a traditional input basis and because funding is scarce, funding is not used to incentivise reform, except where there is specific donor activity.⁵⁷

Quality Assurance

The Accreditation and Quality Assurance Commission (AQAC) under the umbrella of the Ministry of Education and Higher Education is in charge of ensuring quality in TVET tertiary education instituitions (levels 4 and 5). The Strategy recognises that TVET accreditation and quality assurance responsibilities must be defined to be realised within AQAC. The AQAC is expected to approve and maintain the quality criteria, develop the quality standards, accredit TVET institutions and programs, monitor and evaluate TVET institutions and programs to ensure adherence to quality standards.⁵⁸

6.2 Key challenges in the TVET sector

- The main issues that negatively affect governance of the TVET system, which remains weak despite the high volume of reforms being implemented in the sector, are: the fragmentation of the system, the absence of a unified leadership, and the lack of financial and human resources⁵⁹
- The Palestinian education system is subject to political, financial and physical constraints and is vulnerable to many variables that cannot be controlled. The most vulnerable places in the West Bank are Area C and East Jerusalem where Israel exercises full control over the land and the people. In these places, the Ministries of TVET rely on the international donor community to provide education to the Palestinian students and to support the teachers⁶⁰
- The National TVET Strategy (2010) presents a detailed action plan, addressing legislation, financing, labour market relevance of skills, stakeholder engagement, qualification frameworks, teacher training, quality development and assurance including internal and external evaluation. In terms of TVET reform, slow but continuous progress is being made in important processes (e.g. competence-based education, partnerships with the private sector, quality assurance, importance of continuing vocational training (CVT)). However, the complexity of the situation in Palestine and the limited capacity to operate the revised TVET system have not led to immediate and sustainable results. The national stakeholders still lack the capacity and resources to run the processes autonomously⁶¹

⁵⁷ ETF. Mapping Vocational Education and Training Governance in Palestine, 2014

⁵⁸ UNESCO-UNEVOC. World TVET Database: Palestine, 2012

⁵⁹ ETF. Mapping Vocational Education and Training Governance in Palestine, 2014

⁶⁰ ETF. Palestine: Education, Training and Employment Devleopments (2018), 2019

⁶¹ ETF. Palestine: Education, Training and Employment Devleopments (2018), 2019

- There is a significant commitment on the part of the international donors, but their allocation of resources is almost always over the lifetime of a project or programme, thus on a temporary basis that results in non-permanent appointments in ministries and TVET establishments and time-limited expenditure on equipment, learning environments, etc. This methodology can be helpful in generating initiatives, but often results in challenges and problems that inhibit permanent solutions and sustainability once the project and its financing draws to a conclusion⁶²
- Small number of Palestinian youth chooses the TVET track TVET suffers from low appeal among Palestinian youth⁶³
- Many TVET programmes that do not reflect a modern, hands-on approach but are still based on traditional teaching methods⁶⁴

6.3 Evidence of PPP initiatives in the TVET sector

> Local Education and Training (LET) Councils

As a way of improving the linkages between training and the needs of the labour market, Local Education and Training (LET) councils were established by the Ministry of Labour with the support of GIZ. Each council comprises of representatives from the government, private sector and civil society. The objectives of the councils are to enhance social dialogue and foster local employment initiatives. Their main role is to maintain links and communications between different employment stakeholders and supporting partnerships. Eleven councils currently operate in the West Bank and one in Gaza. To date, the LET councils have been very active in international initiatives (e.g. the EU-funded TVET support programme), in which they have been given a specific role (e.g. skills needs analysis, assessment of proposals, advisory role for projects). Beyond these donor initiatives, however, the councils suffer from a lack of resources.⁶⁵

Employment Offices/Centres

The institution responsible for employment policy is the Ministry of Labour. It deals with the employment sector and works in close partnership with other stakeholders, such as the Ministry of Education and Higher Education and the Federation of Chambers of Commerce. The Ministry of Labour has limited capacity. It provides a range of employment services through its employment offices. There are 16 employment offices in the West Bank and 5 in Gaza. With support from GIZ, eight of the West Bank offices have been transformed into 'one-stop shops' that offer a comprehensive career guidance package including vocational guidance and employment counselling, in addition to guidance on self-employment and small enterprise creation, job search and job application support and information and work permits to work in Israel. While significant capacity has been developed within the network of one-stop shops, several challenges remain. These include a lack of qualified personnel, limited capacity for networking with employers due to a lack of transportation facilities, and a lack of clarity regarding roles and responsibilities.⁶⁶

⁶² ETF. Palestine: Education, Training and Employment Devleopments (2018), 2019

⁶³ UNESCO-UNEVOC. World TVET Database: Palestine, 2012

⁶⁴ UNESCO-UNEVOC. World TVET Database: Palestine, 2012

⁶⁵ ETF. Palestine: Education, Training and Employment Devleopments (2018), 2019

⁶⁶ ETF. Palestine: Education, Training and Employment Devleopments (2018), 2019

6.4 Evidence of PPPs at the TVET institutional level

Work-based learning (WBL)

The work-based learning (WBL) model implemented at all levels of TVET (vocational schools, colleges, universities) with Enabel's support⁶⁷ is considered to be successful. In 2017, 83 WBL initiatives were successfully launched in the West Bank and Gaza. Forty-four TVET institutions signed agreements with over 200 companies relating to a wide range of technical vocations which are in high demand in the labour market. According to the Monitoring and Evaluation Report published by the Ministry of Education and Higher Education, 22.8% of students in vocational schools participated in internships or practical training in the labour market in 2016 (the target for 2019 is 31%). The WBL model has been positively received by both providers and employers. In August 2018, the Ministry of Labour and the Ministry of Education and Higher Education approved the WBL strategy for the period 2018 to 2022.⁶⁸

Hisham Hijjawi College of Technology

An evaluation project about the development of the auto mechatronics diploma programme at Hisham Hijjawi College of Technology was conducted to assess the impact of the private sector and the partnership with the world of work.⁶⁹

The project was designed to upgrade program curriculum and infrastructure and build the capacity of the academic staff in partnership with the private sector employers. It aimed also to enhance the students' employability and strengthen collaboration between the college and the private sector's employers.

The review that targeted also the employers revealed that the new curricula, being designed and developed in cooperation and partnership with the world of work, did have positive impact on the students as well as the delivery process.⁷⁰ In summary, it was shown that the relations with the representatives of the labour market and industry were enhanced.

Al-Ummah College

The College opened a two-year program in Electrical Engineering through full partnership cooperation with the Jerusalem District Electricity Company (JDECO). This program was built as per the requirements of JDECO, as it was intended to be the future employer for the graduates. In addition to assisting in the design of curricula for the specialisation, JDECO is helping in absorbing the students in its facilities and department during the education stage (i.e. conducting field training) as a college requirement for graduation.

