TORINO PROCESS 2018–2020 JORDAN

NATIONAL REPORT

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CONTENTS

ACRONYMS

ALMPs	Active Labour Market Policies
AQACHEI	Accreditation and Quality Assurance Commission for Higher Education Institutions.
ASCO	Arab Standard Classification of Occupations
HTU	Al Hussein Technical University
BAU	Balqa Applied University
BDC	Business Development Center
BEST	Building and Extending Skills Training (Canadian Project)
BMZ	Federal Ministry of Economic Cooperation and Development (Germany)
CAQA	Center of Accreditation and Quality Assurance
CCs	Community Colleges
CRPD	Convention on the Rights of Persons with Disabilities
CSB	Civil Service Bureau
CVT	Continuous Vocational Training
DACUM	Developing a Curriculum
DEF	Development and Employment Fund
DFID	Department for International Development/ UK
DOS	Department of Statistics
EBRD	European Bank for Reconstruction and Development
ESC	Economic and Social Council
ETF	European Training Foundation
EU	European Union
ETVET	Employment, Technical and Vocational Education and Training

GAC	Global Affairs Canada
GBD	General Budget Department
GDP	Gross Domestic Product
GFJTU	General Federation of Jordanian Trade Unions
GIZ	German Agency for International Cooperation
GSCE	General Secondary Certificate Exam
HCRPD	Higher Council for the Rights of Persons with Disabilities
HPC	Higher Population Council
ILO	International Labour Organization
IMF	International Monetary Fund
ISSF	Innovative Start-ups and SMEs Fund
IVT	Initial Vocational Training
ISCED	International Standard Classification of Education
JAPM	Jordanian Association of Pharmaceutical Manufacturer
JEDCO	Jordan Enterprise Development Corporation
JICA	Japan International Cooperation Agency
JLGC	Jordan Loan Guarantee Corporation
JOHUD	Jordanian Hashemite Fund for Human Development
KOICA	Korea International Cooperation Agency
LM	Labour Market
LMIS	Labour Market Information System
LRPD	Law on the Rights of Persons with Disabilities
MINBUZA	Ministry of Foreign Trade and Development cooperation/ Netherlands
MOF	Ministry of Finance
MOPIC	Ministry of Planning and Foreign Affaires
MOE	Ministry of Education

MoHESR	Ministry of Higher Education and Scientific Research
MSMEs	Micro, Small and Medium Enterprises.
NCHRD	National Center for Human Resources Development
NES	National Employment Strategy
NET	National Employment and Training Company
NEES	National Electronic Employment System
NQF	National Qualification Framework
NSSCs	National Skill Sector Councils
NTTI	National Trainers Training Institute (NTTI)
SSC	Social Security Corporation
TDI	Training and Development Institute
TVSDC	Technical and Vocational Skills Development Commission
TVQF	Technical and Vocational Qualification Framework
TVET	Technical and Vocational Education and Training
UJ	University of Jordan
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations International Children's Emergency Fund
UNRWA	United Nations Relief and Works Agency for Palestine Refugees
UNESCO	United Nations Educational, Scientific and Cultural Organization
USAID	US Agency For International Development
VTC	Vocational Training Corporation
WB	World Bank

BUILDING BLOCK A: COUNTRY AND VET OVERVIEW

A.1: Country background

A.1.1 Introduction

Jordan is small-sized country with a total area of 89,318 square Km and a population of 10,309.0 thousand as estimated in 2018 (DOS/ Jordan in figures 2018). Most of the population (74.8%) is living in 3 governorates out of 12 (Amman 42% and Zarqa 14.3% in the middle region and Irbid governorate 18.5% in the northern region). The rest of the population (25.2%) is distributed in the other 9 governorates in the 3 regions (north, middle and south of Jordan). According to DOS censuses, Jordan population increased remarkably from 5,103.0 thousand in 2004 to 9,559.0 in 2015 (87% increase) mainly due to influxes of refugees from neighbouring countries as a result of turmoil in their countries.

Population in Jordan includes 1,265,000 Syrians, 130,000 Iraqis, 636,000 Egyptians and around 200,000 from various other nationalities (Torino Process report, 2016-17).

The persistent problem of refugees, the population growth rate reaching 2.4% (2018) and the high percentage of those under 15 years old (34.3%, 2018) are all factors contributing to high demographic pressure, which in turn requires significant public investment in education, health, employment, housing and infrastructure.

In terms of economic development, on 1st July 2017, the World Bank reclassified Jordan as a lower middle-income country[1]. Jordan economy is considered as an open economy with emerging markets. The Jordanian economy is characterised by several challenges, that include: insufficient supplies of water, oil, and other natural resources, high rates of unemployment and underemployment, budget and current account deficits, and government debt[2].

The Gross Domestic Product (GDP)/ current prices totalled 42.231 billion USD in 2018. However, the GDP growth rate continued declining from 3.1% in 2014 down to 2.4% in 2015 and reaching 1.94% in 2018[3].

In terms of economic sectors, Jordan economy continues to be dominated by the service sector which contributes to 61.84% of its GDP, while the industry contributes to 27.58% and the agriculture sector to 5.63% in 2018[4].

The Jordan labour market is largely dominated by micro enterprises (less than 5 employees). In 2017, micro enterprises formed 88% of the total number of enterprises, small (5-19) represented 10.2%, medium were (20-99) 1.4% and large enterprises (100 and more) counted for 0.4%. The number of employed workers in micro, small, and medium enterprises was 557,707 (67.1% of total employees working in all enterprises), while the number of employed workers in large enterprises was 273,233 forming about 32.9% of the total employed workers in enterprises (DOS, 2017).

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[1] https://www.albankaldawli.org/ar/country/jordan/brief/qa-jordan-country-reclassification
[2] Jordan Economy 2019, CIA World Factbook-https://theodora.com/wfbcurrent/jordan/jordan_economy.html
[3] WB- https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?locations=JO
[4] https://www.statista.com/statistics/385505/jordan-gdp-distribution-across-economic-sectors/

In regard to ease of doing business, Jordan jumped 29 ranks in the World Bank 2020 Doing Business rankings, progressing from 104 in 2018 to 75 (out of 190 countries) in 2019. The progress is attributed to a series of economic reforms enacted over the past year[5].

A.2: Overview of Vocational Education and Training

A.2.1 Overview of VET: set-up and regulatory framework

The recently approved law number 9 of 2019[6], establishing the Technical and Vocational Skills Development Commission, adopted the following definitions for key VET terms:

- Vocational education and training (VET): An organized process that aims at providing the trainee scientific, practical and cognitive skills required for performing a job, work, craft or occupation, and upon completion of the training requirements the trainee is granted a vocational training certificate at a specific skill level.
- TVET provider: The accredited institution for designing and delivering technical and vocational education and training programmes in accordance with the TVSD law.
- National Qualification Framework: Hierarchical classification for all qualification levels and certificates pertaining to higher education, general education and technical and vocational education and training programmes based on specific descriptors for each level to identify knowledge, skills and competencies related to the qualification.
- Technical and vocational levels: Occupational levels framework to which workers are classified in accordance with technical and practical skills required for performing specific occupation's duties and tasks at specific accuracy level according to labour market requirements.

The types of VET providers according to the certificates/ degrees issued for graduates include:

- Vocational training institutions providing programmes focusing mainly on practical part. The main provider of this type in Jordan is the Vocational Training Corporation (VTC) that provides training programmes leading to semi-skilled, skilled or craftsman level certificates (VTC, 2017). Those levels can be compared with International Standard Classification of Education (ISCED) level 2, 3 and 4 respectively. Other vocational training providers In Jordan include the national company for employment and training (NET) which provides 8 months training programmes that lead to semi-skilled/ skilled level and UNRWA with two training colleges (Wadi Elsear and Naour) which provide 2 years training programmes that lead to vocational training diploma at skilled level.
- Vocational education provided by the Ministry of Education (MOE) as part of the formal educational system in Jordan (Rawashdeh/ UNESCO, 2019). It ends with general secondary certificate that can be compared with ISCED level 3.
- Technical education provided by the Balqa Applied University, private sector, army and UNRWA community colleges. The 2-3 years technical education programmes

[5] https://www.worldbank.org/en/news/press-release/2019/10/24/doing-business-2020-with-a-strong-reform-agenda-jordan-joins-the-top-3-global-improvers
[6] http://www.mol.gov.jo/pages/viewpage.aspx?pageid=233

end up with comprehensive technical/ intermediate university diploma that can be compared with ISCED level 5. Community colleges started recently providing the vocational diploma, 1-2 years training programmes which can be compared to ISCED level 4.

The different types of initial vocational training programmes provided by VTC and the related entry requirements are shown in table A1 (Rawashdeh/ UNESCO, 2019).

Table 1: Initial vocational training programmes types, entry requirements provided by VTC

Training programme level	Duration (semester = 700 actual training hours)	Entry requirements
Semi-skilled	Up to 1 semester	Literacy (ability to read and write). Age not less than 16 years old.
Skilled	2-4 semesters according to specialty.	Successful completion of the basic education. Age not less than 16 years old.
Craftsman	2-4 semesters according to specialty.	Completion of the 2nd secondary grade. Trainees age is usually not less than 17 years old.

In the National Employment and Training office (NET), the 8 months initial vocational training programme is open for literate youth (able to read and write) in the age-range 17 to 29. In UNRWA training colleges, the 2 years vocational training programme is open for those having completed the 10th grade successfully.

The duration of the initial vocational education programme in MoE is of 2 years within the secondary stage of the educational system in Jordan. It is open for students who successfully completed the 10th grade and achieved marks' threshold decided by the ministry for distributing students into the different secondary streams.

Enrolment in the 2-3 years initial technical education programmes in community colleges requires having the general secondary certificate, while enrolment in the 1-2 years vocational diploma programmes requires having completed the secondary stage (regardless whether it is passed or failed).

Continuing Vocational Training (CVT) programmes are offered mainly by VTC through short term training courses either for upgrading workers skills or for the local society members according to their needs. Such short-term training courses aren't necessarily linked with specific levels, and trainees get training course completion certificates. Also the community colleges (public and private) provide CVT in technical fields but at a lesser extent.

The National Qualifications Framework, regulated by law No. 9 of 2019, was approved by the Jordanian government on 16/1/2019. According to the by law, the framework structure consists of 10 qualification levels starting from level 1 (pre-school certificates-KG2, unskilled qualification and qualification acquired by experience) to level 10 (PhD and Medical Specialties). VET qualification levels extend between level 2 and level 6 as shown in table A.2 below:

Table A2: TVET qualifications and the correspondence NQF levels[7].

levels	Qualifications included
6	Technical intermediate diploma (comprehensive exam), equivalent specialized training programmes and equivalent qualifications acquired by prior learning.
5	Technical/ training diploma (without comprehensive exam) and equivalent qualifications acquired by prior learning.
4	Vocational education general secondary certificate, craftsman level diploma and equivalent qualifications acquired by prior learning.
3	Vocational training level 2/ skilled worker level and equivalent qualifications acquired by prior learning.
2	Vocational training level 1/ semi-skilled worker level and equivalent qualifications acquired by prior learning.

The Accreditation and Quality Assurance Commission for Higher Education Institutions (AQACHEI) is the main player in developing and implementing the NQF in Jordan. However, TVET qualifications awarding and providing institutions are required to apply their requests for institutional registrations/ inclusions to the former Centre for Accreditation and Quality Assurance (CAQA), now incorporated within the TVSD Commission. In addition, and in order to place qualifications in the NQF (to check and place their awarded qualifications in the framework in accordance with levels descriptors and the qualification's type and category), awarding institutions are required to apply to AQACHEI through former CAQA, now TVSD Commission

Applying the NQF is expected to positively influence VET programmes in Jordan for both IVET and CVT. On one hand, training providers will be required to revise and develop their training programmes to improve its quality as necessary to meet the set qualifications descriptors. On the other hand, it will encourage training providers to develop more CVT programmes to enable individuals to move to higher levels of education/training and having more chances to progress in their careers.

Legislations related to VET in Jordan include:

- The education law No 3 of 1994 identified 2 streams for the secondary stage: the comprehensive secondary stream and the applied secondary stream. Vocational education is part of the comprehensive secondary stream that is implemented in

[7] NQF Framework by-law 9 of 2019

vocational schools under the MoE, while the applied secondary education is vocational training implemented by VTC institutes.

- Law No 11 of 1985 which mandated VTC to provide both initial and continuing vocational training opportunities for preparing and upgrading technical workforce in different areas of work and to non-academic qualifications levels.
- Law No 23 of 2009 (Higher education and scientific research law) which mandated higher education institutions (community colleges/ universities) to provide technical education.
- Law No 9 of 2019 (Technical and vocational skills development law) which authorized the newly established Vocational and technical skills development commission (TVSDC) to accredit, supervise, evaluate and license TVET providers including technical education providers. The law also mandated the commission, among other tasks, to identify selection and classification criteria for TVET teachers and trainers, developing their abilities and skills, and overseeing occupational tests for workers and issuing the related certificates. Based on law No 19 of 2019, 3 by-laws were developed and issued in 2020 that include:
    - By-law No.15 of 2020 – "The by-law of identifying technical and vocational trainers and supervisor's selection standards and classifying and organizing their professional ranks".
    - By-law N0. 19 of 2020 – "The by-law of TVET providers accreditation".
    - By-law No. 20 of 2020 – "The by-law of equivalence and accreditation of technical qualifications and certificates".
- Labour law No. 8 of 1996 organises the vocational training contract between the employer and the trainee and specifies criteria for conducting the in-company training. The labour law doesn't include articles that impose provision of continuing/ upgrading training of workers' skills by the employer.
- The National Qualifications Framework by law No. 9 of 2019 which identified 5 qualification levels covering the TVET sector (from level 2 to level 6). It also allowed recognition of prior learning in obtaining and progressing through qualification levels. Accordingly, this is expected to encourage individuals to continue their learning and TVET providers to expand the offer of CVT opportunities.

A.2.2 Institutional and governance arrangements

Institutions involved in TVET include the recently established Technical and Vocational Skills Development Commission (TVSDC) and TVET providers. The commission, through its council headed by the Minister of labour and members representing different stakeholders, is responsible mainly for approving TVET sector's strategies, policies and plans, suggesting the TVET sector's related laws proposals, approving occupational standards and coordinating with other education, economic, social and human resources councils. Also, the Commission's responsibilities include – although they are not limited to-: i) accrediting and supervising TVET providers, ii) developing TVET programmes standards, iii) registering qualifications on the NQF, iv) organizing practiced occupations at different levels in accordance with NQF, v) identifying TVET teachers and trainers selection standards, vi) classifying them and developing their skills and abilities, vi) institutionalizing PPP in TVET and licensing TVET providers.

The main TVET providers in Jordan are the Vocational Training Corporation (VTC), the Ministry of Education (MOE) and the Balqa Applied University (BAU)/ community colleges. To a lesser extent, other public and private providers deliver VET at different levels: NET, UNRWA, Al Hussein technical university, Luminos, Khawarzmi, and others).

VTC is a semi-autonomous governmental institution, governed by a board of directors headed by the Minister of Labour and members representing government, civil sector organizations and private sector.

According to its law No 11 of 1985, VTC conducts initial vocational training programmes to prepare the work force mainly for basic occupational levels (semi-skilled, skilled and craftsman levels) for durations that range between several hundred hours to two years using the apprenticeship scheme. In addition, VTC conducts upgrading and continuing training courses targeting already employed workers and other interested people.

While public budget is the main funding resource for VTC, additional funds come from trainees' fees, income generating activities (sales of products and services) by VTC training institutes and occasionally from international donations and loans and from the Employment Technical & Vocational Education & Training ETVET Fund.

The fund was established to finance initiatives/ projects aimed at providing training/ employment opportunities, particularly for unemployed young Jordanians. The main source of the fund is coming from a percentage deducted from the annual work permits fees for foreign workers in Jordan. According to the new TVSD law of 2019, the ETVET fund becomes part of TVSDC and it is renamed as "TVET & Skills Development Activities Supporting Fund".

Curricula, learning materials and the occupational level tests for VTC training programmes and graduates are developed by the curricula and testing directorate in VTC through subjects' experts either from inside or outside VTC. VTC training institutes' annual needs of staff (technical and administrative), equipment and financial allocations are required to be approved and then provided centrally by VTC head quarter based on resources availability.

Each VTC training institute's principal, with the technical and administrative staff, is responsible for the day-to-day running of the institute and the implementation of training courses as planned. Also, the training process in each institute is periodically followed up, monitored and evaluated by the quality control directorate's coordinators in VTC (Rawashdeh/ UNESCO, 2019).

As part of the educational system, vocational education - along with the academic general education- falls under the responsibility of MoE. Therefore, related strategies, policies and plans at national level are governed by the MoE's council. Vocational education is provided through either specialized vocational education schools or in general comprehensive education schools that provide vocational education alongside with general education. While vocational schools' technical related issues are mainly dealt with centrally by the vocational education and production department, management follow up and supervision are the responsibility of general education departments in governorates.

Vocational education has a duration of two years within the secondary level that ends with the national general secondary certificate exams (Tawjihy). Graduates from Tawijihy can either enter the labour market or go to the university (if they fulfil specific criteria).

The main funding of vocational education comes from the public financing and is part of the budget allocated for MoE. Additional financial resources come from income-generating activities (sales of products and services by schools) and occasionally from international donations and loans.

The development of vocational education curricula and learning materials recently moved under the responsibility of the National Center of Curricula Development. However, the curricula and related learning materials still need to be approved by the Education Council under MoE before being applied in vocational education schools. The annual needs of staff (technical and administrative), equipment and financial allocations are submitted by the schools to the Ministry that approves them, depending and based on resources availability.

The Vocational school's manager, together with the technical and administrative staff, is responsible for the day-to-day running of the school and the implementation of the vocational education plan. Also, the training process is followed up, monitored and evaluated by vocational education supervisors/ facilitators (Rawashdeh/ UNESCO, 2019).

Technical education in Jordan is provided by BAU community colleges. The technical colleges, as well as other colleges (managed by the Army, UNRWA or by private entities) operate under the direct authority of BAU that defines and supervises their educational and technical delivery (BAU law No. 13 of 1997). According to the by law No 14 of 2000, BAU is entrusted to develop programmes, studying plans and curricula for the community colleges under the private sector and the Army.

BAU/Community Colleges provide the following programmes[8]:

- 2-3 years technical education programmes for students having general secondary certificates (tawjihi) that end with national comprehensive exams/ intermediate diploma.
- 1-2 years vocational training programmes for students who have completed the secondary stage (with or without tawjihi certificates) that end with vocational/ technical diploma.
- Short term training courses for society individuals to develop their skills.

Technical education in the public community colleges is funded from the BAU budget, which in turn gets its resources mainly from students' tuition fees and support from the Ministry of Higher Education and Scientific Research (MoHESR). Other resources come occasionally from international loans/ donations and the ETVET Fund.