6.5 Key challenges of PPPs in the TVET sector

 For the private sector to take a leading role in delivering labour market needs analysis to support the reform and continuous updating of TVET provision. Social partners such as the Palestinian Federation of Industries, the Federation of Palestinian Chambers of Commerce, Industry and

⁶⁷ See https://www.enabel.be/sites/default/files/private_sector_development_in_the_palestinian_territory.pdf

⁶⁸ ETF. Palestine: Education, Training and Employment Devleopments (2018), 2019

⁶⁹ Final Comprehensive Report Formative Evaluation "Development of the Auto Mechatronics Diploma Program" Hisham Hijjawi College of Technology (HHCT) The Quality Improvement Fund (QIF) Education to Work Transition (World Bank- Funded Project)-September 2017

⁷⁰ The items of the questionnaire for this group were consulted, with some modification from:" Introduction to Internship and Cooperative Education Prepared for E2WTP Participating Institutions prepared and edited by: K. Nijim

Agriculture and the Palestinian General Federation of Trade Unions are not yet in a position to play this leading role⁷¹

- Most PPP engagements are ad-hoc and on a project-by-project basis. At the national level there is no single organisation that represents employers, and the Federation of Chambers of Commerce and Industry, the Palestinian Federation of Industry and on occasion their constituent associations for particular branches of commerce and industry occupy, at least partly, the role of social partners. Whilst they are actively engaged, this occurs on an occasional basis and is not systematic. Employers' organisations mostly have limited capacity and no specific organisation that is devoted to developing and implementing TVET partnership activity
- A major obstacle to the promotion of PPPs in the TVET sector is that TVET institutions are losing credibility with industry. Firms are uncertain of the current purpose of TVET institutions, and the relevance and quality of skills produced in the TVET system. Therefore, enterprises are not considering and positioning the TVET institution as a value-adding partner
- The challenges facing coordinated public-private partnerships in TVET education are due to a high fragmentation of organisations representing the private and academic sectors, mainly family-owned small and medium businesses, a wide range of overlapping TVET programmes provided by a variety of TVET institutions and a lack of tracer studies following graduates as they seek employment⁷²
- A lack of national resources, the relatively low national priority that is given to supporting the TVET sector, the fragmented pattern of government and donor funding, a certain lack of experience in making effective public/private partnerships work, and a reluctance in many cases on the part of employers and companies to become actively engaged are all barriers that relate to finance and funding which in turn inhibits effective reforms.⁷³

⁷¹ ETF. Mapping Vocational Education and Training Governance in Palestine, 2014

⁷² UNESCO-UNEVOC. World TVET Database: Palestine, 2012

⁷³ ETF. Mapping Vocational Education and Training Governance in Palestine, 2014

7. Lebanon

7.1 TVET system in Lebanon

Governance

There are multiple TVET providers and responsible organisations in Lebanon.

The development and modernisation of the TVET sector is divided into two forms:

- 1. Formal form: The formal form is under the aegis of the Directorate General of Technical and Vocational Education (DGTVE) at MEHE for all specialisations except agriculture which is under the supervision of the Ministry of Agriculture (MoA)
- 2. Non-formal form: Under the non-formal form several stakeholders are involved such as the DGTVE, Ministry of Agriculture (MoA), the Ministry of Social Affairs (MOSA), the Ministry of Labour (MoL); the National Employment Office (NEO) and the National Centre for Vocational Training (NCVT).

The Ministry of Education and Higher Education (MEHE) is the responsible organisation for education from preschool to university. The Directorate General of technical and vocational education (DGTVE) operates under the MEHE and is responsible for the administration of TVET provision. This includes the public provision of TVET as well as the performance monitoring of private educational institutions and training providers which includes NGOs. The issuance of diplomas and certificates, organisation of public TVET examinations as well as the coordination with other TVET providers are among the core functions of the DGTVE. In October 2017, the DGTCVE was responsible for 198 private training providers and 158 public training institutes which are supervised and administered by the institute.

The Directorate General of Higher Education (DGHE) facilitates the transition of TVET students into tertiary education. The DGTVE is responsible for the organisation and management of the whole sector, under the supervision of the Minister of Education and Higher Education. The DGTVE is responsible for curricula, programs, specialties, administering unified national examinations, and issuing technical education degrees for the entire vocational and technical sector in Lebanon. The DGTVE currently supervises approximately 398 private training providers and administers 158 public training institutes. The students can choose between general or technical education at the tertiary level. The entrance requirements are set through Decree No 8950 but the universities can set their own requirements and therefore make it difficult for TVET students to enter.

The National Employment Office (NEO), under the Ministry of Labour (MoL), is responsible for the provision of demand-driven workforce management. It supports NGOs which provide certain TVET programmes that have been identified as important for the economy and establishes policies with regards to employment. This public institution supports NGO programmes which are 3-9 months and issues certificates for the graduates, however, these are not officially recognised by the MEHE. Employers are represented in this organisation but the engagement and responsiveness of the sector is still challenging.

The National Centre for Vocational Training (NCVT) offers fast-tracked TVET programmes as well training at the community level in various regions through its mobile trucks. The organisation suffers from insufficient funding, outdated curricula, and lack of teachers and trainers. NCVT cooperates with UNICEF, UNHCR and IECD to increase the numbers of trainers and to implement competency-based short-term programmes.

The Ministry of Social Affairs (MOSA) offers informal vocational training courses through NGOs or in the 220 social development centres. Local development projects facilitate the revitalisation of the local craft industry.

The Ministry of Agriculture (MoA) oversees the TVET education in the agricultural sectors and animal husbandry. It comprises of a General Directorate of Agriculture which is responsible for 31 agricultural centres and eight agricultural technical schools. The Food and Agriculture Organisation (FAO), the International Labour Organization (ILO), the Association of Volunteers in the International Service (AVSI), the Welfare Association for Research and Development (WARD) and UNICEF are supporting the sector through various programmes.

In addition to these, there are a number of for profit and not for profit private TVET providers. Unlike public providers, private TVET providers are independent, both in terms of their funding and management. Some private providers are operated by NGOs, whereas others operate for profit. They mainly offer courses in the business, commercial and IT sectors since these do not necessarily require specific equipment or facilities for the training.

UNRWA, for example, is a provider of TVET for Palestinian refugees in two vocational and technical training centres in Sibline and Nahr Al Bared. It also provides career counselling and employment placement services.