Annual needs of the BAU public community colleges including staff (technical and administrative), equipment and financial allocations are required to be approved and then provided centrally by the BAU in line with resources availability.

The dean of the college, together with the technical and administrative staff, is responsible for the day-to-day running of the college and the implementation of the technical education plan.

[8] UNESCO, 2019

A.2.3 Basic statistics on VET

The number of TVET institutes in Jordan operated by the TVET main providers are as follows:

- VTC: 42 training institutes (VTC annual report 2017).
- MOE: 210 VE schools (23 specialized schools and 187 comprehensive) (Education Strategic Plan 2018 – 2022).
- BAU/ CCs: 51 community colleges (12 colleges under its direct authority and 29 colleges under its supervision) (BAU strategic plan 2017-2021), not all these colleges provide technical education.

Enrolments in secondary education by programmes and sex, year 2015/ 2016 are shown in table A3

Table A3: Enrolments in secondary education by programmes and sex (year 2015/ 2016).

Programme	Male	Female	Total
Hotel Business	1,737	79	1,816
Home Economics	167	10,017	10,184
Agriculture	2,155	521	2,676
Industry	10,158	200	10,358
Total	14,217	10,817	25,034

Source: Education Strategic Plan 2018 – 2022

While table A4 shows enrolments in vocational training/ VTC by programmes and sex in 2017.

Table A4: Enrolments in vocational training/ VTC by programmes and sex (year 2017).

Programme	Enrolment (new)		Enrolment (previous years)		Total		Grand Total
	Male	Female	Male	Female	Male	Female	
Craftsman	256	170	313	146	569	316	885
Skilled	4,223	1,567	6,274	1,350	10,497	2,917	13,414
Semi-skilled	558	811	236	153	794	964	1,758
CVT	3,530	3,432	1,732	311	5,262	3,743	9,005
Intermediate diploma	48	15	332	28	380	43	423
Total	8,615	5,995	8,887	1,988	17,502	7,983	25,485
Grand total		**14,610**		**10,875**			**25,485**

Source: VTC annual book 2017

The total number of trainers and teachers working in vocational education schools under the MoE is about 1,600 (Education Strategic Plan 2018 – 2022), while the total number in VTC training institutes is 543 (VTC, 2017).

In MoE, the total sum of expenditures on vocational education in 2017 was 25,198,000 JD (35,490,141 $) of which 24,498,000 JD (34,504,225 $) were current expenditures and 700,000 JD (985,915 $) were capital expenditures. The total sum of expenditures on Vocational Education represents 2.88% of the total expenditures of MoE[9].

[9] MOE-Statistics report 2017/2018.

For VTC, the total expenditure in 2017 was 11,532,152 JD (16,242,467.6 $) of which 10,235,741 JD (14,416,536.6) were current expenditures and 1,296,411 JD (1825931 $) were capital expenditures (VTC, 2017).

According to General Budget Department (GBD), actual Employment and Technical and Vocational Education and Training (ETVET) expenditures in 2018 financed by the general budget were totaled to 62.267 million JD representing about 0.2% of Jordan GDP. Details of expenditures for the different public ETVET institutions in 2018 are shown in table A5.

Table A5: public expenditures on ETVET institutions in 2018.

Institution	Current Expenditures (JD)	Capital Expenditures (JD)	Total
MOE/ Vocational Education Stream	24,274,000	1,120,000	25,394,000
Vocational Training Corporation	10,255,000	2,378,000	12,633,000
ETVET Fund	288,000	23,052,000[10]	23,340,000
MOHESR/ Public universities and colleges programme/ Employment skills and social inclusion supporting project in BAU.	-	900,000	900,000
Total	34,817,000	27,450,000	62,267,000

Source: General Budget Department representative in the steering committee of Jordan TPR 2018-2020 (un published report).

No detailed information is available about share of TVET funding by source. However, the highest percentage of TVET funding for vocational training/ education in VTC and MoE comes from the public fund (general budget), while at technical education level in BAU/ CCs, the highest percentage comes from BAU budget with additional financial support from the general budget through MoHESR.

Students/ trainees' fees represent the main source of funding in private community colleges and, to a lesser extent, in public ones.

Funding source of NET comes from the (former) ETVET Fund which is financed by the general budget through deducting specific percentage (%) of annual work permits fees issued by MoL for foreign workers.

[10] ETVET Fund expenditures are used for financing both public and private sector institutions' ETVET projects/ initiatives.

Private sector share in funding TVET is indirect through offering on job training for students/ trainees particularly in VTC and NET programmes in addition to paying the annual work permits fees for foreign workers in their companies which partially used in funding TVET institutions/ programmes/ projects through the ETVET Fund.

Shares of donors funding for TVET is not fixed as it varies from one year to another according to donors' projects implemented in the TVET sector in Jordan. The main donors present in the field include, although not limited to: the European Union (EU), the World Bank, the German Corporation for International Cooperation (GIZ), United States Agency for International Development (USAID), Japan International Cooperation Agency (JICA), Korean International Cooperation Agency (KOICA), European Bank for Reconstruction and Development (EBRD). Support provided by donors may cover financing of technical assistance activities, equipment provision and/ or buildings establishment/ renovation. Other international organisations are present as project implementers, these include (but are not limited to) ILO, UNICEF, UNESCO, etc.

In an already rather fragmented system, to which the latest national reforms have tried to bring coherence, it would be of mandatory importance to streamline the support of all the different donors and international organisations present in the sector. A more efficient coordination would help to achieve a more targeted distribution of support to the sector in those priority areas that are more in need, avoiding duplication and further fragmentation of the system.

A.2.4 Vision for VET and major reform undertakings

The main reference strategic document guiding the operations in the field of human resources development is the National Strategy for Human Resources Development (see below). However, it is worth mentioning other important strategic documents that have shaped, are still shaping, the strategic reform of the TVET sector.

There are three key national strategies/ documents addressing the TVET sector in Jordan: The National Agenda 2006-2015, the Jordan's National Employment Strategy 2011-2020 and the Jordan National E-TVET Strategy (2014-2020).

"The main goal of the **National Agenda 2006-2015** is to improve quality of life of the Jordanian citizen through improving standards of living, and providing social welfare and social security, and providing new job opportunities (National Agenda, 2006-2015)".

TVET was addressed in 2 sections (Employment Support & Vocational Training and Education, Higher Education and Scientific Research) out of the agenda's eight sections/axes. The agenda analysed the performance within those two thematic areas and recommended actions and initiatives for each as follows:

Employment Support & Vocational Training

- Restructure the institutional framework of the employment support and vocational training.
- Encourage the gradual replacement of foreign labour
- Encourage the registration of workers in the informal sector at the employment support network.
- Design and implement targeted programs to reduce unemployment among the disabled.
- Increase women's participation in the labour force.

Education, Higher Education and Scientific Research

- Establish a Higher Council for Human Resources Development.
- Establish a National Commission for Accreditation and Quality Assurance of education institutions.
- Increase private sector involvement in the management of vocational education and reform programs and curricula.
- Improve the governance and funding of community colleges and reform their curricula.

According to the **National Employment Strategy 2011-2020,** "implementation of the National Agenda has been spotty and varied, with some objectives moving according to schedule, but many others falling behind or completely abandoned".

Vision for the national employment strategy 2011-2020 is "Improving standards of living for Jordanians, through increased employment, wages and benefits, and productivity improvements". The goal on the supply side as identified by the strategy is "to graduate a skilled and motivated labour force, armed with employable skills and technical knowhow demanded by the labour market". Among the policies identified for achieving the goal is "enhancing the quality of educational and vocational training outcomes".

An action plan was developed and approved by the Council of Ministers on May 14, 2011. Accordingly, an implementation plan was further elaborated based on the action plan. Within the supply side of the action plan, the following projects related to TVET policy area were proposed:

- Review the composition of the ETVET board with the aim of restructuring it with extensive participation of the private sector.
- Expand AQACHEI board supervision scope to cover vocational training providers' institutions.
- Expand awareness campaigns to improve the image of vocational and technical education and training.
- Expand the current pilot programs that allow direct on-the-job training with the private sector for both males and females.

For monitoring and evaluation of the implementation of the strategy, the strategy recommended the setting up of an implementation team composed of all ministries and public agencies in charge of implementing the various actions. The implementation Team is responsible for preparing a quarterly report on progress made against the timetable and indicators outlined in the implementation plan (National Employment Strategy 2011-2020[11]).

The Council of Ministers had assigned the Minister of Labour to lead the implementation team, and an implementation unit was established in the ministry to help the implementation team to carry out its functions.

The **Jordan National E-TVET Strategy 2014-2020** is covering 5 pillars (governance, relevance for employability, inclusiveness, performance measurement and sustainable

[11] https://www.ilo.org/dyn/youthpol/en/equest.fileutils.dochandle?p_uploaded_file_id=171

and effective funding governance) with the following objectives (ETVET Strategy 2014-2020):

1. Governance of the E-TVET sector is improved.
2. The relevance of education and training for employability is improved.
3. Inclusiveness of women, youth and the disabled is improved.
4. Performance measurement systems are enhanced.
5. Sustainable and effective funding of the E-TVET Sector is secured.

The strategy adopted the following vision, mission and goal:

Strategic Vision: TVET is the driver of employment, prosperity, and social inclusion embracing a commitment to environmental responsibility and best practice.

Strategic Mission: To develop and implement a demand-driven, career and business-oriented E-TVET system based on effective sector coordination, commitment to unified quality assurance principles, and social partner engagement.

Strategic Goal: To create a unified and effective E-TVET system that enables Jordanians to fulfil their career aspirations and that contributes to economic growth and social development.

As mentioned in the Torino Process report for Jordan 2016-2017, an action plan for the implementation of the strategy was designed but never updated and no report or monitoring system was established to follow up the implementation**.**

Although the **National Strategy for Human Resources Development 2016-2025 (NHRD)** was developed later in Jordan, it is in line with the above mentioned TVET related national strategies. The NHRD strategy looked at TVET as one of the main areas to be addressed to develop human resources in Jordan, alongside with early childhood, primary and secondary education and higher education. In this regard, the strategy vision will strive to "**substantially increase the number of youth and adults who have relevant technical and vocational skills for employment, decent jobs, and entrepreneurship by 2025".**

Within the TVET area, the NHRD strategy identified 5 strategic objectives that relate to access, quality, accountability, innovation and mind set as follows:

- Establish progressive pathways to promote and recognise all forms of learning and skills development within the system and in the labour market and create new options for high quality tertiary TVET.
- Increase the quality of TVET through consistent training requirements for TVET instructors, aligning standards and quality assurance for all institutions, and closer coordination with the private sector.
- Put in place clear governance structures to ensure accountability across the sector.
- Innovate funding and provision through transforming the E-TVET Fund, public private partnerships, and expanding innovative modes of delivery.
- Promote and establish TVET as an attractive learning opportunity from an early age, and throughout the system.

For achieving those strategic objectives, the strategy identified specific projects for each objective which were included in the implementation roadmap developed for the strategy.

The main progress in the implementation of the NHRD Strategy (2016-2025) in the TVET sector includes the development of the National Qualification Framework (NQF) and the establishment of the Technical and Vocational Skills Development Commission (TVSDC).

The major reforms implemented over the past few years, that are linked to TVET, include:

- The development of the following national strategies:
    - National Employment Strategy 2011-2020.
    - Jordan National E-TVET Strategy (2014-2020).
    - National Strategy for Human Resources Development (2016-2025).
- Approval and issuing of the National Qualification Framework by law No. 9 of 2019.

As mentioned earlier, according to the NQF, TVET qualification levels extend between level 2 and level 6 of the 10 qualification levels adopted by the Jordanian NQF. Both CAQA and AQACHEI institutions are responsible for registering TVET qualifications and accrediting institutions, as well as for checking and approving awarding institutions for the placement of awarded qualifications.

- Approval and issuing of the technical and vocational skills development law No 9 of 2019. According to this law, the following reform undertakings/ activities are currently taking place:
    - Establishment of the Technical and Vocational Skills Development Commission (TVSDC) that replaces the ETVET council. Its main responsibilities are strategic and policy planning and overseeing the TVET sector. The commission will have a council headed by the Minister of labour and with most members coming from the private sector (8 out of 14 members).
    - Establishing a fund within the commission called TVET activities and skills development support fund that replaces the current ETVET Fund.
    - Transferring and integrating CAQA within the TVSDC.
    - Establishing national skill sector councils (NSSCs) representing government, employers and employees in different sectors aiming at proposing general policies for the sector and identifying sectors' priority skills and training needs based on the labour market requirements. Councils which are formed by TVSD council will work according to a by-law (not issued yet) that defines its authorities, tasks, meetings, decisions and recommendations. Therefore, details related to NSCCs scope of work and funding sources still to be clarified.

Dedicated measures for implementing the above-mentioned reforms, such as the development of the required regulations and staffing, are still undergoing and consequently the TVSDC is not yet fully operational. One of the main objectives of the European Union budget support intervention in the TVET Sector was to support the development of the related strategy for the sector, including a complementary technical assistance that worked in key priority areas, including governance. While the EU budget

supported was officially concluded on 17th February 2020, the technical assistance is due to continue its work with the TVSDC.

Some important developments are ongoing in the TVET sector, based on the strategy, as it is illustrated below. Among these, the work to establish the skills sector councils has started with the support of international donors and organizations (the EU, the GiZ, the ILO and EBRD).The number of councils established (or in preparation of being established) is seven covering the sectors of water and energy, ICT, Logistics, tourism, garments, furniture and chemicals (UNESCO, 2019).

A.3 The context of VET

A.3.1 Socioeconomic context

Jordan's economy is among the smallest in the Middle East with a GDP of 29,984 million JD (42,231.0 million USD) in 2018 and a GDP per capita of 2,908.5 JD (4,096.5 USD) – (DOS, 2018a). The contribution of the different economic sectors to the GDP in 2018 is shown in table A6, where it can be noticed that the highest contribution is coming from the financial & insurance services sector (22.6%), followed by manufacturing.

Table A6: Contribution of economic sectors to Jordanian GDP in 2018.

Economic Sector	Contribution to GDP %
Agriculture, Hunting, Forestry & Fishing	5.4
Mining &Quarrying	2.2
Manufacturing	18.9
Electricity & water	3.5
Construction	2.9
Wholesale, Retail Trade, Restaurants & hotels	9.7
Transport, Storage & Communication	8.5
Financial & Insurance Services	22.6
Social & personal services	6.6
Producers of government services	13.2
Net Taxes On Product	11.0

Source: Department of Statistics/ Jordan in Figures 2018 - Preliminary Estimates

The political instability in the whole region, in particular the Syrian and Iraqi crisis, remain the largest factors that negatively affect Jordan economy. This is reflected in an unprecedented refugee influx, in disrupted trade routes, and in lower investments and tourism inflows (particularly as a result of economic slow-down in the Gulf Countries). The persistent regional uncertainties and instability and the reduced external assistance will put increasing pressure on Jordan socio economic situation.

Other economic challenges that Jordan faces include the high unemployment rate (18.6%) in 2018, the low refined economic activity rate 36.2% particularly for females (15.4%)(DOS, 2018a), in addition to what indicated earlier in regard to domination of micro and small enterprises (less than 20 employees) on Jordan labour market.

Accordingly, the GDP growth rate has continued to decline over the last few years moving from 3.1% in 2014 to 1.9% in 2018. Also the public debt ratio to GDP continued its increase from 88.5% in 2014 to 94.4% in 2018. However, the increase was slowed

down to only 0.1% between 2017 and 2018 since it was 94.3% in 2017 (Central Bank of Jordan/ The Jordanian economy in figures 2014-2018).

Therefore, no major breakthrough in Jordan's economy was observed in the last few years as the GDP growth registered a low rate, public debt ratio to GDP was increasing and the high unemployment remained almost unchanged. However, the following political and economic developments look promising for the economy of Jordan in the coming years:

- Improved political stability situation in Iraq that opened doors to increase trade flow, implementing partnership agreements/ projects and participation in the rebuild process of Iraq (The Jordan Times 16/8/2019). Positive impact is expected on different sectors such as transportation, industry and agriculture.
- Investments in diversifying energy resources: the energy sector strategy 2015-2025 aims to increase the contribution of local energy sources to reduce import12. Energy sources in Jordan include the oil shale and renewable energy. Jordan has more than 70 billion tons of sub-surface proven reserves of oil shale, which is more than 7 billion ton oil-equivalent. The national strategy for the energy sector has included Oil Shale as an alternative energy source to contribute about 12% of the energy mix in the Kingdom in 2025[13].Renewable energy projects in Jordan (solar and wind) started in 2016, with 10 schemes expected to generate 2,700 megawatts of electricity by 2021, 715 megawatts of which will be from wind resources14.
- Digitalisation: According to the Jordan's Digital Economy Action Plan (REACH2025) developed by the Ministry of Information and Communication Technology and Information and Communications Technology Association-Jordan "*Jordan is moving away from seeing ICT as an isolated sector and towards digitalising the entire Jordanian economy with emphasis on niche markets and global value chains*". Six key sectors have been identified which have the potential to be the driving sectors of the digital economy in Jordan: Health, education, energy, financing, transport and communications. One of the key targets for full implementation of the digitalisation plan is acceleration of growth in Gross Domestic Product (3-4% extra growth annually by 2025)[15.]

The above-mentioned developments need further investigation and analysis to identify possible new training needs programmes to be covered by training providers at different levels. However, some TVET institutions have recently started delivering training programmes in related areas such as smart systems engineering and artificial intelligence engineering in BAU/ Al Salt college at the technical education level (BAU web site) and renewable energy in VTC at craftsman level (VTC, 2017).

A.3.2 Migration and refugee flows

Migration in Jordan goes in two directions: from Jordan to other countries and from other countries to Jordan, driven in most of the cases by seeking employment opportunities.

[12] https://www.memr.gov.jo/Pages/viewpage.aspx?pageID=276
[13] (http://www.jordanewe.com/about-sector/ministry-energy-and-mineral-resources
[14] Minister of energy/ Jordan Times-18/12/2018
[15] REACH2025.Vision and Action paper EXECSUMMARY - Final 22.11.2016/ http://www.reach2025.net/.

Emigrant Jordanians (mostly in Gulf Cooperation Council (GCC) states) were estimated in 2014 to be 786,000. They are generally highly qualified, with about 85% holding a Bachelor Degree or higher (Jordan Strategies Forum, 2018a). Therefore, Jordanians migration is looked at by some as a brain drain that will negatively affect Jordan development in the long run. However, others raise the importance of the inflow of remittance from Jordanians working abroad (2,628.6 million JD in 2016) on the economy as well as its role in avoiding more increase in the already high unemployment rate challenge (Jordan Strategy Forum, 2018b).

For the immigrant workers, the number of those working legally in Jordan (holding a work permit) was 340,995 in 2017, most of them Egyptians (MOL, 2013-2017). In addition, the number of illegal immigrant workers (no permits) is estimated twice those with work permits. In contrast with emigrant Jordanian working abroad, immigrant workers in Jordan mostly hold a low qualification level (semi-skilled/ skilled levels). The large number of immigrant workers has led to competition with the Jordanian workforce on specific jobs available in the labour market, lowering workers' pays and deteriorating work conditions (Torino Process National report 2016-2017, Jordan).

Regarding refugees, Jordan witnessed several waves of refugees due to wars and turmoil in the neighbouring countries (Palestine, Iraq and Syria) since 1948. The 1948 Palestinian refugees in need of humanitarian assistance and their descendants have been registered and hosted, among other countries, in Jordan by the United Nations Relief and Works Agency (UNRWA) for Palestine Refugees. As of 2016, 2 117 361 Palestinian refugees were registered with the UNRWA in Jordan. Other refugee categories are registered with the Office of the United Nations High Commissioner for Refugees (UNHCR), which has been operating in Jordan since 1998. As of February 2017, 728 955 refugees were registered with the UNHCR, the clear majority of whom were from Syria (655,732) and Iraq (61,405).

For the Syrian refugees' group, which represents currently the main challenge for Jordan, almost 51% of them are under 18 years old, and among them, 16% are under five. There is a relatively high proportion of Syrian refugee households – one in three – that are headed solely by women. A significant proportion of the refugees are classified as extremely poor and apartments are shared between at least three–four families (ETF, 2017).

According to 2015 population and housing census conducted by DOS, the total number of Syrians who left their country to move to Jordan in 2015 was 1,265,514 due to the ongoing Syrian crisis (ongoing since 2011). Around 80% of Syrian refugees live within host Jordanian communities (outside the established camps). This situation puts high pressure on Jordan particularly in regard to education, health and water supplies services in addition to the competition with Jordanians on the already insufficient available jobs opportunities in Jordan labour market (Torino Process National report 2016-2017_ Jordan).

A.3.3 Education sector context

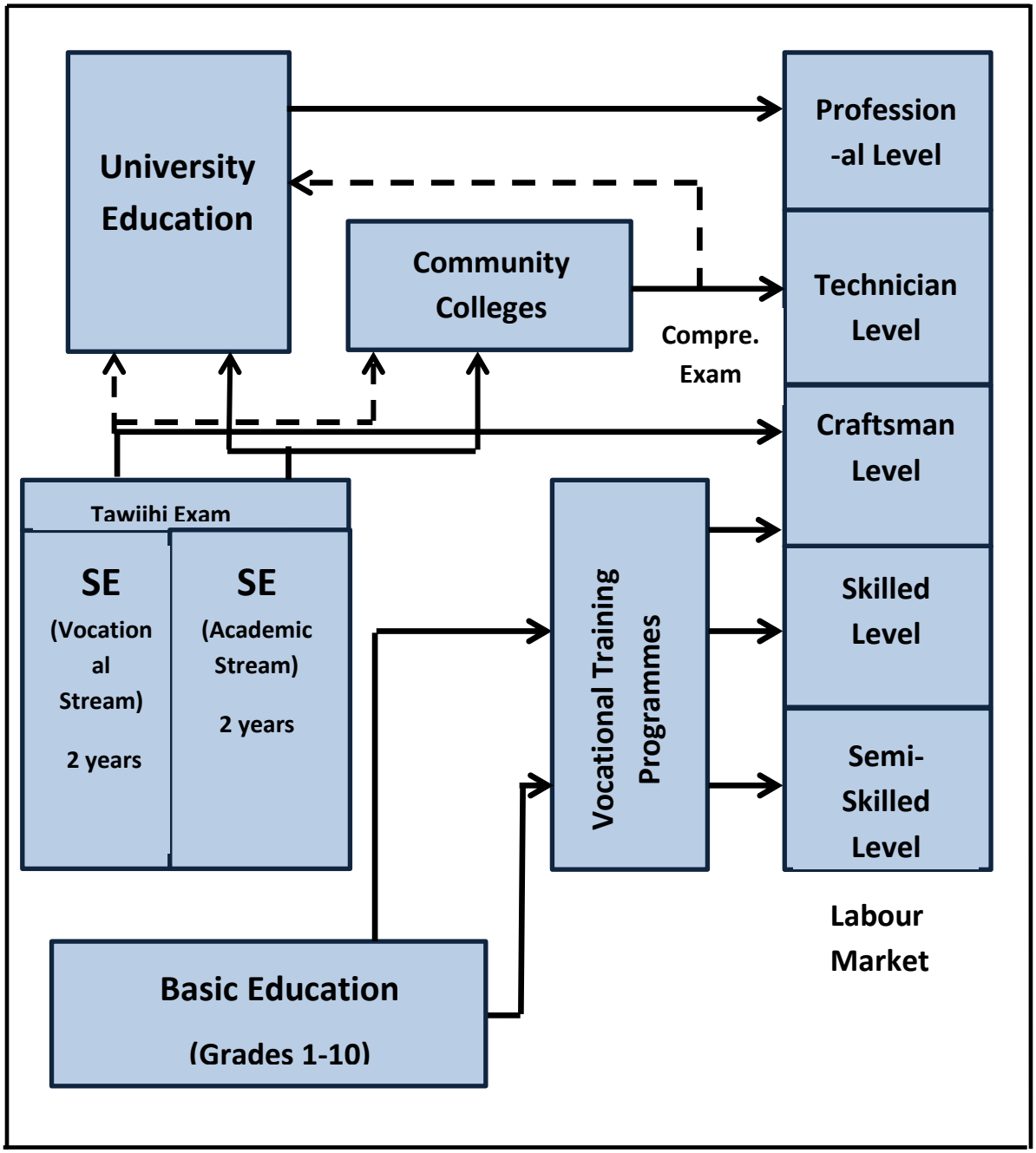
Diagram A1 below shows the education and training system in Jordan, including the continuous/ upgrading training. It can be noted that vocational education/ training mostly starts after completing the 10 years basic education stage. After that, students may join comprehensive secondary education stage either in academic or vocational streams for two years (1st and 2nd secondary grades) MoE's schools, or the skilled worker level vocational training programmes for 1-2 years in the Vocational Training Corporation

(VTC). However, dropped out students from basic education can also join vocational training programmes for up to 700 actual training hours, leading to semi-skilled level.

Success in the general secondary certificate exams (Tawjihi), after the completion of the vocational secondary education stream, opens the door for students to join community colleges or university. In order to do that, they need to meet specific criteria regarding scores achieved in Tawjihi exams and the study plan followed in secondary education. Community colleges' graduates get a technical level of qualification and may bridge to university study if they successfully pass the national comprehensive exams (Al Shamel) with high scores average. Those students who complete the academic secondary education stage, with or without Tawjihi certificate, may join training programmes in VTC or community colleges for 1-2 years leading to craftsman level or technician level (vocational/ technical diploma certificate without access to Al Shamel).

In VTC, graduates of skilled level initial vocational training programmes can progress to higher levels through joining craftsman/ vocational diploma programmes after two years of work experience in their field of specialization (VTC, 2019). However, this happens very rarely. On the other hand, VTC training programmes' graduates can't join community colleges to get an intermediate degree/ technician level or university degree/ professional level, unless they get the Tawjihi certificate.

Diagram A1 Education and Training System in Jordan



Enrolment in TVET is still very low compared with enrolment in other education sub sectors. At secondary education level, vocational education' students represent only 13.2% of the total number of students in 2015/2016 (Education strategic plan 2018-2022) and enrolled students in community colleges represent only 9.6% of those enrolled in universities in 2018 (ESC, 2019). On the other hand, the percentage of TVET students progressing to higher levels of education was also limited. In fact, no more than 4% of vocational education students who passed the Tawjihi examination joined university and only 5% of community colleges graduates could bridge to university education annually in the last years (ESC, 2018 & 2019).

A.3.4 Lifelong learning context

The idea of continuing professional and personal development (CPPD) after entering employment is not a common practice in the TVET system in Jordan. This further hinders progression opportunities in the sector. There is currently little evidence of short-term focused training courses to encourage CPPD being developed or delivered (NSHRD, 2016 – 2025). Therefore, adopting NQF is expected to promote the CPPD concept among individuals through encouraging them to progress to higher level and for TVET providers to offer upgrading/ progression training opportunities needed individuals.

As mentioned earlier, the number of TVET graduates progressing to higher levels of education and training are limited. However, in line with supporting lifelong learning, the national HRD strategy identified the strategic objective of "Establish progressive pathways to promote and recognise all forms of learning and skills development within the system and in the labour market and create new options for high quality tertiary TVET". Accordingly, the NHRD strategy identifies specific projects to achieve this strategic objective through 1- Approve the National Qualifications Framework (NQF) and 2- Degree-level TVET programmes and provision.

As mentioned above in this report, the NQF bylaw No 9 of 2019 was issued. The NQF has 10 qualification levels. It is expected, when applied, that this will motivate individuals of joining offered training and education opportunities that enable them of getting higher qualification levels.

Regarding training opportunities provided as part of lifelong learning concept, VTC offers upgrading training programmes for workers/ employees to develop their skills within the same occupational level or to progress to higher levels. It also provides continuous and society service training programmes for citizens (VTC, 2019). Some community colleges and private training providers offer training courses for individuals.

It should be noted that Jordan's companies rank among the lowest of Arab countries – and second lowest in the world - in terms of providing training to their employees (NSHRD, 2016-2025).

A.3.5 International cooperation context: partnerships and donor support

The main donors involved in projects related to employment and TVET in Jordan during the period 2012-2022 include: USA, GAC/ Canada, the European Union, BMZ/ Germany, Department for International Development (DFID)/ UK, JICA/ Japan, KOICA/ South Korea, Ministry of Foreign Trade and Development cooperation (MINBUZA)/ Netherlands, UNHCR, World Food Program, Finland, Iceland, Australia and the World Bank (WB).

As shown in table A7 in the period 2012-2022 there have been/there are 36 projects for a total budget of 223,349,127 JOD. Nearly 50% of the projects (and funding) expired in 2019. The projects are distributed over the 12 governorates although Amman, Irbid, Zarqa and Mafraq Governorates have the highest number of projects as they have the highest population levels in the Kingdom.

Table A 7: Donors projects related to ETVET during the period 2012-2022 in Jordan

Donors	Project title	Duration
USAID	1- Local Enterprise Support Project (LENS)	2013-2018
	2- Sustainable Cultural Heritage Through Engagement of Local Communities Project (SCHEP)	2014-2018
	3-Youth with Potential	2016-2019
	4- Jordan Workforce Development Project	2014-2018
	5- USAID Building Economic Sustainability through Tourism (BEST)	2015-2020
BMZ, DFID, Netherlands Minister of Foreign Trade and Development Cooperation	1- Trade for Employment	N/A
KOICA	1- Establishment of Specialised Industrial School in Zarqa	2017-2020
Government of the Republic of Korea	2- Technical and Vocational Education and Training for Syrian and Jordanian Youth in Jordan- The students were hosted at Al Quds College	November 2016 till December 2017
JICA	1- The Project for Economic Empowerment and Social Participation of PWDs	2017-2020
	2- Capacity Development of Vocational Training Corporation in the Field of Occupational Safety and Health	2017-2021
	3- Strengthening the Capacity for Career Counseling for the Youth	2017-2020
GIZ, MINBUZA, DFID	1- Fulfilling the promise of the Jordan Compact: An integrated trade and employment proposal	2018-2020
BMZ	1- Vocational Training and Skill Enhancement for Jordanians and Syrian Refugees in the Water Sector	2016-2019
	2- Promotion of training to improve efficiency in the water and energy sector II in Jordan	2016-2019
	3- Employment-Oriented Vocational Training in Skilled Crafts	2017-2020
	4- Labor Market Oriented Vocational Education - Higher	

	Education and Training (MOVE-HET)	2017-2022
BMZ, EU	1- Building the resilience of host communities and refugees in the countries bordering Syria	2016-2019
EU	1- Skills for Employment & Social Inclusion	2017-2019
	2- Madad	January 2018 – December 2019
GAC (Global Affairs Canada)	1- Digital livelihoods	2012-2018
	2- Launching Economic Achievement Program for Women in Jordan	2016-2019
	3- Women's Economic Linkages and Employment Development-WE LEAD	2016-2019
	4- Jordan-Canada Partnership for Youth Employment	2012-2018
	5- Sustainable Economic Development Through Renewable Energy	2015-2019
	6- Promoting Economic Development in Communities Hosting Syrian Refugees	2014-2017
	7- Jordan Valley Links	2015-2019
UNHCR	1- Strengthening Case Management of GBV CP in Amman and Activating Livelihoods Referral Pathways	Jan – Dec 2018
	2- Activating Livelihoods Referral Pathways Through Flexible and Responsive Coaching as Alternatives to Cash Assistance in Irbid and Mafraq municipalities	January 2018 till December 2018
World Food Program	1- Food for Training - FFT	Aug – Dec 2017
	2- Food for Assets – FFA	Oct – Dec 2017
Finland, Iceland, Japan, Australia	1- Expand self-reliance & social cohesion opportunities for Jordanian women in Mafraq Governorate and camp-based Syrian refugee women and promote meaningful engagement in community life (Eid bi Eid) – Phase II	Jan 2017-Dec 2018
	2- Women's Leadership, Empowerment, Access &	

	Protection in Crisis Response (LEAP)	April 2017- 31 March 2018
	3- Building food security and supporting self-reliance through employment in Jordan: A holistic approach to gender equality	1 June 2017- 1 June 2020
The World Bank	1- Support to Building Active Labor Market Program	2013- 2017

Source: GIZ/ DONOR MAPPING IN THE FRAMEWORK OF TVET AND NATIONAL EMPLOYMENT PROJECTS/ MOVE-HET project 2018

Almost all projects span across several activities and areas of intervention category. 47% of projects' interventions focused on Job Placement Services, 42% on Enhancement of workforce participations in the labour market and 33% on both career guidance, and TVET training & further training. It can be notes that key areas of interventions are not covered (or only in part) such as accreditation and quality assurance, and disabled work support, which could be considered for future interventions.

Nearly 60% of projects target the service sector while 40% of them target the manufacturing sector. The two key target groups across all projects are women and youths; 80% of projects focused on youth activities (those aged between 16-30 years), while 70% focused on women (GIZ, 2018b).

BUILDING BLOCK B: ECONOMIC AND LABOUR MARKET ENVIRONMENT

B.1: VET, economy, and labour markets

B.1.1 Labour market situation

The total workforce (active people) in Jordan is 2,086,598 in 2018. This number includes employed and unemployed Jordanians (1,734,248)[16] as well as visitors/ immigrants workers having work permits (352,350) (MOL, 2018).

Refined economic activity rate in 2018 is 36.2% (males: 56.4%, females: 15.4%). The unemployment rate is 18.6% (males: 16.5%, females: 26.8%). According to age groups, the highest unemployment rate reaches 39.2% among the age group 15-24 (Male: 38.4%, female: 58.6%) as shown in table B1.

Table B1: Unemployment rate, Jordanians by age and sex/ 2018

Age group	Male	Female	Total
15-24	38.4%	58.6%	39.2%
25-34	16.7%	32.2%	20.8%
35-44	9.3%	9.9%	9.4%

[16] DOS/ http://dosweb.dos.gov.jo/ar/labourforce/employment-and-unemployment/

45-54	8.6%	0.9%	7.4%
55-64	2.5%	0%	2.3%
65+	0.03%	0%	0.2%
Total	16.5%	26.8%	18.6%

Source: DOS/ Jordan in figures/ 2018

The highest unemployment rate by education level is 20.3% among males with illiterate level while for females it reaches 31.1% for those with Bachelor degree and above (see table B2).

Table B2: Unemployment rate by education level and sex2018

Educational level	Male	Female	Total
Illiterate	20.3%	0%	17.4%
Less than secondary	17.2%	11.9%	16.9%
Secondary	10.5%	16.3%	11.2%
Intermediate diploma	13.0%	23.4%	16.7%
Bachelor and above	17.9%	31.1%	23.5%
Total	16.5%	26.8%	18.6%

Source: DOS/ Jordan in Figures/ 2018

As shown in table B3, 59.2% of employed Jordanians are working in the private sector. However, most females 49.5% are employed in the public sector.

Table B3: Distribution of employed Jordanians by sector and sex/ 2018

Sector	Male	Female	Total
Public sector	37.7%	49.5%	39.9%
Private sector	61.8%	47.9%	59.2%
International bodies	0.6%,	2.3%	0.9%
work at home	0%	0.1%	0.1%
Total	100%	100%	100%

Source: DOS/ Jordan in Figures/ 2018

Most of the employed Jordanian (64.6%) concentrates in 4 economic sectors (public administration, defence and compulsory social security, whole and retail sale and auto engines repair, manufacturing industry and education) as shown in table B4.

Table B4: Distribution of employed Jordanians by economic sector/ activity-2018

Economic sector/ activity	Percentage
Public administration, defence and compulsory social security	26.4%,
Whole and retail sale and auto engines repair	15.3%
Education	13.3%
Manufacturing industry	9.6%
Others	34.4
Total	100%

Source: DOS/ Jordan in Figures/ 2018

Male employees are concentrated in the following sectors: public administration, defence and social security, whole and retail sale and auto repairs, manufacturing, transportation and storage and construction. Instead, females are concentrated in education, health and social services, public administration, defence and social security, manufacturing industries and whole and retail sale and auto engines repair.

Labour market challenges in Jordan include:

- The persistent high unemployment rate, particularly among youth in the age group 15-24 (39.2%) and specifically among females (58.6%) compared to males (38.4%). Unemployment touches, in addition, illiterate or low skilled males (20.3%) and females with high education degrees (31.1%).
- The very low activity rate among women (15.4%), the lowest in the world.
- Domination of Jordan's labour market by micro (less than 5 employees) and small (5-19) enterprises which formed 98.2% of total number of enterprises in 2017 (DOS, 2017).
- Insufficient information related to labour market needs and jobs and insufficient vocational guidance to direct youth to the educational paths that lead to employment opportunities required by labour market.
- The informal sector in Jordan, which according to the International Monetary Fund (IMF) was measured at 26% of GDP before the Syria crisis. The heavy involvement of Syrian refugees in informal activity in sectors such as agriculture, construction, food services, retail trade, and home-based production suggests even a growing share of unmeasured output. (IMF, 2014)[17].
- Weak involvement of labour market institutions and employers in the different levels and stages of TVET in Jordan including national governance, funding, curriculum design, training implementation and evaluation (NHRDS, 2016-2025).
- Immigrant workers particularly Egyptian and Syrian refugees' workers in the labour market. Acceptance of immigrant workers particularly at semi-skilled and skilled occupational levels in specific sectors (construction, agriculture and

[17] (file:///C:/Users/Admin/Downloads/_cr14153.pdf).

services) to work for lower pays led to a situation that employers prefer hiring them instead of Jordanian workers.