> Financing

The Government spent only 2.6% of GDP on education in 2013, allocating approximately 8.6% of total government expenditure to education at all levels.⁷⁴ Public spending on education includes spending on schools, universities and TVET.

The directors of public TVET providers submit their budget needs to the finance department at the Directorate General, which finalises the budget for submission to MEHE. A consolidated budget is then submitted to the Minister of Finance, the Council of Ministers and subsequently to Parliament for approval.⁷⁵

The funding for public TVET providers is through the budget allocated from the DGTVE and through tuition fees. The lion share of tuition fees is used to cover running expenses of schools thus leaving little room for upgrading equipment and infrastructure, integrating digital learning and updating teaching methodologies. The DGTVE's budget covers personnel salaries and budgets, with less than 7% of the budget remaining for equipment, training and maintenance needs.⁷⁶ The DGTVE does not provide funding to any private sector institution. The NEO and MOSA provide incentives to some NGOs.

The provision of quality TVET cannot be achieved without securing adequate funding for the TVET system, while rationalising spending and devising new mechanisms to reduce costs and ensure efficiency in spending. These mechanisms include expanding partnerships with employers. Except for the dual system, no mechanism is currently in place for employers' financial contribution to the TVET system. A stronger partnership with the private sector could potentially reduce the dependence of TVET providers on the public budget allowing educational institutions to support themselves.

⁷⁴ http://uis.unesco.org/country/LB

⁷⁵ Since 2005, however, the Minister of Finance has instead applied the "Twelfth Budget Rule," which uses the budget from the last year, which is divided into 12 and each month they spend 1/12th of the total amount

⁷⁶ ETF 2016

> Quality Assurance

The number of public TVET providers has more than doubled from the under 60 public TVET providers in 2001-2002 to over 162 public providers today. This proliferation has occurred without a review of the demographics and economy in the selected areas, and with no quality assurance mechanisms in place to ensure that TVET provision is of "a consistent standard."⁷⁷ As a result, there is an underutilisation of some schools⁷⁸ and the overall quality of training provision has been affected by this expansion.

The 2011-2014 Action Plan for TVET called for the establishment of a Quality Assurance Agency. The Lebanon Crisis Response Plan 2017-2020 also identified the enhancement of the quality of education services as one of its key priorities. Despite this continued emphasis, however, the DGTVE only has a few QA mechanisms in place to ensure quality.

The DGTVE lacks the necessary staff and structures to promote quality assurance. The General Educational Inspectorate of the Central Inspection at the DGTVE reviews the efficiency of public training providers, curricula, student attendance and examinations. However this Department is understaffed, with only five inspectors for 162 public TVET providers. Inspectors only conduct about one visit per school per year, depending on their workload. The work of education inspectors, on the other hand, is limited to ensuring the regularity of the administrative work in the technical institutes and schools and reviewing complaints submitted.⁷⁹

Technical and vocational schools provide an annual report prepared by the school principal and assistants. However, this self-assessment is not comprehensive and does not reflect the relevance of programmes to the labour market. Tracer studies and employer satisfaction surveys are scant.

The Department of Educational Monitoring and Guidance, part of the Monitoring and Examinations Unit at the DGTVE, examines applications for licenses to open new private TVET schools. The Department of Educational Monitoring and Guidance also dispatches education supervisors who monitor education provision.

The education supervisor at the DGTVE conducts regular visits to the schools based on an annual work plan and drafts individual school reports, which are then submitted to the central administration. Supervision entail of meetings with the principal, teachers and students to assess curriculum implementation, teaching methods, theoretical and practical lessons, examinations and examination results. However, due to the shortage of educational supervisors, with only two supervisors overseeing all private TVET providers, this work has been limited to ensuring the regularity of administrative work in the technical institutes and schools and to responding to complaints. The collection of statistics related to the number of students, teachers, trainers, specialties and divisions is limited in the absence of an education management information system (EMIS) within DGTVE. Without an automated central formal system to manage and monitor TVET provision and inform decision making, the analysis and reporting of TVET data has been limited.

⁷⁷ GIZ 2011

⁷⁸ Over 50 public TVET providers have less than 200 students enrolled (UNESCO 2014)

⁷⁹ Reported in an ILO interview with DGTVE on 3 November 2017

7.2 Key challenges in the TVET sector

According to the ILO National Strategic Framework for TVET in Lebanon (2018-2022), Lebanon is facing the following challenges to the TVET system:

I. Access and service delivery

Reluctance of students and families to enroll in technical education and training

- Shortage of decent job opportunities for TVET graduates
- High competition for low-skilled TVET-level jobs due to the mass influx of refugees and other migrants willing to accept lower wages
- Mismatch between youth expectations in addition to salaries and working conditions of TVET-level jobs
- Absence of clarity in the competencies acquired by graduates through TVET programmes, accentuating the need for improved testing and certification mechanisms
- Failure to adopt horizontal and vertical pathways and modular courses to allow students and workers to progress in their education and careers as part of a lifelong learning process
- Nonexistence of career guidance in most VET schools.

Programmes are not inclusive

- Failure of TVET providers to challenge the gender division in labour market specialisations
- Inaccessibility of most programmes by PwDs.

Weak infrastructure

- Weak infrastructure of the TVET institutions and their need for rehabilitation and equipment in the purpose of keeping up with the requirements of employers and the changing needs of the labour market
- Insufficient allocation of materials to allow for trainees to learn through trial and error.

II. Quality and relevance

Weak relevance of TVET training to labour market demand

- Outdated curricula unfounded on competencies
- Absence of unified qualification standards for the competencies, curricula and impact assessment tools
- Nonexistence of systematic participation of the social partners in the design, implementation and evaluation of TVET programmes
- Inaccuracy and unreliability of information on the current and future needs of the market
- Absence of implementation of a National Qualification System or sector qualifications systems to allow for multiple pathways
- Inadequate accreditation system and quality assurance mechanisms
- Life skills not adequately addressed by existing TVET programmes.
- Absence of graduates follow-ups and tracer studies.

Shortage of qualified trainers

- Absence of trainers who have (a) the knowledge and pedagogical competencies to adopt modern training methods, (b) current and relevant staff and supervisors industry/technical experience for training on competencies in demand in the labour market
- Shortage of meaningful supervision of TVET and insufficient number of education supervisors and inspectors for sufficient guidance.

III. Governance and systems

Absence of common priorities for TVET

 Lack of inter-institutional coordination mechanisms to harmonise practises, define priorities, and learn from progress

Centralised financing system unsupported by evidence of cost effective approaches

- Centralisation in the management of TVET constraining the capacities of TVET providers to introduce innovative practices and multiple financing mechanisms
- Lack of cost efficiency due to a large network of under-utilised centres that have been established without any study examining the number of providers per geographic area visà-vis number of students and labour market demand.