- Mismatch between the Education/ TVET and labour market needs. This was stated clearly in the NHRDS (2016-2025) “there are some fundamental mismatches between the skills required for 21st century employment and the outputs from the current TVET system”.
- Weak ability of the Jordan economy in offering enough employment opportunities for the labour market new entrants. As in 2018, the new jobs created according to DOS were about 38906[18] while the number of graduates from Jordan universities (2017/2018) in different educational studies was about 56466 (MOHESR, 2017/18).
- Relatively low pay and inappropriate working conditions. The ILO youth transition study found that young males rejected job offers in the majority of cases on the grounds of low pay (58%), while inappropriate workplace conditions (28%), followed by low pay (26%), were the most important reasons given by young females (ILO, 2014).

The above-mentioned challenges that characterise the labour market make even more difficult for Jordanians and for young people to find a job. Women are particularly affected.

B.1.2 Specific challenges and opportunities: skill mismatch

TVET and education in general contribute to the skill mismatch situation since graduated trainees/ students as well as job seekers aren’t equipped with the right skills demanded by the labour market as indicated by NSHRD (2016-2025) “TVET provision is considered out dated, with limited practical skills training, and thus not providing the skills required by Jordanian employers”. Possible reasons for this situation include: Absence of reliable data to drive and inform decision making, poor involvement of employers in the different stages of the training process (identification of actual labour market training needs, design of training content, training implementation and trainees’ evaluation), insufficient work-based training particularly in MoE vocational schools and community colleges, lack of TVET trainers/ teachers practical and industrial experience, insufficient continuous vocational training courses opportunities provided by TVET for job seekers that meet labour market actual needs and the system used in streaming students to TVET according to their grades and not wishes leading to send low achievers mostly to TVET.

B.1.3 Specific challenges and opportunities: migration

Jordan is both a country of immigration and of emigration. Regarding the number of Jordanian emigrating, whilst there is no official number, it was estimated to be 786,000 (in 2014) corresponding to 10.5% of the country’s total national population according to Jordanian expatriates in the Gulf survey- July-2018 conducted by Jordan Strategies Forum. The survey indicated that 66% of Jordanian expatriates in the Gulf have Bachelor Degree, 14.5% Master Degree and 3.9% Ph.D. which mean that Jordanians who work in the Gulf are at the top of the ladder in the labor market and consequently raising an argument about brain drain and its impact on Jordan development at the long run.

[18] http://www.dos.gov.jo/dos_home_a/main/linked-html/Job_opp.htm

However, other arguments raise the importance of the inflow of remittance from Jordanians working abroad (2,628.6 million JD in 2016) on the economy as well as its role in reducing pressure on the local labor market since without labor emigration, the unemployment challenge would become even more challenging (Jordan Strategy Forum, 2018b).

Number of immigrant workers with work permits in Jordan in 2018 was 352,350. About 54% of those workers are Egyptians, 12% Syrians and 34% are from other nationalities. They are concentrated in the economic sectors of manufacturing (26%), agriculture (25%), Social & Personal Services (20%), trade, restaurants & hotels (13%) and construction (12%) (DOS, 2018b).

On the other hand, immigrant workers without work permits are about 680,000 as declared by the minister of labour on 24/7/2018[19]. In addition to illegal Egyptian workers (no work permits), the influx of Syrian refugees in the recent years led to increase the number of immigrant workers with no work permits. While the total number of registered Syrian refugees as in August 2019 is 660,330 (123,210 in camps and 573,120 out of camps), total number of Syrians who left their countries to Jordan in 2015 was 1,265,514 due to the on-going Syrian crisis since 2011[20]

Large numbers of immigrant workers led to high competition with Jordanian workforce on the available jobs in labour market, lowering workers' pays and deteriorating work conditions. Thus, resulted that at low level (semi-skilled and skilled) jobs in specific sectors particularly agriculture, construction and manufacturing and to some extent retail sale and food service is dominated by immigrant works. Accordingly, a policy at national level is required to face this challenge and measures to be taken to support Jordanians employment in those sectors.

B.1.4 Specific challenges and opportunities: digital transformation

Digital transformation can be defined in general term as "integration of digital technology into all areas of a business, fundamentally changing how you operate and deliver value to customers. It's also a cultural change that requires organizations to continually challenge the status quo, experiment, and get comfortable with failure"[21].

Digital technologies have changed how organizations work, creating new jobs and replacing others. For workers, this means reskilling themselves in order to thrive in a high-tech working environment. For educators, this means integrating information and communications technology ICT in skills development, not just in the course materials but also in course delivery. This brings both challenges and opportunities to TVET[22].

In Jordan, a project for e learning in VTC was conducted with support from ETF and later from GIZ. Main outcomes so far include development of some training elements of Hybrid auto repair training units into electronic form and piloting them in training of trainers' course.

Countries in the beginning stage of digital journey usually adopt low-cost measures, e.g., allowing access to open educational resources online, placing existing text and

[19] https://alghad.com/300-ألف-أردني-عاطل-عن-العمل-ومليون-عامل-وا
[20] 2015 population and housing census conducted by DOS.
[21] https://enterprisersproject.com/what-is-digital-transformation
[22] https://development.asia/explainer/preparing-tvet-digital-age

presentations online, or producing videos demonstrating technical and behavioural competences[23].

However, it can be said that none of TVET institutions started applying e learning in its programmes so far. Doing so requires preparations and investments in regard to: Develop adaptive (computer based) content, put in place the required infrastructure, and train trainers/ teachers and trainees/ students on the use of e learning.

B.1.5 Strategic policy responses involving education and VET

Strategic policy responses currently in place to address challenges described above include:

- Regulating immigrant workers employment within Jordan labour market through limiting issuance of work permits to specific sectors and vocations where Jordanian workers usually aren't available to cover demand (MOL).
- Replacing higher education specialisms witnessing high unemployment rates with more demanded ones in the labour market.
- Expansion of social security umbrella to cover all enterprises including micro ones as well as expansion of its coverage to include maternity and unemployment benefits (SSC). This is expected to encourage job seekers to work in such enterprises as well as encouraging employers in general to hire females.
- Building Labour Market Information System (LMIS) in MOL to inform strategic decision-making process in TVET and to enhance vocational guidance and career counselling.
- Developing effective partnerships with private sector in TVET through more involvement of private sector in TVET governance, sector skill councils and expanding apprenticeship/ work-based training in TVET programmes. All key national strategies including Jordan 2025, National Employment Strategy (2011-2020), E-TVET Strategy (2014-2020), and National Human Resources Development Strategy (2016-2025) strategy stressed the importance of partnership with private sector in order to develop demand driven training system in TVET.
- Developing National Qualification Framework (NQF) that include different levels of qualifications which enable individuals of vertical and horizontal mobility and getting recognition of the knowledge, skills and competencies they have acquired through different learning methods.

Implementation of the last two mentioned policies is mainly related to TVET sector:

For the policy of developing partnership with private sector, the Technical and Vocational Skills Development (TVSD) law No. 9 of 2019 approved recently includes establishment of TVSD Commission. The commission which goes in line with HRDS (2016-2025) recommendations will be the governing body of TVET sector. As private sector will have majority of members (8 out of 14) in the TVSD council, it is expected to play a key role in the governance of the sector. Additionally, according to the mentioned law, private

[23] Ibid

sector through sector skill councils will be effectively involved in proposing general policies and identification of priority skills and training needs for different labour market sectors. Also, there is currently a trend in TVET institutions to expand applying of apprenticeship/ work-based training in TVET programmes particularly at technical education in BAU/ Al Salt Technical College and Al Hussein Technical University.

For the policy of developing NQF, the national qualification framework by law NO 9 of 2019 was approved and issued recently. Accordingly, TVET providers are required to design their training programmes in line with qualifications' descriptors. In addition, they are expected to compete on offering continuous learning/ upgrading training courses for individuals/ employed workers for vertical/ horizontal mobility on the qualification levels which indeed promote lifelong learning.

B.1.6 The role of VET in remedies through active labour market policies (ALMPs)

Different initiatives in response to active labour market policies were developed and implemented in Jordan to encounter the high unemployment rate among youth and assist job seekers in joining labour market in general. Also, those initiatives encouraged economically inactive individuals to look for employment particularly in rural areas. Examples of TVET related ALMPs initiatives include but not limited to:

- Satellite factories initiative/project
  - The initiative was launched in 2008 by Ministry of Labour, within its efforts to reduce unemployment, particularly among females in the rural areas in Jordan. It aims at encouraging companies/investors to establish sub/new factories in the targeted areas to provide employment opportunities, mainly for females (Rawashdeh/ UNESCO, 2019).
  - Number of satellite factories established and operated until 2018 is 24 factories distributed in different governorates in Jordan having 5866 employees of which 2200 are females. All the established factories are in the garment industry[24].
- National Service Programme
  - It is MOL programme, started in 2019 and aims at providing training linked with potential employment opportunities for youth job seekers (males and females) aged between 18-30 years. For males, the training is 6 months of which the first month in military sites to learn discipline and the other 5 months in TVET institutions and companies. The training for females will be for 5 months only without military training. The targeted number of job seekers to be trained by the programme is 20000. The programme consists of 2 tracks: Vocational and technical. The vocational track is open for all educational levels, and training will be in the fields of: Industry, agriculture, water technology, renewable energy, logistics, transportation, tourism, construction, beatification, food processing and garments. The technical track is opened for individuals successfully completed the general secondary stage, and the training will be in the fields of: Kindergarten, ICT and engineering[25].

[24] MoL home page (http://www.mol.gov.jo/).
[25] Nation service programme home page "http://khedmetwatan.jo/"

- The National Electronic Employment System (NEES)
  - NEES was established by MOL for the purpose of online matching job seekers with employers. Job seekers and companies can register directly online in the system or through MOL offices. Therefore, it assists job seekers in finding jobs and companies in filling available vacancies as required. MOL recently launched more developed system for online registration of jobs seekers and matching with requested employers' vacancies. The new system is called the National Platform for Employment.
- Continuing vocational training courses
  - This type of training courses is mainly provided by VTC in addition to some community colleges but at less scale. VTC provides short term training courses as continuous training for the society individuals and upgrading training for employed workers. Therefore, such courses may help individuals in finding jobs or in developing their jobs' competencies in companies.
  - The VTC, under the coordination of the TVSD Commission, is developing solutions for eLearning provision.

B.1.7 Identification of skills demand and its bearing on VET provision

No comprehensive system for identifying and anticipating labour market needs linked with education in general and TVET system in particular is available in Jordan. Only recently with support of international organizations, started the initiative of sector skills councils (SSC). According to TVSD law, those councils are national consultative councils representing employers, employees and government, and among other tasks will be responsible for identifying priority skills and training needs in different sectors. This initiative which is still in the early stage is expected to improve relevance of TVET programmes provision and may facilitate vertical permeability in TVET particularly with recently adoption of NQF in Jordan.

However, some studies/ projects/ systems provide some information/ indicators about labour market skills demand. This includes:

- Several sectorial survey studies conducted by the National Center for Human Resources Development (NCHRD) on behalf of MOL and financed by ETVET Fund. Surveys are covering both demand side (numbers and skills) and supply side provided by TVET institutions. Number of studies completed since 2013 is 18 covering priority sectors as identified by ETVET Council[26].
  - However, there is no evidence that training providers such as the VTC, the community colleges or the vocational education schools have adapted their curricula or their provision to the results and recommendations of these studies (TPR, 2016-2017).
- In addition, NCHRD through Al Manar project publish on its website HRI statistics that consist of two parts. The first part is the Education Database, which includes information about students and graduates of education institutions in Jordan including TVET providers (NET, VTC, VE/ MOE and community colleges). The second part is he Labour Force Database which includes in particular data about

[26] Al-Manar project web site/ http://www.almanar.jo/en/studies-researches/sectoralstudies

employed, unemployed and licensed foreign workers (Rawashdeh/ UNESCO, 2019).

- The former National Electronic Employment System (NEES) in MOL which was supposed to provide an on-line platform to match job seekers and employer's needs. Jordanian companies can register their available vacancies directly on line in the system with required qualification, work experience, age and gender as well as offered salaries and other incentives. Job seekers can register directly on line or through employment offices with the support of a dedicated staff trained to use the system.

Other services were initially planned to be provided through NEES that include: career guidance, labour market sectors, information and electronic/ on line training but are not operational so far (Rawashdeh/ UNESCO, 2019).

No evidence that TVET institutions have used results of above-mentioned resources to inform improvement of policies related to their TVET policies and programmes.

At institutional level, some of main TVET providers such as VTC and to less extent MOE conduct tracer studies that include feedback from employers and graduates on the skills needed. However, here also no evidence that results were used to inform improvements.

Informal learning can be validated by CAQA through occupational tests that lead to issue work licenses/ certificates with specific occupational level within the 3 basic levels (semi-skilled, skilled and craftsman) for those who pass the tests.

Recognition of qualifications acquired abroad is usually the responsibility of AQACHEI. However, recently issued laws (Technical and vocational skills development law No 9 of 2019 and NQF by law No 9 of 2019) organize above mentioned issues, but still additional by laws/ regulations to be issued for more details.

B.1.8 Supporting migrants and refugees through VET

TVET programmes are open for migrants but this will not allow them to work in the labour market unless they have the work permit from MOL. On the other hand, foreign workers - mostly Egyptians - can be tested to get skill recognition certificate only upon official request from MOL. Syrian refugees registered in UNHCR can enrol in VTC training programmes directly according to the same conditions applied to Jordanians. In addition, Syrian refugees are trained in VTC and NET training institutes through projects supported by international cooperation agencies.

According to agreements between ILO office/ Amman and each of VTC and NET, Syrian refugees receive supervised on the job training in specific sectors that include garment, manufacturing and construction. Signed agreements include conducting theoretical and practical tests for the recognition of prior learning and skills learned by Syrian refugees and accordingly work licenses issued by CAQA for those who passed the tests.

B.2: Entrepreneurial learning and entrepreneurship

B.2.1 Job creation and VET

TVET contribution to job creation is limited to providing entrepreneurship skills training in some of TVET institutions' programmes. No other services are provided for trainees/

graduates by TVET institutions to support self-employment such as link with sources of finance, business incubators, and development of visibility studies/ business plans for their own projects' ideas before graduation.

Worth mentioning here that one of the VTC main tasks, according to its law No 11 of 1985 is "Providing extension services support for establishing and developing small and medium enterprises". However, this task isn't effective, and no extension services are provided by VTC.

B.2.2 VET policies to promote entrepreneurship

Among main TVET providers in Jordan, tracking of self-employment and business creation is applied by VTC as part of tracer studies conducted almost on regular basis (annually) for its IVET programmes' graduates. The recent tracer study conducted in 2019 for VTC/ IVET programmes' graduates of 2016 showed the following results:

Self-employed percentage of graduates was only 5.5%.

- 68.8% of self-employed graduates are working in business matching their training specializations.
- Monthly income rates were 301-500 JD for 68.2% of the self-employed graduates, and 200-300 JD for 18.2%. This is higher than the monthly wage rates of waged employed graduates which were: 301-500 JD for 32% and 200-300 for 53.6% of the graduates.

However, no evidence of using information resulted of tracking self-employment in developing VTC training programmes content for more promotion of graduates' skills and orientation towards self-employment and business creation.

The importance of entrepreneurship was stressed within the strategic objective of the NHRDS (2016-2025) stating that "By 2025, substantially increase the number of youth and adults who have relevant technical and vocational skills for employment, decent jobs, and entrepreneurship".

However, this wasn't reflected on the ground so far.

According to VTC training programmes instructions (2019), 15 actual training hours on "establishment and management of small projects" are provided in the initial training programmes of skilled and craftsman levels. This training is provided as part of a training package (life, entrepreneurship and self-employment skills) of 75 actual hours that covers: communication (10 hours), vocational tracks (10 hours), self-marketing (10 hours), problem solving (5 hours), establishment and management of small projects, (15 hours) and electronic citizen (25 hours). The mentioned package's topics are provided separately along the training programme duration, where the self-employment is provided during the last quarter of the programme. The package is provided for VTC programmes' trainees by its institutes' staff and in some cases by specialized trainers from the Jordanian Hashemite Fund for Human Development (JOHUD)[27].

No entrepreneurship skills training is provided in MOE vocational education. However, one of the study plan's specialized topics is "industrial projects management" delivered for 2 hours/ week.

[27] Meeting with quality control director in VTC

In BAU/ community colleges, the study plan for the intermediate college diploma includes entrepreneurship skills topic. Also, NET provides entrepreneurship skills training usually as a package for the trainees by specialized outsider institutions/ trainers.

Other services for supporting entrepreneurship that include training, technical advisory and financing are provided for entrepreneurs with different backgrounds including TVET graduates. Ministry of Planning and International Cooperation (MOPIC) launched IRADA programme in 2002. It provides technical, advisory and training services for Jordanian citizens to establish/ develop their own businesses/ small projects in different sectors such as industry, services and agriculture[28].

According to the "guide of the financing programmes in Jordan" developed by IRADA in 2016, there are 27 public and private institutions providing financial support for the establishment and development of new businesses/ small projects.

One of the key financing institutions for promoting and developing entrepreneurship in Jordan is the Development and Employment Fund (DEF). It is a governmental institution governed by a board of directors representing both public and private sectors and headed by the minister of labour. The fund implements several financing programmes for supporting the establishment and development of individuals'/ groups' projects. Among those is a programme called "my profession". It aims at financing TVET graduates for establishing their own projects. The programme started in 2017 and provides financial loans ranging between 5,000 and 20,000 JD.

In addition to the financial support for establishing self-employment projects, the fund organizes and implements awareness days and training courses on entrepreneurship/ establishment of small and medium project for youth including TVET trainees/ graduates (DEF, 2017).

Also, the Jordan Innovative Start-ups and SMEs Fund (ISSF) which was established in 2017 with a total working capital of US $ 98 million (50 million from the WB and 48 millions from the Central Bank of Jordan) finances innovative start-ups and SMEs. The Fund is operated and managed by the Jordan Loan Guarantee Corporation (JLGC)[29].

Other institutions also provide entrepreneurship training for youth in Jordan. Such as: Business Development Center (BDC), INJAZ, Jordan River Foundation and JOHUD.

On the other hand, according to the "National Strategy for Entrepreneurship and MSMEs Development 2016-2020/ JEDCO" document, several challenges and constraints are faced in this sector. They include but are not limited to: instability of investment regulations, insufficient awareness and training of some of the in charge public officers and the complicated procedures, measures and financial guarantees for getting permits and starting new projects. Indeed, this was reflected in the World Bank's "Doing Business, 2019" report which ranked Jordan 104 out of 190 countries in terms of starting a business (However, Jordan's rank jumped to 75 according to WB doing business 2020 due to important economic reforms implemented by Jordan last year). Also, the strategy indicated an important obstacle for entrepreneurship growth in Jordan represented in weak entrepreneurial culture among Jordanian youths, mainly due to absence of related knowledge and skills within the education programmes particularly in universities and TVET.