Insufficient partnerships with the private sector

- Low trust in the efficiency and relevance of public sector training providers and limited interest among the private sector to partner with public institutions on TVET programmes. Such partnerships would ensure stronger and more adequate provision of employability skills for TVET graduates along with the acquisition of practical experience
- Absence of space and forums for the systematic inclusion of private sector representatives in the shaping of policies and priorities, as well as for the design, implementation and evaluation of training programmes.

However, in view of understanding the TVET landscape in Lebanon in general and for the purpose of assessing its importance and potential for improving the country's competitiveness and economic development, the observer must also get familiar with the overall political, socio-economic and labour market context. As a matter of fact, the Syrian crisis has led to the highest level of refugee population displacement since World War II. Lebanon currently hosts the highest refugee population per capita in the world (one refugee to every four Lebanese).⁸⁰

Consequently, results show that one of the manifold perennial challenges is the increase in poverty rates and decrease in youth penetration to job market. Youth unemployment rate is 35% as per the National Youth Policy. The country is suffering from recurring and structural unemployment, which hinder economic growth and job creation especially in vulnerable areas such as the North of Lebanon. UNHCR interagency 2019 statistics shows that the North of Lebanon and Akkar host over 355,000 Syrians refugees, which in turn aggravated the situation notably in terms of youth employment. There is a growing gap between the labour supply and labour demand in the market. This might be associated to several factors;

- 1. rigid labour regulations make it difficult to develop businesses and hire talent,
- 2. skills mismatch with labour market demands
- 3. poor governance structures which results lack that could facilitate job creation.

Regardless of the remarkable interventions, skills matching and job creation remain the important tools towards achieving sustainable livelihoods, stabilisation, reduction of tensions. This is due to the absence of an inclusive and comprehensive approach that takes into consideration the relevant sectors where Syrian do not compete with Lebanese. According to The Vulnerability Assessment of Syrian Refugees in Lebanon (VASyR 2019), 61% of Syrian refugees aged 15 to 24 were not employed, not in education, and not attending any training (NEET). However, surveys show that 47% of Syrian youth are active in employment mainly in construction (21%) and agriculture (17%) where competition with Lebanese is less. This puts the activity rate among Syrian refugees at a roughly equal stance with both Lebanese and the Palestinian refugees because of generally high unemployment.

⁸⁰ UNHCR, 2015

7.3 Evidence of PPP initiatives in the TVET sector

Work Based Learning (WBL) is one example of PPP in Lebanon. It refers to the "learning that occurs when people do real work. This work can be paid or unpaid, but it must be real work that leads to the production of real goods and services."⁸¹ WBL is often seen as a powerful vehicle for developing workplace skills and promoting productivity of the labour force. However there is a long tradition of skill development through informal or traditional apprenticeships. Although reliable data is not available, informal apprenticeships still represent the main training route for some sectors and occupations including crafts, construction, retail, garment making and repair, and automobile maintenance. Typically, informal apprenticeships take place entirely within the workplace and do not involve any complementary classroom-based education or training. In addition to these informal arrangements, there are three types of formal programmes:

- Well-established programmes have a large number of participants and represent a large share of the upper secondary initial vocational education and training system. These programmes have a sound institutional base
- Long-established programmes are an integral part of the country's vocational education and training system, but tend to remain small, specifically in comparison to institution-based vocational education and training
- Small pilot programmes tend to depend on support from donor agencies for their continued existence and viability.

WBL in Lebanon goes under the TVET sector and combines classroom-based learning. WBL improves the practical skills of TVET students and facilitates the transition from school to work for graduates. TVET providers benefit from WBL by saving on equipment needed for the training process in their campuses. The private sector benefits from WBL because employers can save money and time by avoiding the costs of re-training employees. Employers can hire young people who are better trained, have skills relevant for the needs of the labour market, and have prior work experience. However, Lebanon (excluding the LP program dual system) lacks structured WBL schemes that provide a framework with regulations regarding duration, content, roles and responsibilities regarding firms and supervisors, and monitoring schemes etc. The dual system's main objective is to promote employability in a changing workplace. This system understands that technological advancements and employees can shape and change the workplace. Another objective is to create a willingness to learn and foster personal development.

In order for people to work in a knowledge society and deal with its future challenges, they must be able to plan, carry out and check their own work independently. Vocational education through apprenticeship orients toward this goal. Regular training complemented with additional qualifications can support these apprenticeships and lead to further specialisations after finishing these programmes. Lebanon's dual system consists of three years of study with the first year of practical training taking place in a school setting. In the first year, the objective is to strengthen students' theoretical and basic skills. In the second and third years, student acquire theoretical knowledge at school and develop workplace skills through practical experience at companies.

The LP Level (also known as the dual system/apprenticeship system) offers training for eight different trades such as industrial electric, industrial mechanics, restaurant service, car mechanics, heating and sanitary/plumbing, woodworking, production cook, metal construction, and maintenance. The Meister Level offers training for three different trades only. Training at the LP and Meister levels are only available in a limited number of schools and institutes in the country. The "majority of dual system

⁸¹ European Training Foundation, Work Based Learning: A Handbook for Policy Makers and Social Partners in ETF Partner Countries, 2014, p.3

students (69%) are employed in companies immediately after completing their studies and have the option to pursue further studies in their field."⁸²

Similar to Lebanon's broader TVET system, there are numerous challenges associated with apprenticeship. It is difficult to keep teachers updated on new technological developments in their fields. Although training teachers is fundamental for equipping them with additional skills to provide settings conducive to learning, this is largely absent. Companies lack qualified trainers who can create links between theoretical education offered in TVET schools and practical training provided by firms. These two key components of the apprenticeship system create serious gaps in the training provided.

Furthermore, Lebanese society has a negative view associated with TVET and there is a general lack of awareness of the apprenticeship system, resulting in low participation rates. It is also common for students to drop out of their apprenticeship program, especially during their first year. Limited career guidance for students is one of the primary reasons for high dropout rates.⁸³ In some cases, students opt not to return to school once they have started earning wages and employers like to retain students who have not completed their studies because they can offer them lower wages. Another important challenge is the relative low cost of employing foreign workers in Lebanese companies, which leads employers to prefer and hire foreigners over Lebanese workers.