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http://www.irada.org.jo/[28]

[29] Home page: jlgc.com/en/issf

II. ‘Open floor’

Employers’ organizations

Employers’ organizations include chambers of commerce, chambers of industry, and employers’ associations/ unions. There are 17 chambers of commerce in different cities in Jordan (Amman, Zarqa, Ruseifa, Salt, Madaba, Sothern Shouneh, Irbid, Ramtha, Mafraq, Ajloun, Jerash, Southern Mazar, Al Karak, Maan, Tafileh, Aqaba and Jordan chamber of commerce). The Jordan chamber of commerce represents all chambers of commerce and trade sectors in Jordan.

There are four chambers of industry in Jordan: Amman, Zarqa, Irbid, and the Jordan chamber of industry (Rawashdeh/ UNESCO, 2018).

Regarding employers’ associations/ unions, there are more than 50 of those associations/ unions in different sectors including, but not limited to, industry, ICT, tourism, banking, agriculture, trades, hospitals and health care, crafts professions and shops, and transportation and distribution.

Employers’ organizations involvement in TVET is mainly in the governance of TVET sector/ institutions through their representation in boards of directors/ governing councils as well as in implementing some joint training projects/ initiatives with TVET institutions. However, they are still far behind from playing a leading role in TVET, particularly supporting and promoting apprenticeship and work-based training as it is the case in other countries like Germany and Switzerland.

Employees’ organizations/ trade unions

There are 17 trade unions in different work sectors in Jordan. Those work sectors include, but are not limited to: land transport, electricity, mining, petrochemicals, air transportation and tourism, textile, garment and clothing and banks accounting and insurance. In addition to the labour unions, there is the General Federation of Jordanian Trade Unions (GFJTU) that includes the 17 union members (Rawashdeh/ UNESCO, 2018).

Employees’ organization role in TVET is limited to its representation of GFJTU in the governing bodies of TVET sector/ institutions (ETVET council which was cancelled after approval of TVSD law and VTC board of directors). Worth mentioning here is that GFJTU is not represented in the newly created TVSD Council.

Summary and analytical conclusions

Labour market situation

Labour market situation in Jordan is characterized by domination of micro and small enterprises (less than 20 employees) which equals to 98.2% as in 2017, large size of informal sector (26% of GDP in 2014), high numbers of immigrant/ refugees workers (with and without work permits), low refined activity rate (36.2%) and high unemployment rate (18.60%)

TVET challenges related to labour market status in Jordan include: Mismatch of TVET outcomes with labour market needs, un-appropriate/ insufficient places for work based training, insufficient jobs vacancies provided by the economy, competition with immigrant/ refugees workers, and low wages offered for TVET graduates.

Factors contribute to above mentioned challenges include: Shortage of information related to labour market needs, weak involvement of private sector in TVET, insufficient ALMPs for motivating people towards self-development, domination of MSMEs in labour market, weak capabilities of labour market institutions needed for effective involvement in TVET, low annual economic growth and the existence of high numbers of unorganized immigrants/ refugees workers ready to work for lower pays.

While most of the mentioned challenges and its related contributing factors are beyond TVET sector's role and capacity to deal with, recent legislations developments are expected to provide solution for the mismatch and to motivate self-development. The Technical and Vocational Skills Development (TVSD) law No 9 of 2019 impose more involvement of private sector in TVET. Private sector involvement will be through their majority representatives' members in the TVSD Council (responsible for TVET sector strategies, polices and plans) on one hand, and their participation in the sector skills councils (responsible for identifying skills and training needs) on the other hand. Also, approval of the NQF by law No 19 of 2019 is expected to motivate individuals to develop their abilities to transfer to higher qualification level and consequently TVET institutions to provide more CVT opportunities.

Entrepreneurial learning and entrepreneurship

TVET contribution to job creation is limited to providing entrepreneurship skills training in some of TVET institutions' programmes. The entrepreneurship skills training are delivered as a separated package in VTC and NET or a topic in technical education in BAU/ CCs i.e not integrated in the technical education/ vocational training of the profession. Other supporting services such as financing and visibility studies assistance are provided by other institutions outside TVET. Although VTC responsibilities according to its law include a task for providing extension services support, however the task isn't effective.

Challenges related to self-employment include: Lack of integrated services required for promoting entrepreneurship in TVET institutions, and shortage of information related to self-employment of TVET institutions' graduates.

Factors contributing to the mentioned challenges include: Absence of strategies/ polices at TVET institutions for promoting self-employment, weak coordination and cooperation between TVET institutions and other institutions responsible for providing services for self-employment and lack/ absence of tracer studies for TVET graduates that cover track self-employment.

Regarding solutions for the self-employment related challenges, no solutions are taking place currently either at the sector level or the institutional level.

Suggested recommendations for addressing Economic and labor market environment challenges are:

- Adopting polices/ measures aiming at motivating and incentivising labour market companies for employing fresh TVET graduates.
- Marketing TVET programmes (IVET/ CVT) and workers certification services targeting both employers and employees particularly in MSMEs and informal sector.
- Capacity building of employers/ employees' institutions for a more effective involvement in TVET.

- Developing and adopting strategies at institutional levels for promoting graduates' self-employment.
- Strengthening coordination and cooperation between TVET institutions and other institutions responsible for providing services for self-employment.
- Establishing Entrepreneurship Development Centres in TVET institutions to provide start-up support services within the institution.
- Developing and adopting mechanisms as required for tracking graduates' self-employment.

BUILDING BLOCK C: SOCIAL ENVIRONMENT AND INDIVIDUAL DEMAND FOR VET

C.1: Participation in VET and lifelong learning

C.1.1 Participation

As mentioned earlier, joining TVET in its different levels and types is not a priority for youth and parents in the Jordanian society. According to a study on youth aged 16-20 years old conducted by the Higher Population Council in 2012, the percentage of the 10th grade students who had selected secondary vocational education as the first choice was 11.5% and for the vocational training in VTC was only 0.2%. The same study indicated that 93% of the surveyed sample would like to join university after the secondary stage as a first choice, and only 2% would like to join technical education in community colleges (HPC, 2012). Indeed, this confirms the general perception of Jordanians that prefer the academic stream in order to continue their higher education in universities. Therefore, the majority of those joining VTC programmes, vocational education stream in MOE and technical education in community colleges are due to their low marks and not because of their own wishes.

NSHRD (2016-2025) indicated that not enough students pursue TVET and that only about 14% of students choose to enrol in the vocational stream at the secondary school level (grades 11-12). It also stated that enrolment in Community Colleges recently witnessed a decline. In addition to the stigma of "academic failure" associated with the vocational stream, the strategy attributed the weak enrolment to the limited pathways that hinder students from progressing from different types of TVET to others, especially to higher levels of education/ training.

Numbers of students enrolled in some of MOE vocational schools are up to their intake capacities, while for others particularly in remote areas, students' numbers are less than schools' capacities[30]. However, percentage of students in vocational secondary education in 2015/ 2016 was only 13.2% of those in the general secondary education (Education strategic plan 2018-2022). Also, in VTC, some of the training institutes in the southern part of Jordan are working under their intake capacities[31].

On the other hand, some TVET tracks are more attractive for students after the 10th grade than others. For instance, enrolment in vocational education in MOE is higher than enrolment in the initial training at the skilled worker level training programme in VTC. While the number of the 1st vocational secondary totalled 10,872 in the scholastic year

[30] Meeting with vocational education and production director/ MOE
[31] Meeting with ADG for training affaires

2015/2016 (MOE education strategic plan 2018-2022), in 2017, the total new entrants in the skilled worker level in VTC went down to 5,790 (VTC, 2017). This is mainly because VE ends with the general secondary exam/certificate which is the only channel to join higher education (universities or community colleges). While for vocational training, graduates can only join the labour market or in some cases further training programmes to upgrade their skills or get a higher skill level.

Additionally, technical education in community colleges is looked at by some students as a step towards joining universities and getting higher education degrees rather as a target by itself.

Some specializations register higher enrolment rates than others in initial vocational training and education programmes. Examples of specializations with weak enrolment include: construction, welding and metal fabrication and wood working occupations compared with specializations witnessing higher enrolment such as auto electrical/ electronic and air conditioning and refrigeration occupations. This can be noticed from graduates numbers in VTC, for example graduates numbers in 2017 from welding and metal fabrication was 237 and from wood working was 124 while from auto electricity/ electronics 570 and from air conditioning and refrigeration 460 (VTC, 2017).

No studies are available on the reasons why some specialisations have a weaker enrolment. However, it can be assumed that reasons could include – for certain type of jobs - hard working conditions, competition with immigrant workers and relatively modest earnings/ wages compared with hard working conditions.

The MOE 210 vocational schools and the VTC 42 training institutes are covering all governorates and to some extent sub governorates in Jordan different regions. However, students in remote areas and in some sub governorates have to use relatively costly transportation or to move their residence to join vocational education/ training school/ institute in other area. This additional financial burden on families represents another obstacle that makes some of students/ families joining the nearby academic school instead of vocational education/ training. This is more obvious in the case of technical education since a smaller number of community colleges is available in different Jordanian areas to provide technical education opportunities as required.

C.1.2 VET opportunities for vulnerable and marginalised groups

Vulnerability is mainly linked with poverty in Jordan as poor people are unable of meeting their basic needs. According to the National Strategy for Social Protection 2019-2025, 15.7% of population in Jordan lives under the poverty line. As well, those who sit immediately above the poverty line are vulnerable and at risk of falling into poverty. In addition to poor people, vulnerable groups include persons with disabilities and refugees due to their limited access to basic services coupled, in most cases, with poverty.

TVET programmes are, to some extent, accessible for different groups of Jordanians including vulnerable and marginalised groups.

Vulnerable poor people

For the initial vocational training programmes in VTC institutes, the training fees are very symbolic (30 JD per semester for the 3 basic levels programmes in VTC (VTC, 2019). However, trainees' fees were covered by ETVET Fund in the recent years. For vocational education in MOE, students don't pay any fees for their study in the 1st and 2nd

vocational secondary[32]. The above-mentioned fees are applied to Jordanians, including vulnerable poor people.

On the other hand, distribution of MOE and VTC schools/ institutes in different governorates/ sub governorates in Jordan facilitates vulnerable poor people to join VET programmes. In addition, VTC conducts some subsidized training programmes that cover transportation costs.

Trainees attending the VTC apprenticeship training programmes' get allowances/ wages from employers for their on-the- job training (VTC, 2019). Thus, covering their daily needs expenses and consequently lessening burden on their poor families.

In NET, trainees receive a monthly allowance covering pocket money (50 JD) and transportation cost (25 JD). Thus, encouraging vulnerable poor people to join the training opportunities provided.

Compared with vocational education and training, technical education in community colleges is less accessible by vulnerable poor people for two reasons: 1- Relatively high fees (20-35 JD/ credited hour)[33], 2- Shortage of community colleges in some areas which hinders poor people living there from joining technical education. However, for poor students in community colleges, they can receive loans/ grants from support funds for students in Jordan universities.

For the continuing vocational training, VTC is the main TVET provider that offers different continuing training courses for different age groups.

Disabled people

According to the building's codes, all new TVET institutions premises are required to be accessible by disabled students. Therefore, new TVET schools/ institutes/ colleges were built according to those codes. On the other hand, TVET training programmes are open for people with disabilities if they can practice the training and the occupation without being in high risk of injuries.

In VTC, there are specific training institutes/ programmes that are equipped for disabled people according to specific criteria (VTC, 2019). Training institutes/ workshops are prepared and equipped as required to facilitate access and training process of disabled trainees. Regarding training fees, disabled trainees are exempted from paying training fees (VTC, 2019).

Refugees

Around 80% of Syrian refugees reside in host communities, which has put huge pressure on the education system and subsequently impacted the quality of education that some Jordanian youths receive. In 2015/2016 school year, there were over 143,000 Syrian students enrolled in public schools, an 875% increase from 2011/2012 year. (NSHRD, 2016 – 2025).

Syrian refugees have access to vocational training programmes provided by VTC and NET, usually through projects financed by international agencies. However, VTC training programmes are open to non-Jordanians as long as they pay the cost of the training

[32] Meeting with vocational education and production director
[33] BAU homepage "https://www.bau.edu.jo/"

(VTC, 2019). MOE doesn't provide vocational education for Syrian refugees in its vocational schools although the ministry provides general education for them in the general education schools according to an agreement with UNHCR in Jordan.

Some of the community colleges provide vocational training for Syrian refugees also through financing agreements with international agencies.

International organizations supported provision of training opportunities for Syrian refugees as well as Jordanians in host communities in Jordan. An example is United Nations International Children's Emergency Fund (UNICEF)/ Jordan. In 2017, 115,681 young people (55% females) benefited from life skills programmes provided by UNICEF Jordan and its partners in camps and host communities, furthermore 478 young people (50% females) began certified vocational training. UNICEF Jordan also supported four vocational training centres for Syrian refugees in Za'atari and Azraq camps, with a focus on females and youth with disabilities. Between February and October 2017, 2,895 young people (27% females) participated in vocational training programmes. Of the first two cohorts of graduates (February-July), 15% successfully found paid employment and nearly half participated in post-programme volunteering opportunities (UNICEF, 2017[34]).

C.1.3 Policies to improve VET access and participation

It is well known that general social perspective of TVET stream is the main obstacle for increasing youth enrolment in TVET in Jordan. Therefore, recent strategies stressed policies aims at changing the society perspectives towards TVET.

The 5th strategic objective within the sub system of TVET in the NHRDS (2016-2025) stated "Mindset/ Promote and establish TVET as an attractive learning opportunity from an early age, and throughout the system". Accordingly, the strategy identified several projects to achieve the said strategic objective that includes: School-based careers guidance and exposure to design and technology, participation of Jordan in the World Skills competition, and reform the current tracking system for the MOE/ VE stream and delink VET from low scholastic achievement.

The MOE education strategic plan (2018-2022), within the vocational education domain identified a specific objective of increasing access to VE through conducting awareness activities and vocational counselling programmes for the 10th grade students as well as increasing the number and specializations of vocational schools.

In VTC, its strategic plan (2015-2024) included an objective for increasing enrolment in its training programmes at a rate of 5% annually and identified several projects for achieving the objective. Examples of such projects include: Establishing, expanding and maintaining of VTC training institutes, providing transportation and covering training fees for enrolled trainees, and training of unemployed jobs seekers, people with disabilities and prisoners.

At TVET level, measures currently taking place to increase enrolment in TVET include:

- Awareness campaigns targeting the 10th grade, 1st secondary and 2nd secondary students in MOE schools focusing on TVET opportunities available, usually conducted by each TVET institute independently (VTC, MOE and NET),

[34] https://www.unicef.org/about/annualreport/files/Jordan_2017_COAR.pdf

- starting the technical and vocational education diploma programmes in BAU/CCs for those who completed the secondary stage with or without the GSC, and
- the implementation of training and employment projects/ initiatives that link training in TVET institutions with employment opportunities in the private sector such as the National Service programme launched recently by MOL.

On the other hand, some of the current applied policies/ measures contribute to reinforcing the cultural stigma associated with the prospects and status of technical and vocational paths and consequently the students/ families continue to prefer academic university degrees in Jordan, regardless of whether this route positively impacts employability or not. Such policies include: Removing of vocational education topic from the primary level curricula (removed in 2014 to use the time allocated to focus on improving literacy and numeracy at early grades (1st to 3rd grades)) resulting in not having any TVET related element, streaming of poorly performing academic students into TVET, and assigning of educational counsellors without any training specific to technical and vocational education (NHRDS 2016-2025).

Other policies/ measures that also affect access to TVET include: Limitation of the use of vocational schools/ institutes to the daily hours which restrains enrolment of those who can join training only during evening and night hours, and the policy related to how immigrant workers licensing is organised, resulting in a deterioration of wages and working conditions. Consequently, many Jordanians refrained from participating in certain training programmes leading to specific jobs and occupations.

Regarding the role of the digital and online learning, all TVET courses are given in frontal classrooms and dedicated workshops. There were very basic trials to develop digital and online learning particularly in VTC, but nothing applied in the actual training process so far[35].

C.1.4 Promoting VET access and participation for vulnerable and marginalised groups

According to the “Rights of People with disabilities Law No 20 of 2017” TVET institutions are required to facilitate inclusive enrolment of people with disabilities in different vocational and technical programmes.

Regarding Syrian refugees, the Jordan Response Plan for Syria crisis 2018-2020 was designed to meet the immediate livelihood needs of vulnerable Syrian refugees and host populations, the response plan includes projects focusing on employment creation, including job matching and employability services, vocational training and apprenticeships, and career counselling services designed to increase the accessibility of decent work opportunities.

As previously mentioned, the no/ very low fees as well as distribution of vocational education/ training schools/ institutes in different governorates/ sub governorates paved the way for different groups of Jordanians including vulnerable poor people to participate in vocational education and training. In addition, other measures have been undertaken that lead to promote VET access and participation for vulnerable and marginalized groups. Examples of such measures are:

[35] Meeting with curricula and tests director

- Exemption of people with disabilities from paying fees when joining VTC training programmes (VTC, 2019).

- Preparing some of VTC training institutes and workshops to facilitate access and participation of disabled people in training programmes.

- Implementing initiatives financed mainly by ETVET Fund to support training/ employment programmes for youth (males and females) particularly poor and disabled people. Examples include but are not limited to: MOL satellite factories project in rural areas, paying training fees, training for unemployed disabled people in Ma'an and covering VTC trainees' transportation and work dress costs (ETVET Fund, 2017).

- The provision of a financial support for trainees enrolled in the NET training programmes that include a monthly allowance of 50-75 JD, in addition to 25 JD/ month for transportation cost, plus the work dress.

Other initiatives, not targeting specifically vulnerable groups, are put in place by the TVET sector such as satellite training and eLearning (see section B). The potential of these initiatives may be further explored to reach out to people in vulnerable groups, such as disabled people, people with low access to training opportunities in the area in which they live, etc.

C.1.5 Flexible VET provision in support of participation in VET

Compared with other TVET providers in Jordan, the VTC system is relatively more flexible in VET provision with a wide range of training opportunities for different trainees' groups (educational background, age, and skill levels). VTC provides both IVT and CVT programmes in its 42 training institutes within 19 main occupational families/ sectors (VTC, 2017).

IVT programmes cover mainly the semi-skilled (for those having basic reading and writing capabilities and are over 16), skilled level (for those who completed the 10th grade successfully and are between 16 and35 years old), and the craftsman skill levels (for those who completed the 2nd secondary class successfully and are under 35). In addition, there are other IVT programmes applied in VTC that include vocational diploma, hotel's related occupations training programmes covering 3 levels (1st, 2nd, and 3rd), and training programmes for occupational safety specialists and supervisors. Most of IVT programmes, particularly the semi-skilled, skilled and craftsman levels are conducted using the apprenticeship training scheme in cooperation with companies and enterprises (VTC, 2019).

For the CVT programmes, VTC provides continuing training courses in different occupational areas for individuals. The pre-conditions for joining CVT courses are the ability to read and write and be over 16 years old. VTC additionally provides upgrading courses for individuals having skills/ experience in specific area either with the objective to upgrade their skills within the same occupational level or to promote to a higher skill level (VTC, 2019).

MOE provides the two years vocational education in the 1st and 2nd secondary classes as part of the educational system in Jordan. No other TVET programmes are provided by MOE. Therefore, the group benefiting from vocational education services in MOE is limited to youths who successfully completed the 10th grade (males and females between 16 and18 years old). Vocational education in MOE covers 4 branches (hotel

business, home economics, agriculture and industry). Curricula are centrally developed, and the students get a certificate upon completion of each year (1st and 2nd) as well as the general secondary certificate (passed or failed) for those who participated in the related exams.

In BAU/CCs, the 2-3 years technical education programme is open to the group of youths (males and females) who successfully passed the general secondary exams, and usually are between 18 and 21 years old. Upon the successful completion of the 2/3 studying years, students get a community college certificate and the comprehensive intermediate diploma for those who pass the national comprehensive exams for community colleges.

BAU recently launched a technical/vocational diploma programme targeting those having the general secondary certificates (passed or failed). Thus, expanding groups categories targeted by technical/ vocational education/ training offered by community colleges. Also, some private colleges develop curricula and conduct vocational training programmes for 1 or 2 years as well as shorter training courses upon request of international agencies to train Syrian refugees.

Curricula in main TVET institutions are centrally directed with very limited autonomy regarding short term continuing training courses in VTC and BAU/ CCs. In VTC, IVT training programmes curricula are developed centrally by the programmes, tests, and instructional resources directorate using Arab Standard Classification of Occupations (ASCO 2008), occupational standards, or DACUM methodology. For continuing and upgrading training, curricula are based on the needs of individuals or of companies' needs. Training programmes are built in training units, each cover one task or competency. Therefore, those who didn't complete the training programme can get a document indicating the units learned (VTC, 2019).

Study plans for the technical/ vocational education/ training programmes are developed centrally. However, some BAU colleges develop curricula for specific training courses needed by labour market/ society. An example of those courses is the piping technology course developed and provided by AL Husun community college in in cooperation with two private sector companies with the support of the USAID project "Jordan Economic Development Programme (SABEQ)"[36].

According to the National HRD Strategy 2016-2025, continuing professional and personal development (CPPD) for employed people is not part of the Jordanian education and training system, additionally the absence of an NQF further hinders progression opportunities in TVET. Therefore, one of its identified strategic objectives within the thematic area "access" is to "Establish progressive pathways to promote and recognise all forms of learning and skills development within the system and in the labour market and create new options for high quality tertiary TVET education", and one of the projects identified for achieving this objective is "Approving the National Qualifications Framework (NQF)".

Consequently, NQF bylaw No 9 of 2019 was approved recently in 2019, it is expected that this will lead to establishing mechanisms for the recognition of prior learning and for promoting lifelong learning.

[36] BAU web site

C.1.6 Validation of non-formal and informal learning

Entry preconditions for IVT programmes are well identified within each TVET providers' regulations/ instructions. Except for the semi-skilled and 1st level (hotels) training programmes in VTC and all training programmes in NET, entry preconditions for IVT in TVET institutions programmes are linked to the education system in Jordan. Examples on these entry preconditions are i) Completion of 10th grade to join skilled worker level in VTC or the 1st vocational secondary in MOE, and ii) the general secondary certificate to join the technical education in BAU/ CCs. For VTC semi-skilled and NET programmes, the education precondition is the ability to read and write, which is usually validated by VTC/ NET interview person/ committee.

Validation can also be done for joining upgrading and continuing training courses in VTC. According to each training programme's enrolment preconditions, validation can be done through one or more of the following validation tools: occupational level test certificate (semi-skilled, skilled), work experience certificate for a specific number of years, and/ or ability to read and write (VTC, 2019). The occupational level tests which consist of two parts (theoretical and practical) are needed to validate the skills acquired through either non-formal or informal training in order to join upgrading courses. Occupational tests are implemented and supervised by CAQA.

It is worth mentioning that upgrading training courses may either aim at upgrading individual's skills within the same occupational level or transferring the individual to the next higher level of education or training within the three basic occupational levels (semi-skilled, skilled and craftsman). However, no data is available about the number of participants who joined the upgrading training courses based on their skills acquired outside the formal education and/or TVET system.

According to the ETVET law No 46 of 2008 and its by law No 35 of 2012, later on cancelled and replaced by the law No 19 of 2019, the Centre for Accreditation and Quality Assurance (CAQA) was responsible for the accreditation and licensing of TVET providers and their programmes as well as the implementation of occupational skill level tests for giving workers' licences. Therefore, CAQA was responsible for the validation of individuals' skills acquired through non-formal or informal learning by implementing or overseeing the implementation of occupational tests within the 3 basic levels (skilled, semi-skilled and craftsman). VTC was accredited by CAQA to validate the skills acquired through informal learning using occupational tests for this purpose. Both Jordanian and foreign workers can undertake occupation tests providing that foreign workers possess an official request from MOL.

Upon the issuance of the TVSD law No 19 of 2019, the role and responsibilities of CAQA (related to accreditation and licensing of VET providers and training programmes as well as workers occupational levels tests) were all transferred to the TVSD commission.

On the other hand and for implementing NQF by law No 9 of 2019, instructions will be issued that detail policies and mechanisms for the recognition of prior learning of individuals as well as required criteria for the access, progress and transfer between qualifications. According to the NQF by law and above mentioned TVSD law, AQACHEI and the TVSD Commission play specific roles in positioning and registering of TVET qualifications on the NQF

Whether validation processes according to the recently approved Jordanian NQF are valid and accepted by stakeholders, it is too early to assess. However, for the previous period starting from 2013 during which CAQA was responsible for the accreditation of

VET providers and programmes, qualification registration, and testing and licensing of workers, the numbers of stakeholders who benefitted from these services can be considered as an indicator of acceptance. Actually until 2019, the number of accredited providers was 268, accredited programmes: 962 (VTC: 382, NET: 83, MOE: 24, private providers 473, BAU: 0, and UNRWA: 0) and registered qualifications: 97 (VTC: 19, NET: 31, MOE: 22, private providers 25, BAU: 0, and UNRWA: 0)[37]. Indeed, this can be considered an evidence for stakeholders' acceptance and satisfaction considering that at that time all these processes were new and that the NQF was not yet approved.

For Syrian refugees, occupational level skills tests and certifications are applied as part of arrangements agreed with international agencies and organizations in the framework of projects providing training to Syrians.

C.2: Equity and equal opportunity in VET

C.2.1 Success of learners in VET

In the MOE, the indicator of the success of learners in comprehensive secondary education is the general secondary certificate exam. Table C1 below shows success rates in general secondary exams for different streams and for the years 2014-2018.

Table C1: Success rates in general secondary exams for the vocational, scientific, and literary streams (year 2014-2018)

Year	Vocational	Scientific	Literary
2014	34%	56.7%	17.4%
2015	47%	55.6%	18.8%
2016	45%	59.4%	22.1%
2017	51%	59.1%	40.2%
2018	39%	65.2%	51.3%

Source: Statistic report for the scholastic year 2017/2018.

As it can be noticed from the table, the success rate in the vocational education in the general secondary certificate exam (GSCE) is less than 50% in the reference years except for 2017. Also, there was no specific increasing/ decreasing pattern in the success rates since it was moving up and down irregularly from one year to another. Low success rates reflect the low level of students who originally funnelled to vocational education.

On the other hand, when compared with their peers in other secondary education streams, success rates are lower than the scientific stream students but higher than those in the literary stream in all years, except for 2018.

In the first session of the 2019 GSCE, success rate for the formal education students in the vocational education stream was 41.4% (industry 33.8%, agriculture: 44.7%, hotels: 45.2%, and home economics: 47%). As it can be noticed, success rate in industry branch is the lowest and in-home economics is the highest. It is worth mentioning here,

[37] CAQA statistics

that students are distributed to different branches according to their marks in the 10th grade. Those who join hotels and agriculture branches is usually because it is their first choice[38]. On the other hand, females usually join home economics branch (98% of total number of students in 2015/ 2016), followed by agriculture (19% of total number of students in 2015/ 2016) (MOE/ education strategy 2018-2022). This may explain the comparatively low success rate as students are more motivated in specializations, they like more, and on the other hand, commitment to study and discipline are usually more common among female students compared with male students.

Although no precise dropout rate specific for secondary vocational education is available, it was 10.9% for the 1st secondary grade/ general secondary education in 2014/ 2015 (MOE/ education strategy 2018-2022).

For VTC, the number of trainees and graduates for both IVT and CVT programmes during the period 2014-2017 are shown in table C2.

Table C2: VTC trainees and graduates' numbers during (2014-2017)

Year	New enrolled trainees	Trainees from previous years trainees	Total	Graduates
2014	12,564	8,940	21,504	8,358
2015	14,101	10,074	24,175	9,167
2016	14,178	10,428	24,606	10,096
2017	15,610	10,875	26,845	12,082

Source: VTC annual reports

As it can be noticed from the table, the total increase of trainees (new and from previous years) and graduates' numbers from 2014 to 2017 were 25% and 44% respectively. This reflects development in the attractiveness of vocational training programmes provided by VTC.

However, the indicator for the success rate in the IVT programmes (semi-skilled, skilled, and craftsman levels) is the success in the occupational level tests conducted at the end of those training programmes. Success rate of IVT programmes' trainees who pass occupational level tests is usually about 95%. On the other hand, employment rate for IVT programmes graduates in VTC according to the recent tracer study conducted in 2019 for the middle region institutes graduates of 2016 was 56.7%. This can be looked at as an indicator of modest success rate for those programmes which require more investigations and analysis for the causes.

Regarding dropouts, it varied from one programme to another, however, the general rate dropout in VTC programmes was 10% in 2016 (VTC, 2016).

In technical education programmes in BAU, the number of enrolled students in community colleges in different specializations in 2017/2018 was 25,205 of which 9,554 (38%) were enrolled in engineering, productive industries and construction specializations. The number of graduates for the same year was 5,522 of which 1,847

[38] Meeting with Vocational Education and Production Director.

students (33%) graduated from engineering, productive industries and construction specializations (NCHRD, 2017).

The indicator for success in technical education is the national comprehensive exam for community colleges. In 2018/2019, the rate of success in the comprehensive exam was 67.2% in the summer session, out of 4,789 students who participated in the exam 3,220 passed. (BAU home page 18/8/2019). Regarding the dropout rate in technical education, no studies are conducted for calculating dropout rates. However, it is estimated at 1-2% annually[39].

C.2.2 VET learners in need of additional learning and training support

Additional support needed by TVET learners are almost the same in the different TVET providers' institutions. In the first place, it is financial as students come mainly from middle income to poor families; secondly it is teaching support as usually students enrolled in TVET are lower performing. The lower percentage of students from TVET passing the GSC (Tawjihi) comprehensive exams (compared with their peer scientific branch students) is an additional indication that TVET students are requiring more teaching and training support.

No data is available about the proportions of learners requiring additional financial or teaching supports in any of the main TVET providers. Consequently, no policies and mechanisms are in place to deal with such issues and provide required support for learners.

Even though, some measures were taken by some TVET providers to address one or both of the two issues, these measures were not systematic and comprehensive. In specific poor areas in Jordan, VTC covered transportation and work forms costs for the trainees through a project financed by ETVET Fund (ETVET Fund, 2017). Also, according to other supporting project, ETVET Fund covered VTC/ IVT programmes trainees' fees in the recent several years. For learners who can't achieve the skill level as required, the training period can be extended for free according to VTC training programmes instructions.

In MOE, all public schools' students including VE students are exempted of schools' fees. In addition, MOE provide residence and meals for students from remote areas joining vocational education in 3 schools in Mafraq, Aqaba and Eail. There are no official and organized measures regarding additional teaching support for students.

In BAU/ CCs, the support provided for disadvantaged students in technical education is financial (in case of poverty conditions). This support is provided through the poor student support fund within the MOHESR in the form of grants or loans based on specific criteria such as parents' income, number of brothers studying and student's performance in his/ her study.

In the absence of systematic and generalised mechanisms identifying and quantifying students' difficulties, there is no clear picture about the type and size of the potential support needed. Consequently, it is not possible to assess whether TVET institutions would have the capabilities and capacities to provide the needed support.

[39] Meeting with Director of National Center for Training and Trainers Rehabilitation/ BAU

C.2.3 Measures in support of equity in VET

In its strategic plan (2015-2024), VTC adopted several programmes to ensure equal treatment regarding enrolment in its training programmes. Those programmes include: i) train persons with disabilities, ii) train the prisoners of the rehabilitation centres, and iii) promote and enhance the women participation in vocational training.

The objective of the programme to enhance women participation was to reach an annual increase of 3% of female participation in vocational training programs.

However, gender parity index (0000) in training programmes enrolment during the period 2014-2017 wasn't moving in linear pattern but fluctuating, with ups and downs. The gender parity index was 37%, 39%, 35%, and 43% in 2014, 2015, 2016, and 2017 respectively (VTC annual reports 2014-2017).

To ensure success of the different students, the only policy adopted envisages the extension of the training duration for those who didn't achieve their training objectives. The training extension is individual and carried out under supervision, at training institutes or in the work place. It is free of charge.

In MOE, the strategic education plan (2018-2022) included the establishment of 15 specialized vocational schools of which 7 for females, and renovation plans for the vocational schools aiming at promoting access in general and for females and disabled students particularly.

MOE works with the support of international donors to provide basic and academic secondary education for Syrians refugees' students. The number of Syrians refugees' students in the scholastic year 2016/2017 was 126,127 (MOE Strategic education plan 2018-2022). In addition, MOE implements six non-formal programmes aiming at providing education opportunities for adults and children dropped out from schools and who wish to resume their education. These programmes include adult literacy, home studies, evening studies, drop-out, summer studies, and catch-up programmes. (MOE Strategic education plan 2018-2022).

However, vocational education in the MOE is not included in international partners' supported projects for Syrian refugees. Therefore, a very limited numbers of Syrians are enrolled in vocational schools[40].

It should be noted that no programmes such as individualized learning plans, teaching support, free-of-charge remedial lessons, and smaller classes are applied. These type of policies and practices were not incorporated in MOE strategic education plan (2018-2022).

This is also true for the technical education programmes delivered in BAU/ CCs.

C.2.4 Inclusive education and VET

Regarding the commitment towards inclusive education for people with disabilities, Jordan signed the Convention on the Rights of Persons with Disabilities (CRPD). In addition, a new Law on the Rights of Persons with Disabilities (LRPD) (law No. 20 of 2017) was approved replacing the previous one (law No 31 of 2007). Both laws stressed the importance of inclusive education for all as a key principle. The new LRPD law

[40] Meeting with the director of vocational education

number 20 stipulates that the MOE, in coordination with the Higher Council for the Rights of Persons with Disabilities (HCRPD), will guarantee the admission and enrolment of children with disabilities into educational institutions, draw up a comprehensive national plan for enrolling persons with disabilities into educational institutions to be completed no later than 10 years from its starting date, providing the optimal level of inclusive education, and limit the practicing of educational diagnosis and teaching for students with disabilities only to trained and certified individuals[41].

Concerning vocational training, LRPD law number 20 indicates that the MOL and VTC in coordination with (HCRPD) are to take measures to guarantee the inclusion of persons with disabilities in the training programmes available, and to secure utilization thereof on an equal basis with others.

For technical education, the LRPD law indicates that "no person may be excluded from higher education institutions or be denied the right to study any specializations available therein on the basis of, or because of, disability"[42]. As such, it is also applied to technical education in community colleges as part of higher education in Jordan.

At the national levels, pillar No 3 of the Jordan National E-TVET Strategy (2014-2020) "increase the inclusiveness of TVET" identified solutions to enhance the inclusion of vulnerable groups including disabled people, migrants, women…etc.

The MOE education strategic plan (2018-2022) included a strategic objective to ensure access and equality for all residents in Jordan with specific objectives linked to infrastructure, inclusive education and special needs, lifelong learning and non-formal education.

Commitment towards an inclusive education also applies to vocational education. This was clear in the education strategy (within the vocational education domain) which indicates the need to "Develop renovation plan for specialized vocational education schools, including renovation for students with disabilities".

The VTC strategic plan (2015-2024) identifies several projects to enhance inclusiveness. Examples include train the persons with disabilities, train the prisoners of the rehabilitation centres, and promotion project to increase women participation in vocational training (Women Development Project (WDP)). VTC had already renovated 9 of its training institutes and prepared them to be accessible for disabled trainees[43].

To complement the information above, the Jordanian National Building Code No (7) of 1993, states that the construction of all public and private sector buildings including those of TVET institutions need to be accessible by persons with disabilities.

C.3: Active support to employment

C.3.1 Employability of VET graduates

According to NSHRD (2016-2025), TVET provision does not place enough emphasis on preparing students for employment in a 21st century knowledge economy, which involves going beyond providing up-to-date technical competences, and should include developing key competence such as entrepreneurship, networking and creativity.

[41] HCRPD homepage http://www.hcd.gov.jo// law 20 of 2017
[42] Ibid
[43] Meeting with the Head of vocational direction and counseling section

However, information related to TVET graduates' employability need to be based on systematic studies and surveys on TVET outcomes and its relevance for the labour market. Currently, such studies are mainly limited to tracer studies conducted by TVET providers for their own graduates. Even these tracer studies are not implemented on a regular, comprehensive, and unified way, in the different TVET institutions.

In VTC, tracer studies are conducted annually for graduates, usually 3 years after their graduation. Based on available financial resources, studies may cover graduates of different training programmes and regions, entirely or partially. The most recent tracer study was conducted in 2019 for 2016 graduates of different programmes in the middle region's institutes. The results of this study were the following:

- The percentage of employed graduates is **56.7%** (35.1% in jobs matching their training specializations, 21.6% not matching), while the percentage of unemployed is **43.3%**. This percentage of unemployment is higher than the unemployment rate among the same age group of (20-24) at national level in the 4th round of DOS employment and unemployment survey of 2019 which equals to **39.7%**[44].

- The wages of 53.6% of the employed graduates in jobs matching their training field range between 200 and 300 JD/month.

- The study results didn't include information related to employed graduates on the period of transition from graduation to work.

- 42.6% of employed graduates in fields not matching their skills, indicated unavailability of job opportunities in their field as the main reason for choosing a job in a different field.