Another initiative, taken by UNESCO's Office of Beirut to enhance PPPs in the region, was a two-day workshop that took place in September 2019, and which was attended by high-level representatives of the public and private sectors from 14 Arab states. It aimed to examine the state of public private partnerships (PPP) between TVET institutions and the private sector and the potential of expanding the provision of TVET and enhancing its quality and relevance, as well as to identify current national reform efforts, and explore areas for development of institutionalized partnerships between TVET institutions and the world of work throughout the Arab region. Representatives of international organisations, other UN agencies, and partners also took part in the event, including: UNICEF, FAO, UNRWA, GIZ, European Training Foundation (ETF), Swiss Business Council-Lebanon (SBC-Lebanon), Association of Lebanese Industrialists, and Federation of Egyptian industries.

The workshop offered participants a platform to share experiences, best practices and success stories, and to reflect on the challenges of institutionalising PPP in the Arab region. Three national studies conducted by UNESCO for Jordan, Palestine and Egypt were presented and discussed and participants ultimately agreed upon a set of recommendations (see p. 62).

7.4 Evidence of PPPs at the TVET institutional level

> The Directorate General of Vocational and Technical Education (DGTVE)

The Ministry of Education and Higher Education (MEHE) has the role of overseeing the TVET system in Lebanon. Under it, the Directorate General of Vocational and Technical Education is responsible of the TVET sector as a whole, its development and modernization. In addition to managing the public provision of TVET, the DGTVE also supervises the performance of private educational institutes and training providers including NGOs. The DGTVE is also responsible of organizing public TVET examinations, issuing diplomas and certificates to learners and coordinating with line ministries and other bodies that provide different types of TVET. These

⁸² GIZ-DSME-Lebanon (2010): Project Monitoring Report

⁸³ Barend Vlaardingerbroek, Neil Taylor and Tom Haig. "Student Transition to Vocational Education from Middle Secondary School in Australia and Lebanon: An Exploratory Study." Mediterranean Journal of Educational Studies, Vol. 14(1) 2009, pp. 91-107. See page 95: http://www.um.edu.mt/__data/assets/pdf_file/0009/77049/Med_Journal_09-_Vlaardinger.pdf

include the Ministry of Agriculture, the National Employment Office, the Ministry of Social Affairs and the National Centre for Vocational Training.

> The Directorate General of Higher Education (DGHE)

The DGHE is in authority of administering higher education provision, including technical tertiary education, regulating private higher education providers and supervising all higher education institutions. The single exception is the Lebanese University; it is the only public university, which is autonomous and maintains its own system of governance.

The DGHE also regulates the transition of TVET students into tertiary education as they have the option of enrolling in academic programs or continuing with technical education at tertiary level. The decree no. 8950 stipulates that any VET graduate with an average of 12/20 and 13/20 for the students of the agricultural technical schools are eligible to pursue higher education after TS. Nevertheless, it leaves it up to universities to set their own entrance requirements.

> The National Employment Office (NEO) under the Ministry of Labour (MoL)

The National Employment Office is a public institution with financial and administrative autonomy under the tutorship of the Minister of Labour. Mainly, it is in charge of employment related policy-making, job matching and placement through its Employment Bureau.

The NEO has supported over 40 NGOs to provide accelerated VT programmes across the country. The short-term courses are usually completed in between three (120 hours), six (240 hours) and nine months (450 hours). After successfully completing these courses, graduates receive certificates stamped by the NEO. Most certificates are not officially recognized by MEHE.

> The National Centre for Vocational Training (NCVT)

The NCVT is responsible for accelerated VT programmes. The short-term courses are usually completed in between three (120 hours), six (240 hours) and nine months (450 hours). All students who enrol in NCVT-sponsored courses receive a certificate from the NCVT upon completion of the programme.

The NCVT is working at less than half its capacity and suffers from funding shortages, a low number of teachers and trainers, out-dated curricula and poor infrastructure and equipment.

> The Ministry of Social Affairs (MoSA)

MoSA offers short informal vocational training courses through NGOs or through the Social Development Centres affiliated to it which allows the Ministry to establish local presence, facilitating local development projects.

Since 2011, MoSA has been working on the traditional crafts industry, identifying a total of 24 crafts in Lebanon. Some other training such as on wood, glass and pottery are not offered by MoSA due to the relatively high cost of equipment.

Like the NCVT, MOSA also provides its own certification to graduates upon successful completion of VT courses.

> The Ministry of Agriculture

The Ministry of Agriculture is responsible of the management of agricultural schools and for training on agriculture and animal husbandry. The Extension and Agricultural Education division within the General Directorate of Agriculture leads at least 28 agricultural centres, including Eight (including the new school of Jebjenine) agricultural technical schools and three agricultural service centres across Lebanon. Its mission is to deliver agricultural education and training.

Students specializing in agriculture have the option of choosing between BT in Agriculture and accelerated vocational training programmes in the MOA's centres and schools. Nevertheless, several challenges are being faced in the public agricultural technical education such as declining interest and lack of funding. As a result, many schools are understaffed, and curricula are not updated to meet emerging skills demand such as agribusiness, farm management skills. In addition, according to the the Lebanese labour law, Syrians are allowed to work in agriculture, thus most of the vacancies within this sector are occupied by Syrians workers without any social benefits, which results in less job opportunities for Lebanese.

> The United Nations Relief and Works Agency (UNRWA)

UNRWA provides TVET for Palestinian refugees in two vocational and technical training centres. It also provides career counselling and employment placement through its four Employment Service Centres, first established in partnership with the ILO. UNRWA trainings are not officially recognized by the DGTVE.

Private training providers

Unlike public providers, private TVET providers are independent both in terms of their funding and management. Some of these providers are operated by NGOs, whereas others operate for profit. Although they have a relative independence, they're still obliged to obtain DGTVE accreditation. Non-formal providers must be in a school certified by the government, and officially registered with the DGTVE. They must also have their students sit for one official examination organized by the central administration at the end of each academic year. Upon successful completion of the course, students are provided with a certificate from the institution authenticated by the Directorate General. Generally, private technical and vocational schools focus on non-industrial disciplines such as business and commerce and IT that do not require heavy equipment, factories and laboratories.

The DGTVE is required to oversee the work of private institutes and schools. Besides, it is mandatory for private schools to submit an annual report to the DGTVE. However, because of staff shortages, the DGTVE has no other follow-up mechanisms in place to promote quality assurance in private schools.