- 32.5% of unemployed graduates indicated as main reason for unemployment the low wages offered, and the same reason was given by 40.2% of those working in other fields than their training specializations.

In MOE, 3 tracer studies were conducted during the period 2016-2019. They covered three sectors: industry, agriculture, and hotels branches. Each tracer study covered graduates from several years. It worth mentioning here that all mentioned tracer studies covered only already employed graduates in the surveyed enterprises leading to a major shortcoming of not having the percentage of employment/ unemployment among graduates.

As an example, we take the tracer study in the agriculture branch which covered graduates of 2013 to 2017. Here below are the main results related to graduates' employability within the study:

- 67.3% of respondents needed less than 1 year to find their job and 32.3% 1 year.

- For 36.6% the monthly wage was below the minimum wage (which is 220 JD), for 21.8% it was equal to the minimum wage, and for 41.6% it was above the minimum wage.

[44] DOS statistics

However, graduates' employability cannot be assessed objectively without having information related to graduates employed (in jobs that match or do not match their training).

No tracer studies are conducted by BAU/ CCs on their graduates. Hence, there is no information about employability of technical education programmes graduates[45]. However, unemployment of community colleges graduates was 14% in 2015 (ESC, 2017).

In 2015, average monthly wages of employed males and females' workers in private sector enterprises having secondary or community college intermediate diploma were 405 JD for males and 338 JD for females. Those wages are lower than those received by university degree holders but still higher than wages of employees with less than secondary education level. Also, the workers' wages in the private sector are lower when compared with average wages of their peers working in the public sector institutions (DOS, 2012-2016).

C.3.2 Economic factors with an impact on transition

There are specific economic factors that impede the entry of TVET graduates into the labour market. Such factors include:

- The low GDP growth rate that continued declining from 3.1% in 2014 down to 2.4% in 2015 until it reached 1.9% in 2018 (World Bank[46]).
- Weak ability of the Jordan economy in offering enough employment opportunities for new entrants in the labour market. For example in 2017, the new jobs created according to DOS were about 54,000 while the number of graduates from Jordan universities (2016/2017) in different educational studies was about 69,000[47] in addition to about 25800 graduates from TVET institutions (VTC, MOE/ VE, BAU/ CCs and NET) (Al Manar Project/ Human Resources Statistics)[48].
- High numbers of immigrant workers competing with Jordanians, in particular with TVET graduates, on the already insufficient employment opportunities available (immigrant workers are more ready to work in hard conditions and with lower salaries). As mentioned earlier in the report, number of immigrant workers having work permits reached a total of 352,350 in 2018 (most of them are from Egypt (54%)). This problem became even more challenging with the influx of Syrian refugees after the turmoil in Syria, most Syrian workers don't have work permits.

C.3.3 Overview of policies in support of employability and transition to employment

Policies adopted to support employability and transition to the labour market include:

- The increase of the private sector involvement in identifying training needs, and development of occupational standards and TVET programmes' curricula through their participation in technical committees, DACUM processes and sector skill councils. Such involvement is expected to develop more demand driven

[45] Meeting with Director of National Center for Training and Trainers Rehabilitation/ BAU
[46] https://data.worldbank.org/country/jordan
[47] MOHESR 2016/17 statistics
[48] http://www.almanar.jo/en/human-resources-information/hristatistics

TVET programmes. This goes in line with the NSHRD (2016-2025) strategic objective "*TVET2: Quality – Increase the quality of TVET through consistent training requirements for TVET instructors, aligning standards and quality assurance for all institutions, and* ***closer coordination with private sector***".

- The integration of soft/ life skills as well as entrepreneurship skills in the training programmes to enhance graduates' employability in companies and strengthen their capacity to start their own businesses. Both VTC (VTC, 2019) and NET[49] have already included life skills and entrepreneurship skills in their IVT programmes.

- The application of work-based learning as part of TVET programmes through apprenticeship, internship, and dual training schemes. Both VTC and NET apply such schemes since their establishment in 1976 and 2007 respectively. Vocational education students in MOE schools are required to practice their specialization for 24 days either in work places in the labour market or in their schools workshops during summer holiday (Rawashdeh/ UNESCO, 2019). At the technical level Al Salt technical college in BAU and Al Hussein Technical University just started in 2018/ 2019 technical programmes of 2-3 years that include on the job training for 1-2 semesters (Rawashdeh/ UNESCO, 2019).The on the job training helps students/ trainees on one hand to acquire the actual skills required by the labour market and on the other to adapt to the work environment. Thus, facilitating the hiring process for employers and students as well as the transition from school to work.

- The establishment of the online National Electronic Employment System (NEES) that enables employers to register vacancies and jobs seekers (including TVET graduates) to upload their CVs. In this way, the system should also facilitate the matching process for job placement. The system is established and operated by the MOL. With technical support from Okhtaboot/ private online career Network Company, the system was developed recently into more advanced electronic system called the National Employment Platform having the same provided services for both employers and jobs seekers. Available data on NEES will be transferred to the new system which is operated/ managed by MOL[50].

- The provision of vocational guidance and employment services for trainees, students and graduates in some of the TVET providers' institutions to assist graduates in finding a job. In VTC, there is a central employment unit that collects data on employed graduates, assists companies in contacting graduates for employment opportunities, participate in jobs fairs, and coordinate with NEES to registering graduates on the system.

C.3.4 Career guidance

The Career Guidance Strategy which was developed and adopted in 2011 with the support of the ETF and the Canadian Building and Extending Skills Training (BEST) project was not operated as the related implementation unit wasn't established (TPR, 2016/17).

In the MOL, employment directorates in the governorates in Jordan provide career guidance services for job seekers including TVET graduates and workers looking for

[49] Meeting with training director
[50] Meeting with LM Data Base Section Head

training and/or available employment opportunities (TPR, 2016/17). In addition, the employment directorates still conduct awareness campaigns according to annual plans that target schools, universities and associations to inform on training and employment opportunities, etc.

The National Electronic Employment System (NEES) operated and maintained by MOL was initially planned to provide, beside the registration of jobs seekers and job vacancies, additional services that include career guidance, sector information and online training services. However, those additional services are not yet operational[51].

Career guidance services provided by TVET institutions to their students/ trainees and graduates vary from provider to provider.

MoE has about 2,000 educational guidance officers working in its schools. They usually have educational psychology background, and their focus is on social and educational issues and not vocational and career guidance (ESC, 2016). The career guidance services and graduates follow up section in the vocational education directorate is limited to developing some information material and providing their contact details to companies looking to employ VE graduates with (TPR, 2016/17).

Neither the comprehensive secondary schools nor the specialized vocational ones, have vocational guidance officers to provide career guidance for students and graduates. However, those schools as other general education schools have educational counsellors who provide advices and counselling on educational and behavioural issues rather on career guidance.

In VTC, there is at least one career/ vocational guidance and counselling officer in each of its institutes. They mostly have educational, psychological background with some work experience and/ or training courses in career and vocational guidance. The vocational guidance and counselling officer provides advice for new entrants to support them in the selection of a vocational specialization, the trainees' adaptation to the institutional and/ or work place training environment and solving problems that the trainees may face. However, due to the lack of information about labour market occupations (needs, working conditions, wages, etc.), their role in advising and providing career guidance for students and graduates remains limited.

The BAU community colleges do not provide career guidance services.

III. Summary and analytical conclusions

Participation in TVET is still low compared with general academic and university education as it is an unattractive option for students and their families. Furthermore, continuing professional and personal development (CPPD) is not a priority for individuals and companies. Inclusion of people with disabilities in TVET remains weak.

The factors that contribute to the above low participation in TVET include:

- The low image that VET still has in the society, in particular vocational training, considered as a training path for low performers in general education,
- weak vocational guidance services and awareness campaigns targeting, students, parents and society in general,

[51] Meeting with LM Data Base Section Head

- relatively low salaries and lack of social insurances in TVET related occupations
- competition with foreign workers on occupations and jobs usually targeted by TVET graduate
- unavailability/limited implementation of a national qualification framework
- lack of awareness and absence of incentives for companies regarding the development of their employees' competencies
- limited professional development and training opportunities provided by TVET institutions for employed workers
- un-readiness of some TVET institutes, schools, colleges to receive disabled people and weak capabilities of the training and teaching staff to train disabled people.

Possible solutions related to the mentioned challenges are either at national or institutional level. Concerning the low participation and low enrolment in TVET, the new TVSD Commission will be developing vocational guidance and counselling plans and awareness campaigns at national level according to one of its mandated tasks. Also, to increase enrolment in vocational education, MOE education strategy 2018-2022 included establishing 15 new specialized vocational schools. The promulgation of the NQF by law No 9 of 2019 is expected to promote CPPD among individuals as it enables career path progress to higher levels along the framework's 10 qualification levels as well as recognition of non-formal and informal learning. Regarding inclusion of people with disabilities, according to Jordan national buildings codes TVET institutes, schools, colleges are required to be built with accessible facilities for persons with disabilities. Therefore, TVET institutions are working on or have plans to renovate their facilities, to be more accessible by disabled persons.

Concerning equity and equal opportunity in TVET, the main policy challenges include the low success rate of vocational education students in GSC/ Al-Tawjihy exams, and insufficient support for disadvantaged students/ trainees (financial and teaching support).

Some factors influencing the challenges above include: the GSC exams instructions concerning success requirements in academic topics (math, physics, etc.) where students originally streamed to VE are weak and absence of comprehensive plans for supporting disadvantaged and vulnerable TVET students.

Possible solutions can be put in place at institutional level but not at national level. For the low success rate, the MOE is reviewing the SGC exams success instructions through the Al-Tawjihy exams development plan. For disadvantaged students, some measures are taken by TVET institutions to assist in encountering financial difficulties. Such measures include: Provision of accommodation and meals for MOE/ VE students in some remote areas, transportation and training uniforms costs for VTC trainees in poor areas, monthly allowances for all NET trainees and financial support from poor students fund for the in need students in BAU/ CCs.

With regard to active support to employment, challenges are related to weak employability of TVET graduates, and insufficient employment support services.

The factors contributing to these challenges include: weak relevance of the skills of the TVET graduates compared with those demanded by the labour market, insufficient job

opportunities for graduates due to weak economic growth, low wages offered to graduates compared to the working conditions, insufficient career guidance and employment services provided to graduates to help the transition from school to work, and shortage of regular feedback on graduates status and performance through systematically conducted follow up/ tracer studies.

The TVET sector alone cannot do much in response to shortage of job opportunities and low salaries. This requires an economic re-dynamization and comprehensive strategies and solutions that involve different socio-economic sectors at national level. However, the TVET sector policies can contribute to address some of the challenges, for example through:

- The establishment of private sector led SSCs which are expected to improve TVET programmes' outcomes relevancy,
- the introduction/integration of employability and entrepreneurship skills in VTC, NET, and BAU/ CCs training/ education programmes,
- the registration of VTC/ IVT training programmes' graduates on the NEES,
- and conducting tracer studies for graduates in VTC, NET, and MOE/ VE although not on a regular and comprehensive basis.

The recommendations suggested for addressing social environment and individual demand for VET challenges are:

- Develop unified TVET quality standards to be used as basis for TVET institutions performance evaluation.
- Expand VET opportunities for vulnerable and marginalized groups
- Extend professional education and training opportunities targeting employed workers to assist them in progressing in their career paths. This may require opening TVET institutions to receive participants at evening after their working hours.
- Develop plans and mechanisms in each TVET institution for providing required support for disadvantaged students according to their needs.
- Develop and implement a renovation plan for TVET institutions, as needed, to become accessible for students/ trainees with disabilities.
- Build capacity of educational counsellors in MOE vocational schools to provide career guidance for vocational education students and graduates.
- Develop a manual guide to be used for implementing tracer studies for graduates of TVET institutions.

BUILDING BLOCK D: INTERNAL EFFICIENCY AND OPERATION OF THE VET SYSTEM

D.1: Teaching and learning environment

D.1.1 Teaching and learning methods, including work-based learning

Not much progress was achieved regarding methods of teaching and learning used in TVET since the previous edition of the Torino Process (TPR, 2016-2017). As in the theoretical lessons, the dominating method is still the teacher centred lecturing method where the teacher or trainer talks, and students or trainees take notes. For the practical training, the traditional demonstration is the method mostly used. The trainer or teacher performs the tasks and the trainees imitate the same tasks mainly individually or, in some cases, in sub groups under his/her close supervision and follow up. Although these traditional methods may help the students to acquire the related theoretic and practical competencies, they do not help to develop other methodological, social and personal competencies needed in the labour market such as planning, problem solving, team working, creativity, self-development and other skills.

On the other hand, teaching and learning aids are not yet sufficiently and effectively used by trainers and teachers. It should be noted, however, that students in the community colleges are required to do work projects prior to their graduation. Such projects are mostly conducted through group work that can support developing team work skills, one essential employment skill required by the labour market

All TVET providers in Jordan deliver both practical and theoretical training but at different ratios. While theory is delivered mainly in the classrooms, practice is delivered in equipped workshops or labs. Vocational training programmes in VTC and NET are more practice oriented compared with vocational education in MOE and technical education in BAU community colleges. The percentage of practical training in VTC varies according to the training program, it is 50-60% for craftsman level, 60-70% for skilled level, and 80-90% for the semi-skilled level (VTC, 2019).

While in VTC and NET, the same trainer provides both technical theory and practice, in BAU and MOE, technical theory is delivered by teachers other than those delivering practical skills in workshops. Consequently, there is a possible lack of integration and coherence between theoretical knowledge and practical skills.

Most of IVT programmes (semi-skilled, skilled and craftsman levels) in VTC, include work-based training in cooperation with labour market enterprises, while continuing and upgrading training courses are conducted mainly within the institutes' workshops. The skilled worker-training program is the main training program in VTC implemented through the apprenticeship scheme using the dual training system.

NET also applies work-based training in its training programmes. Trainees are required to spend the last 2 -3 months, out of the 8 months of the duration their training programmes, in the work place (Rawashdeh/ UNESCO, 2018).

For vocational education in MOE, work-based learning is very limited as the practical part of the vocational education is implemented in the schools' equipped workshops. However, vocational education students, after completing the 1st secondary class, are required to have 24 days of practical training, in their speciality, in the workplace or in their schools.

Similar to VE in MOE, technical education in BAU takes place at the college's premises, but students are required to get work place training for 2 months as a condition for graduation.

Obstacles that may face extending and improving apprenticeship and other work-based training include (Rawashdeh/ UNESCO, 2018):

- Inadequate legal framework for the effective implementation of apprenticeship and other work-based learning in TVET.
- Massive presence of micro and small enterprises (98% of all enterprises) that do not have or have limited capacity to train apprentices.
- Lack of private sector capacity to participate effectively in planning, designing, and implementing TVET.
- Inadequate workplace facilities and conditions for conducting work-based training.
- Insufficient training places for apprenticeship or other forms of work-based training in some areas.
- Unwillingness of some companies to cooperate in implementing work-based training.
- Insufficient resources for improving apprenticeship and other forms of work-based training schemes.
- Negative perception of society of TVET, including apprenticeship and other work-based form of training.
- Low female enrolment in apprenticeship or other forms of work-based training due to cultural issues or inappropriate working conditions for females.

D.1.2 Teaching and learning environment

NSHRD (2016-2025) indicates that "TVET provision is considered outdated, not 'applied' enough, and not providing the skills required by Jordanian employers". It indicated as well that "less than half of employers surveyed as part of the most recent National Employment Strategy were happy with the skill levels of new hires". In addition, the ESC report" State of the country 2018) stated that 70% of employers surveyed expressed their dissatisfaction with vocational education graduates' quality. Therefore, such opinions are considered as indicators of outdated curricula and ineffective methods in delivering training due mainly to poor employers' involvement in course design and delivery (except for VTC which apply dual training in cooperation with employers).

Together with the outdated curricula, TVET teachers and trainers (with some exceptions) are still using traditional teaching and learning methods based on lecturing for theory and demonstration or imitation for practice and do not use (or to a limited extent) interactive and creative pedagogical methods.

Regarding TVET institutions' facilities (buildings and equipment), conditions vary from one TVET provider to another and even from one institute, school, college to another within the same TVET provider institution, this is because new institutes usually have

modern or more developed facilities. TVET facilities are relatively more appropriate for implementing training programmes according to the approved curricula. However, there is still a need to update training equipment to cope with continuing technical developments in the labour market as well as following updating of training curricula. TVET facilities need periodic maintenance to keep them in good conditions for conducting training. Updating and maintaining TVET facilities are usually hindered by the shortage of required financial resources, worsened by the difficult economic situation of the last years.

D.1.3 Policies to improve training/teaching and learning methods in VET

TVET related strategies included programmes and projects supporting directly or indirectly the development of learning and training methods used in TVET (See table D1).

Table D1: Supporting development of learning and training methods in TVET related strategies

Strategy	Objectives/ programmes/ projects/ measures
National Human Resource Development Strategy (2016-2025)	• Expand apprenticeship programmes
VTC Strategic Plan (2015-2025)	• Enabling and upgrading technical staff skills. • Providing electronic curricula and programs and production, cloning and recording training movies regarding the development of curricula and programs.
MOE/ Education Strategic Plan (2018-2022)	• Increase the percentage of trained teachers from 25% to 100%.
BAU Strategic Plan (2017-2021)	• Reviewing teaching methods focusing on applied and practical aspects. • Upgrading teaching staff and trainers' skills.

The European Union budget support programme (SESIP – Skills for Employment and Social Inclusion Programme) in the TVET sector and the complementary technical assistance, targeted – among others – training of teachers and trainers as one of the key actions of the project. In this respect, important ToT actions have been implemented (see below for specific details).

The GIZ project "Training for water and energy efficiency development (TWEED)" included an activity for developing ToT didactic modules for the training of vocational trainers. The developed course titled (training competences for practice- oriented vocational training) was accredited by CAQA and accordingly graduates of such courses will be licensed as vocational trainers. The focus of the course is on developing trainers' competencies in practical training in workshops and the inclusion of different categories of the professional competencies (technical, methodological, personal and social) as required by the labour market. Two pilots training courses using the developed didactic training modules were conducted for two groups of vocational trainers from VTC, NET, MOE, UNRWA and BAU in 2018. The total number of participants was 50 in the two pilot courses. VTC adopted these ToT modules and its TDI (Training and Development

Institute), which was accredited by CAQA for delivering the course, started conducting it for VTC vocational trainers.

The above-mentioned ToT didactic modules were also modified to be applied for training of in company instructors focusing mainly on methodological and didactical approaches useful for workplace instruction. The course to train in company instructors was accredited by CAQA and a pilot training course for a group of 17 participants from companies was conducted in 2018. Actually, the concept of licensed in-company instructor is new to Jordan labour market which is expected to positively reflect on the quality of apprenticeship and other work based learning forms if widely adopted by companies in Jordan.

New policy towards expanding in applying work-based learning was observed at technical level in BAU/ Al Salt Technical College and in Al Hussein Technical University.