The relation between the public and private sector in TVET is regulated through:

- The Higher Council of TVET: The Higher Council for TVET is a consultative body comprised of representatives of government agencies involved in TVET. It is mandated to ensure the systematic involvement of social partners in TVET policy design and strategic planning (Annex 1);
- Common Projects such as the project agreed upon between the MEHE and the Ministry of Tourism;
- Agreements with syndicates as the ratified agreement with the Syndicate of Agro-food Industry and Topography;
- The Dual System's main objective is to promote employability in a changing workplace. This system understands that technological advancements and employees can shape and change the workplace. Another objective is to create a willingness to learn and foster personal development. In order for people to work in a knowledge society and deal with its future challenges, they must be able to plan, carry out, and check their own work independently. The dual system has two levels: the LP level and the Meister Level;
- The decree N^o 11019 issued on 07 October, 1968, is the only decree currently dealing with apprenticeships. It was issued by the Ministry of Labour (named Ministry of Labour and

Social Affairs at that time), where child labour was "a normal and common issue." This decree aimed to set some rules regarding this matter trying to give some rights for the children under the name of "apprentice."

7.5 Key challenges of PPPs in the TVET sector

For the past few years efforts have been in place to reform the TVET system in Lebanon. The TVET system of Lebanon has to overcome a lot of challenges in order to become an efficient system that educates and trains qualified workforce able to contribute to the development of the national economy. Major challenges are related to:

- Negative attitudes of students and parents towards TVET including apprenticeship and other work-based training;
- Insufficient financial resources for increasing and improving apprenticeship and other work based training schemes. Financing of WBL is a core issue for guaranteeing the sustainability of leveraging youth capacities. Most TVET students come from poor or underprivileged areas and there is no financial support allocated specifically for WBL schemes in Lebanon that includes accommodation, transportation, and insurance. Instead, donors through INGOs and NGOs provide apprentices "stipends." Stipends are economic incentives that help cover the apprentices' expenses during their training;
- Lack of private sector capacity to participate effectively in planning, designing, and implementing TVET in Lebanon;
- Inadequate facilities for conducting work-based training;
- Unwillingness of some companies to cooperate in implementing work-based trainings. Employers and employee organisations are not yet active partners in the development of economic and educational policies with lifelong training components;
- Lebanon's economy mostly depends on small and micro enterprises;
- Insufficient training places for apprenticeship and other work-based training ;
- Lack of labour market information and advice to students and employers. Lebanon has no established labour market information system. No official labour market needs analyses have been carried out for several years the last one dates back to 2004. There is no structured and consolidated mechanism for skills matching and anticipation. The limited dialogue with social partners and the business sector in particular remains a key problem in defining and implementing effective measures to address skills development and skills mismatch.

8. Some international examples of good practices of training centers managed/co-managed by private sector

8.1 Vocational Education in Denmark

The Vocational Education in Denmark is administered by the Ministry of Education's VET Department. There are no other intermediary levels between the Ministry and the training schools. The Ministry's management responsibilities have changed from direct administration of schools to the development of VET policies and targets, promulgation of Education Orders delineating a broad framework for VET courses and regulation of financing.

Vocational schools are now organized as private, non-profit and independent institutions. They have considerable freedom in the programming of delivery and enrolments, curriculum development and teaching. Individual schools decide which courses to offer and how to organize the teaching within the national guidelines and financial framework. The independent schools which wish to obtain public funds have to offer programs which comply with government regulations. Public grants are not earmarked, and schools are free to allocate resources as they see fit.

A governing board with equal representation of local employers' associations and trade unions is overall responsible for the college management, and the social partners are also represented in a large number of sector-specific local training committees advising the college on the provision of VET programmes and continuing training courses. This is one of several ways of ensuring that programmes always meet the needs of the local/regional labour market.

Activities are governed by a legal framework developed in consultation with the social partners and issued by the Ministry of Education and are financed through a per-student state grant system supplemented by income generating activities.

See: http://aarhustech.dk/english/english/aarhus-tech-international/references

8.2 Enhanced TVET Funding in Kenya

In **Nairobi, Kenya**, the higher Education Loans Board (HELB) enhanced TVET Funding for the financial year (FY) 2018/19.

The government reduced the annual cost of training from Ksh. 92,000 to Ksh. 56,420 per annum and provided capitation of Ksh. 30,000 per year per trainee in order to make TVET affordable. Furthermore, the FY 2018/19 Government has resolved to enhance funds to finance over 150,000 TVET trainees at an estimated cost of Ksh. 10.5B. The technical training institutions received a government capitation of Ksh. 30,000 per student enrolled through the Kenya Universities and Colleges Central Placement Service (KUCCPS) or admitted in Kenya Medical Training Institutions (KMTC) whilst an additional Ksh. 6 Billion was channeled through HELB awarded as loans. HELB disbursed Ksh. 40,000 for each eligible student with Ksh. 26,400 paid directly to TVET institutions for tuition and Ksh. 13,600 for trainee stipend paid to the student's individual bank accounts. The CS also directed all TVET institutions to implement the smart card solution during the FY 2018/19 so as to effectively and efficiently manage these funds that have been invested in the TVET sector by the Government.

This TVET Government marshal plan was in line with the Big 4 Agenda⁸⁴ and gave an opportunity for the youth to acquire technical skills in order to improve their productivity and enhance the employability thereby meaningfully contributing to national development. In order to achieve the Big 4 Agenda, there is need for adequate and skilled human capital and HELB played a major role in facilitating this through student loans, scholarship and bursaries.

8.3 China Vocational Training Holdings (CVTH)

In the Modern Vocational Education Development strategy 2014-2020, the private sector is defined as a key provider and private TVET provision is to be institutionalised and legislated. Companies and industry associations are allowed to purchase or rent failing TVET institutions. Companies with specific skilled labour demands are encouraged to outsource such needs to local TVET schools by setting up a customised curriculum. Joint Admission & Training will allow companies and schools to have a say in admitting students to such a programme and will co-develop the curriculum.

Organisations such as the China Vocational Training Holdings (CVTH) are large training institutions promising graduates job placements. THE CVTH's Department for Employment maintains relationships with about 1,800 employers and has a database of employers with details such as the size of the company, demand requirements (how many workers they need, type of worker required), and location. Moreover, one of the pilot projects currently taking place in China is the foundation of the Tianjin Institute of Mechanical Technology. The institute offers three-year programmes in numerical control, automobile systems, information technology, and electronic and mechanical systems. The institute is connected with a large industrial group made up of different companies. The strategy sets aim to have more than 80% of large and medium sized companies as TVET providers by 2020.

⁸⁴ Kenya Vision 2030 was launched in 2008 as Kenya's development blueprint covering the period 2008 to 2030. It was aimed at making Kenya a newly industrializing, "middle income country providing high quality life for all its citizens by the year 2030". when Kenyan President Uhuru Kenyatta began his second term in office in 2017, he released his development blueprint for Kenya, known as the Big 4 Agenda. The plan outlines 4 pillars of development: Food security, affordable housing, universal health care and manufacturing

9. Recommendations

> Governance

- Establish a stronger role through formal agreements between the government and the private sector in developing and implementing national strategies and action plans which clearly and explicitly include TVET reform
- Modify related laws and regulations to increase percentage of private sector and social partners representatives in governance bodies of the TVET sector
- Harmonise policies, legislations, strategies, programmes and action plans for PPP to accelerate progress towards establishing knowledge-based economies and to speed the issuance of the TVET Law and its executive regulations
- The relevance of TVET to labour market needs to be improved by institutionalising employer engagement at all levels of the system as well as establishing sustainable and regular information through labour market information systems
- A monitoring and evaluation function that looks at the whole TVET sector could be established through cooperation mechanisms involving the different stakeholders
- Restructuring the funding mechanisms for TVET including WBL and apprenticeships both within the school-based training structure and the employer side
- Utilise current policies to include larger TVET projects where private sector investors are encouraged to cooperate not just for their own individual need for skilled labour but for the business opportunity - this is one way of improving provision at a large scale

> Implementation of PPPs

- TVET stakeholders should review their curriculum development process. It is crucial that this
 - 1. includes the labour market component (analysis of occupational profiles) and the components
 - linked to the provision side (development of qualifications, curriculum, assessment standards, etc.). The business sector should be actively involved in the occupational analysis⁸⁵
- More attention should be given to setting clear and standardised qualifications for incompany tutors and mentors responsible for the in-company training of apprentices. Consistent and regular training for these tutors should be established and not left in its current ad hoc status. It should be incorporated in the system and in the agreements drafted between the government and employers
- More advanced and regular evidence-based research, data collection and monitoring and evaluation tools should be established at the national level with networks at the local level for TVET in general and WBL in particular. The objectives should include analysis of the system, best practices, short-comings and be used as a tool for informed decision making This could be initiated at a central government body and could receive donor funding to start but it is crucial that sustainable measures are in place from the beginning. Crucial to understanding the extent and nature of WBL better is to have better information on informal/traditional apprenticeship schemes where information is almost none existant
- Enhancing communication and interaction between private sector representatives in governance bodies and employers and employer associations as well as with individual members regarding TVET and partnerships issues
- Delegating more authority to TVET providers for local management decisions that involve

⁸⁵ ETF. Torino Process 2016-2017: Egypt, 2017

undertaking initiatives and forming local partnerships with private sector companies in the surrounding areas (signing cooperation agreements, continuous and up grading training, on the job training of trainers, etc.)

- The government, in partnership with all stakeholders is required to implement an integrated campaign to change the image of TVET in general and WBL in particular. This should include nontraditional tools like social media, messages within drama and reality show competitions addressing the target groups
- Establishing partnership/marketing units in TVET institutions particularly at the local level which includes responsibilities of marketing TVET programmes and partnerships with labour market companies and work places. The partnership/marketing unit will form a point of contact to which employers refer to for partnering in training and other cooperation activities
- Developing policies and taking measures as required by the TVET sector institutions to
 organise informal apprenticeship in informal sectors of the economy which currently lies
 outside the field of interest of mainstream government activity in the TVET sector
- Providing tax deduction for firms on the net cost of approved training conducted as initial
 or continuous training for new employees and already employed workers. The deduction
 which can be doubled on the net cost of training is expected to act as an incentive for
 encouraging companies, particularly large scale firms, to partnership with TVET providers
 for training of their workers pre and during their employment
- Capacity building should be provided to intermediary employer organisations in better managing the process of WBL especially for enterprises. Also the relationship between government bodies and these employer organisations needs to be enhanced at the operational level with more cooperation and alignment in the overall objectives of WBL. Employer organisations should also develop orientation programmes within enterprises for off-the-job teachers and trainers in order for the links to be stronger between school and enterprise and this will be for the benefit of the learner, especially that most practical instructors at schools
- The traditional informal training system should be supplemented with off-job apprenticeship in well-established training centres at the local areas where apprentices work.

The regional forum on "Enhancing institutional partnerships between the TVET institutions and the world of work in the Arab region", held on 23-24 September 2019 in UNESCO's Regional Bureau of Beirut issued the following recommendations:

> Laws, legislations, policies, planning and objectives

- Developing a policy that promotes public-private partnership within a framework of mutual trust, as the institutional relationship between the two parties must be extended and expanded into mutual economic and national social goals
- Allocating and establishing adequate budgets to support and build technical capacities and roles for all partners involved, especially considering that the cost resulting from weak human resources performance due to the lack of training is greater than the costs of vocational and technical training and education
- Designing and adopting national qualification frameworks which recognise experiences gained during work
- Adopting the applied principle of centralised planning and decentralisation in order to facilitate partnerships and agreements with the private sector
- Adopting and activating legislation which would govern TVET to support the participatory relationship between TVET institutions and the business sector and would encourage and motivate the private sector to carry out the tasks of TVET

- Creating a reference framework for coordination and cooperation between the various sectors of TVET to prevent conflict and duplication of work
- Human resources development cannot be achieved by neither training institutions nor the private sector by itself; rather it is necessary to work together to achieve development goals
- It is important to establish TVET units within companies and factories so that private sector organisations can play their part in supporting training
- The private sector, represented by companies, factories and institutions, should incorporate into its strategy the promotion of investments in TVET in order to contribute to the success of economic development projects
- The need to develop and amend legislation governing TVET to support the building of a participatory relationship between training institutions and the business sector
- Developing legislation that encourages the private sector to carry out the task of TVET through clear, direct and indirect incentives
- Identifying clear roles and responsibilities that training and technical education institutions must play, as well as production and service institutions and the supporting role of government through the consolidation of TVET institutions as well as the consolidation of supervisory and administrative bodies
- Establishing a quality accreditation system in accordance with international standards that enables education programmes highly connected to market needs and competencies and responsive to technological changes.

> Partnership-enhancing tools, mechanisms and activities

- Establishing advisory committees, technical committees, councils, bodies, twinning programmes and other partnership tools and means
- Enhancing the effectiveness of the use of training sites and the workshops of training providers in implementing programmes (raising the ratio through two periods) to achieve a better investment of different resources
- Establishing technical committees that are involved in the preparation of professional standards and career guides
- Providing capacity-building programs to the company's accredited trainer(s) as well as to the curriculum and educational materials related to apprenticeship courses while taking into account the provision of the necessary tools to monitor the performance of the company's trainer(s) in accordance with quality standards
- Establishing a national TVET-related statistics body in each country to be led by the Ministry
 of Planning in order to provide an approved database of data and information on labor
 market needs and on training programmes provided by TVET institutions, as well as to
 identify the training needs and administrative and technical requirements in which career
 guidance training programmes can be built in line with international standards
- Organising national competitions to motivate the private sector to build partnerships with the public sector
- Building the capacity for TVET institutions in terms of educational leadership and partnership building
- Using media (including social media) to promote the importance of TVET and future employment opportunities as well as to promote the importance of public-private partnerships for TVET
- Establishing an accredited system for the standardisation of terminology, names and concepts
- Developing a unified training system for trainers
- Adoption of a single entity that qualifies and licenses trainers in TVET-related sectors in accordance with international regulations and standards.

> Regional and international cooperation

- Monitoring and disseminating promising regional and global initiatives and experiences in Arab countries through the International Center for Technical and Vocational Education and Training (UNEVOC)
- Holding further meetings to follow up on the discussions based on what has been agreed, such as the international accreditation of the Partnership Framework for the Development of the Vocational and Technical Education Sector as well as a virtual forum in Arabic
- Building an effective and institutional relationship between training centers and institutes in Arab countries and relevant international organisations to benefit from recent experiences and applications in training
- Implementing twinning programmes between Arab and regional countries based on agreements of understanding between Arab countries.

Appendices

Annex 1. Model Skill Centre of Excellence for Pharmaceutical Sector in Jordan

 Introduction: The Jordanian pharmaceutical sector is considered to be advanced and one-step ahead of regional competitors due to the sector's various strengths, which include availability of high- level professional local human resources and a favorable business environment.

The sector is positioned among the highest exporters in Jordan, where export of pharmaceutical medicines and products in Jordan was totaled at 467.7 million JD representing about 10.6% of the total products exports that equals to 4,396.6 million JD in 2016. Pharmaceutical medicines and products sales are concentrated in KSA, Algeria, Iraq and Sudan (Central Bank of Jordan Annual Report 2017).

Studies demonstrate that the sector plays an important role in resolving the country's unemployment problem with over 5,000 direct jobs and 8,000 indirect jobs in 2008.

- Establishment of the CoE: Since the pharmaceutical sector was identified as one of priority economic sectors in Jordan, and in order to meet the need of the pharmaceutical industries for skilled workers at operational level, VTC established the center in 2014 using an available building in one of its existing training institutes in Salt city in the middle region of Jordan.
- Partners and their roles: The center was established through partnership between VTC and Jordan Association of Pharmaceutical Products (JAPM) and with support from both the European Union and the ETVET Fund.
- VTC: In addition to providing buildings and technical and administrative staff, VTC is planning, implementing, managing and evaluating training process in the center.
- Jordan Association of Pharmaceutical Products (JAPM): JAPM involvement is through their
 presentation and chairing of the CoE steering committee responsible for the supervision and
 decision making in terms of curricula amendments and recruitment of centre staff. Also JAPM
 roles includes: identifying the sector training needs, marketing of the CoE services, providing
 raw materials for training/production process and providing of on-job training for the trainees
 as well as employment opportunities for the graduates.
- EU: Through their project in Jordan (Technical Assistance of the Programme in Support to the Employment and TVET Reforms), EU supported the pharmaceutical CoE through developing the curriculum with 10 training modules/text books, 5 years operational plan for the center and ToT for the technical staff.
- **ETVET Fund:** The fund support included covering cost of the equipment and salaries for key technical staff of the CoE.
- Implemented training programmes: The training programme conducted in the center is titled "Operation Technician /Pharmaceutical production units" is one year programme of which 3 months are conducted in pharmaceuticals industries. The programme leads to the occupational level 3 (technician) according to the occupational skills levels in Jordan which consist of 5 levels. The training programme is opened for students who completed the second secondary class in the educational system in Jordan (12 years in the schools). It is opened for both males and females.

Annual intake of the institute is about (30) trainees and the employment percentage for the graduates according to the center principal is 90%. However, no tracer studies for the center graduates were conducted so far (interview with CoE principal).

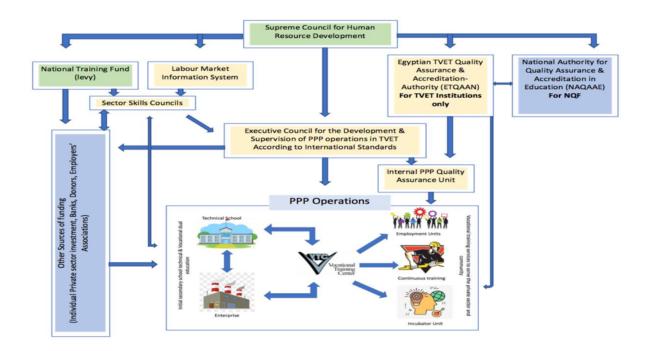
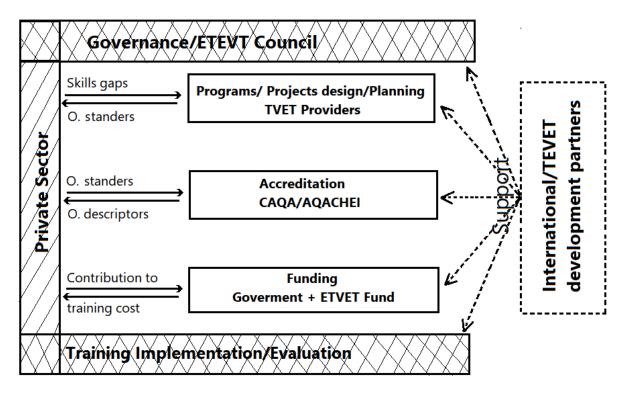
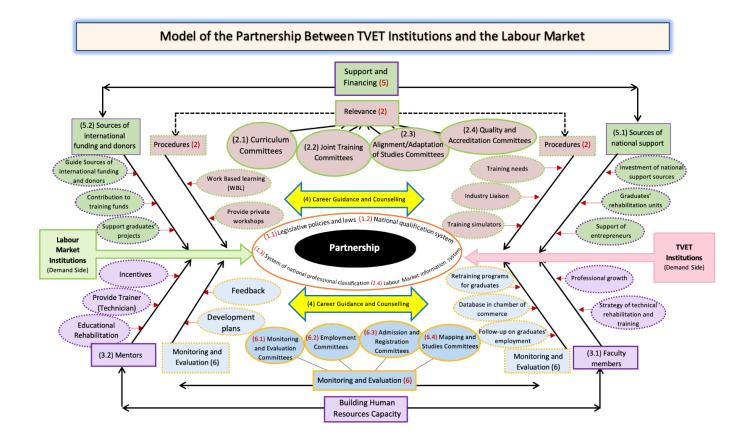


Figure 6. Structure of Proposed Comprehensive PPP Model in Egypt

Figure 7. Proposed TVET partnership model/ Jordan







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Enhancing Institutionalized Partnerships between TVET

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