Al Salt technical college which was established in 2018/2019 to implement technical education programmes (three years for the associate degree and two years for the technical diploma) started firstly with energy engineering and intelligent systems engineering programmes. The programmes will be conducted in the college as well as in the labour market work sites.

In Al Hussein Technical University (HTU), the implementation of technical education programmes will be in the university campus as well as in companies through partnership with private sector as follows[52]:

- Technician Degree: One and a half year studying in campus and 6 months' in apprenticeship in an industry.
- Technical Degree: Two years studying in campus and one-year apprenticeship in company training/employment initiatives/projects.

D.1.4 improving the training and learning environment

Recent strategic plans for all the main TVET providers (VTC, MOE/ VE and BAU/CCs) included objectives, programmes, projects and sub-components for upgrading, maintaining equipment and buildings and/or developing curricula and learning materials to improve TVET quality.

Needs of upgrading and maintaining equipment and buildings are identified annually by TVET institutes, schools, colleges at local level, and then sent to their TVET institutions central departments for approval, considering the available financial resources, which are usually insufficient to cover the needs identified.

However, other resources for upgrading and maintaining equipment, machines and buildings in addition to curricula and learning materials could be provided through either international donors' grants and loans or locally from the general budget. Examples of recent development projects are:

- Local financed project for upgrading specific workshops equipment in VTC institutes (JD 637,000 about $ 895,000) (VTC, 2017).

[52] HTU homepage "https://www.htu.edu.jo/degreesoffered.html"

- Local financed project for the renovation of VTC buildings infrastructure in all governorates in Jordan (JD 350,000 about $ 490,000) (VTC, 2017).

Concerning curricula and teaching materials, its development is a permanent process administered by the programmes, curricula and e-learning directorate in VTC. In 2017, 113 training programmes (initial and continuing) and 43 teaching materials were prepared or updated (VTC, 2017). The implementation of e-learning project started in 2017 to be completed by 2018 as indicated by VTC annual report (2017). Parts of training units were developed through the project on hybrid auto mechanics and piloted with a group of trainers. However, the developed e-learning materials have not yet being used in the training process in VTC[53].

In MOE, in addition to the annual insufficient allocations for VE schools' buildings and equipment development, the following development projects for upgrading equipment and maintaining buildings are in place (ESC, 2017):

- Buildings maintenance and equipment development of Abdel Hameed Sharaf Industrial Vocational School (2 million JD).

- Vocational schools' equipment development project financed by the EU budget support project and ETVET Fund.

The National Centre for Curricula Development is responsible for the development of learning materials. With the support of the Korean International Cooperation Agency (KOICA) and the GIZ, curricula and learning materials for 6 VE specializations were developed.

In BAU, buildings renovation or expansion took place recently in several community colleges that included: Technology Engineering College, Irbid University College and Princess Alia University College. The EU budget support programme also included a project to develop the equipment in BAU/ CCs[54].

Concerning technical education study plans and programmes development in BAU, one of the measures in BAU strategic plan (2017-2021) stated: Developing new specialties according to LM needs and revising old programmes and study plans concerning curricula, number of studying hours and teaching methods with focus on practical and applied aspects". However, on the ground, BAU introduced new specialties in technical education (Examples: Water treatment, renewable energy, hybrid and electrical auto maintenance and manufacturing with computerized machines) and started implementing of new study plans focusing on skills and competencies in addition to knowledge (ESC, 2019).

D.2 Teachers and trainers

D.2.1 Composition of the workforce of VET teachers and trainers

TVET institutions do not apply common categories system and regulations for teachers and trainers. In VTC, there is only one level for trainers who deliver both theoretical and practical training. Other training process related to technical positions includes training officers and training coordinators. Both positions deal with supervisory roles. The training officer is responsible for supervising one or more workshops in his/her training institute.

[53] Meeting with programmes director
[54] Meeting with director of National Center for Training and Trainers Rehabilitation/ BAU

The training coordinator is responsible for the supervision and follows up training in different institutes and cover one or more occupation.

Trainers' career path in VTC was approved initially by the board of directors, years ago. It included identification of different levels of trainers (positions/ titles) with specific criteria for transferring from one level to another linked mainly with work experience, training attended and related achievements. However, no progress had been noticed for applying it since then.

In MOE and BAU, there are two categories of vocational/ technical teachers: Theoretical subjects' teachers who provide technical theory in class rooms and the workshop teacher/ instructor for delivering practical training. However, MOE teachers' ranks by law No 61 of 2002 is also applied to vocational teachers although its criteria and conditions for promotion between different levels are more related to the general academic education. The by law classified teachers in MOE into 3 ranks: Teacher, 1st grade teacher and expert teacher. Transfer from one rank to the next higher one requires achieving specific criteria for each rank. Based on the rank to be promoted to, criteria are as following:

- Educational background (minimum 1st university degree for the three ranks).
- Number of working years in teaching in public education institutions under MOE
- Successful completion of specific training course such as international computer driving license (ICDL), use of computer in education and training course in education/ specialty.
- Annual performance evaluation level of the teacher to be not less than good for the recent 2-3 years.
- Developing/ performing of 2 academic teaching/ education books, researches, creative works or inventions in his specialization that serves the education process

However, new developments in regard to trainers' classification and rankings at national level in Jordan as a new by law No 15 of 2020 "Identification of TVET trainers and supervisors selection, classification and ranks criteria" was issued recently. The by law classified TVET trainers into 8 categories and TVET supervisors into 4 with the possibility of adding more categories by the TVSD Council for both (trainers and supervisors). Regarding ranks, the new by law identified 4 ranks for trainers and 4 for supervisors, and also here with the possibility for adding more ranks by the council.

According to the above mentioned by law, TVSDC will be responsible for issuing TVET trainers and supervisors licenses. Also all TVET institutions trainers and supervisors are required to adapt their status according to the by law regulations within one year of its effective date.

Educational qualifications of teaching workforce in TVET range between less than secondary to first university degree or higher levels. It varies from one TVET provider to another according to the level of TVET programmes delivered. Therefore, the teaching workforce in VTC has, in general, lower educational qualifications compared with teachers working in MOE/ VE and BAU/ CCs.

Out of the total number of 676 teachers (trainers, training officers, and training coordinators) working in VTC 243 (36%) has a university degree, 273 (40%) community colleges diploma, and 160 (24%) a secondary or less than secondary qualification or certificate. Regarding gender balance, the number of female teachers is 166 representing 24.5% of the teachers in VTC (VTC, Annual report 2017).

The minimum qualification required to be recruited as technical theory teachers in MOE/ VE schools is university degree. For the practical /workshop teachers, an intermediate college diploma is required and, in some cases, those with practical work experience and secondary education background can be recruited. Approximately 1,600 qualified teachers are working in VE of which 691(43%) are females (ESC, 2017).

In BAU/ CCs, and according to the accreditation criteria of the Higher Education Accreditation Commission, teachers for technical theory in community colleges are required to have 1st university degree., and for workshop teachers/ trainers to have intermediate college diploma. The number of trainers/ workshop teachers/ lab supervisors working in BAU/ CCs is 1,215 (ESC, 2017).

According to those interviewed in the main TVET providers (VTC, MOE, and BAU/ CCs), the shortage of teachers and trainers is one of the key challenges faced by TVET institutions. One of the reasons for this shortage is the relatively high retirement percentage among the teaching force and difficulty in replacing retirees with young trainers/ teachers.

D.2.2 Entering the teaching profession in VET

As stated earlier, the preferred required qualification to be appointed as trainers in VTC is the intermediate college diploma, but in some vocational fields where such qualifications are not available, trainers with lower qualifications can be recruited provided that they have sufficient related work experience. In MOE and according to the Education law No 3 (1994) teachers of secondary education are required to have at least a Bachelor's degree and a one-year postgraduate diploma. However, practical/ workshop teachers may have an intermediate college diploma or work experience only. Regarding technical education in BAU community colleges, technical theory teachers are required to have Bachelor's degree as minimum requirement according to the accreditation criteria of the Accreditation and Quality Assurance Commission for Higher Education Institutions (AQACHEI) while workshops' trainers are required to have an intermediate college diploma.

Teachers and trainers in VTC and MOE as in all other public institution are appointed through the Civil Service Bureau (CSB). They usually have the required academic qualification but lack, in general, the practical experience as well as the professional pedagogical skills needed for teaching and training (NSHRD, 2016-2025).

For example, the following processes and standards are applied by CSB in recruiting new VTC trainers (GIZ, 2018a):

- On an annual basis, the numbers of required trainers in different specialisations are determined by VTC according to its identified needs.
- The identified needed number of trainers is studied by a committee formed by the civil service council with representatives from CSB, the general budget department and the Ministry of public sector development, and discussed with VTC representative/s for justification and approval of the requested numbers.

- Upon the Cabinet approval and issuance of the table of jobs formation that include vacancies/ jobs to be filled in the different public institutions, VTC identifies its requirements for recruiting the new trainers specifying their educational qualification and employment governorate.
- From its job applicants' data base, CSB selects at least 3 candidates based on specific criteria that include: graduation seniority, seniority in applying to CSB, grades in the university/ community college and the marks achieved in the technical theoretical test conducted by CSB. Marks allocated for CSB for the criteria count for 90% of the overall evaluation.
- The candidates nominated by CSB are sent for interviews by a committee at VTC. The evaluation made by VTC counts for 10% of the overall evaluation. However, it is possible for the VTC committee to reject all the candidates if they are not appropriate.
- No practical tests are applied, neither counts the previous training experience or a ToT training certificate in the selection process for new trainers.

For community colleges, teachers are recruited directly by BAU outside CSB.

According to international standards, an in-company trainer/ instructor is required to train apprentices/ trainees exclusively in the real work environment, which means that he/she is concentrating on the delivery of practice-oriented training mostly at the relevant work places.

In Jordan, in company trainers/ instructors may work as trainers on full-time or part time basis where they deliver training as additional tasks to their jobs in the company. Full-time in company trainers may be found only in large scale companies, while in small and medium sized companies, there are no full-time in-company instructors, but training tasks are part of the tasks covered by technicians, supervisors and engineers.

In-company trainer/ instructor is usually a technician already working in the company and transferred to work as a trainer. Therefore, such trainers/ instructors usually have the technical skills but lack the pedagogical skills required for effective delivery of training (GIZ, 2018a).

On the other hand, the ToT courses for vocational trainers and in company instructors developed by GIZ/ TWEED project in 2018 were approved by CAQA, and the VTC/ TDI was accredited as training provider for conducting such courses. As such, successful completion of in company instructor's training course will enable participants to become licensed in-company instructor. Indeed, adopting the concept of in company instructor particularly by companies and expanding of implemented courses for participants from industry will be positively reflected on the effectiveness and efficiency of apprenticeship and other work-based training in Jordan.

D.2.3 Employment status of teachers in VET

Teachers/ trainers in VTC and MOE are usually civil servants working on full-time employment basis. In some cases, teachers/ trainers can be hired for a certain period of time as part of a training project/ initiative or to cover shortage of required teaching staff in schools/ institutes on over time account either on full or part time basis.

Teacher's job in general is a socially respected job in Jordan. However, the relatively low salaries are negatively affecting living conditions of teachers/ trainers pushing them to look for jobs offering better working conditions and salaries. The relatively low salaries of TVET teachers/ trainers make it more difficult to attract and recruit higher calibre teachers/ trainers on one hand and retaining of employed ones on the other. Consequently, it leads, together with other factors, to shortages of teaching staff observed in the main TVET institutions[55]. However, the recent approval of the increase of salary for MOE teachers in October 2019 (35%-75%) is expected to improve employment conditions for this category of VE teachers.

Worth mentioning here is that the HRD strategy indicates that one of its desired outcomes related to TVET trainers is: "TVET teaching and training is a well-respected profession that attracts high calibre candidates".

Regarding teachers/ trainers in community colleges, they are usually full time BAU/ community colleges' employees, and in some cases part time ones are contracted for delivering specific technical education/ training tasks.

D.2.4 Quality of teachers and trainers in VET

The issue of quality of teachers and trainers and of continuing professional Development are of central importance to support enhancing the quality of the education and training system and is one of the strategic objectives of the NHRD Strategy (2016-2025). Vocational and technical education and training teachers and trainers possess the necessary academic qualification but lack, in general, the practical experience as well as the professional pedagogical skills needed for teaching and training. This is also, to some extent, true for practical/ workshops teachers/ trainers at technical level in BAU/ CCs.

TVET institutions, at various levels, try to compensate for the lack of practical and pedagogical skills through pre and in-service training courses conducted for teachers/ trainers. The TVSD Commission should also fulfil the role of regulatory body in this field. Through the support of the European Union (SESIP project) a large training and re-training of teaching and training staff was conducted for a total of **2293 trainers and teachers** respectively from VTC (560), MoE (1117) and BAU (616).

The curricula adopted for the ToT training and re-training, was based on newly accredited qualifications (by former CAQA for the VTC and MoE and by AQACHEI for BAU). The practical component of the training was carried out in enterprises and industries covering several economic sectors.

In VTC, the identification of training needs and training processes are conducted as per a structured TNA system (GIZ, 2018a):

- Newly appointed trainers join (100 training hours) at TDI to introduce them to the related laws and by-laws that govern their work as public civil service employees and to the pedagogical basics for the training/ learning process.
- Training needs (technical and pedagogical) are identified annually by TDI and the Quality Control Directorate using a special form that is distributed to be filled by the trainers and approved by their technical/ management references (training officers, institutes' managers and training directors) as required.

[55] Meetings with concerned representatives from TVET institutions

- The pedagogical training needs are aggregated by TDI and the relevant training courses are identified. Technical training needs are analysed by the quality control directorate, and the relevant training courses are designed accordingly.
- An annual training plan (technical and pedagogical) of the identified training courses is developed and implemented in TDI for the pedagogical training and in vocational training institutes for the technical training.

In MOE, teachers and trainers' training needs are identified by vocational schools annually and sent after being approved to the Managing Directorate of Supervisory and Educational Training responsible for training of all teachers in MOE. Accordingly, the directorate launches an open tender for both public and private sector institutes and companies for the provision of the required training.

The National Center for Trainers Training and Rehabilitation offers training opportunities to technical education teachers in the community colleges/ BAU. The National Centre for Trainers and Teachers was established by BAU to provide ToT for TVET trainers and teachers. The main focus of the training courses provided by the centre is on pedagogical and management aspects related to TVET (TPR, 2016-2017).

In addition to internally planned and organized training, teachers and trainers could also have other training opportunities abroad upon their availability.

Within the EU budget support, and according to one of the disbursement indicators, public training providers (MOE, VTC, and BAU) upgraded technical skills for a number of their teachers and trainers through training provided by the private sector during 2017.

However, professional development of TVET teachers and trainers still faces obstacles that negatively affect the achievement of planned results. Such obstacles include, but are not limited to:

- Shortage of teachers and trainers that hinders their participation in the development training courses due to unavailability of replacement to cover their teaching or training hours.
- Weak or absence of partnerships with the industrial sector to offer on the job training opportunities to periodically expose teachers and trainers to technology developments in the labour market as it would be required.
- Unavailability of clear incentives that link achieved professional developments with promotions.

D.2.5 Attracting and retaining teachers and trainers in VET

Some actions have been taken to address the identified problems since the last TPR 2016-2017, they include:

- The recently approved increase of teachers' salaries in MOE, which will include vocational education teachers.
- Getting an approval by VTC for hiring about 30 trainers in 2020 on contract basis that offer higher salaries than regular salaries. This is a step towards attracting trainers with the required qualification (particularly work experience), which can be repeated according to the needs.

- With the support of the GIZ/ TWEED project, new didactic modules for ToT courses were developed and accredited. They target vocational trainers and in company instructors focusing on practical professional competencies training methodology.
- Accreditation of VTC/ TDI for implementing the newly developed ToT courses and accordingly, the courses became part of training course offer.
- Implementation of 2 ToT pilots targeting vocational trainers, with participants from different TVET institutions and 1 pilot in company course for participants from companies.

On the other hand, NSHRD (2016-2025) also identifies some actions and targets that are meant to address challenges linked to teachers and trainers:

- TVET teaching and training is a well-respected profession that attracts high calibre candidates.
- TVET trainers are fully engaged with current industry practices and requirements and complete regular placements/ attachments in industry to update their knowledge and skills.
- Trainers receive comprehensive pre and in-service training.
- Trainers across all TVET provision have clear progression opportunities and are appropriately remunerated.

Accordingly, the strategy identified the following two projects for the achievement of the targets sought within the quality thematic area:

- Establishing standards and training requirements for TVET trainers and instructors.
- Accreditation and grading system for all TVET trainers.

However, limited development can be reported in this area, in particular:

- Teachers and trainers in VTC and MOE, with exceptions as indicated above, are still recruited through CSB based mainly on their academic education and not on practical skills and work experience.
- Unavailability of well identified comprehensive pre and in-service training plans.
- Lack of teachers and trainers' engagement with current industry practice through regular on the job placements.
- Shortage of teachers and trainers in the main TVET institutions.
- Modest salaries of teachers and trainers compared with their technician peers working in the private sector.
- Absence of an accreditation and grading system, and clear career path for all TVET teachers/ trainers. However, and as stated earlier, the recently approved by law No 15 of 2020 identified classification categories and ranks for TVET teachers and trainers but still need to be applied on the ground.

D.2.6 Steering, motivating and supporting professional development

As detailed in the answers of the previous questions, recent developments aiming at improving availability of qualified teachers were limited to the development, accreditation and implementation of new didactic modules for training of both vocational trainers and in company instructors.

Two public ToT institutes are providing professional development opportunities for the TVET workforce. The training and Development Institute (TDI) in VTC mandated to organise and implement ToT courses mainly for VTC trainers in pedagogical and technical areas. The training opportunities are also opened for TVET teachers/ trainers from public and private sectors providers. The other institute is the National Trainers Training Institute (NTTI) (the name changed recently to National Center for Training and Trainers Rehabilitation). It provides training opportunities for TVET teachers from BAU community colleges as well as from other TVET institutions in public and private sector upon request. In addition, there are other private sector training institutes/ companies providing training opportunities for TVET teachers/ trainers.

Fees/ costs of provided training opportunities for TVET institutions' teachers/ trainers are paid/ beared by their institutions.

Other professional development opportunities are available for TVET institutions' workforce abroad as part of TVET development projects financed by donors.

No specific requirement is in place for TVET teachers/ trainers to undergo professional developments. Some TVET institutions identify their teachers/ trainers' needs of upgrading training courses (pedagogical and practical skills) annually, and consequently develop a plan for implementing the requested training in cooperation with TOT institutes/ companies. So far, no or very rare cases of cooperation in upgrading of teachers'/ trainers' technical skills are taking place between TVET institutions and companies.

Before promulgation of by law No 20 of 2020, no grading system for TVET teachers/ trainers was in place that offers incentives for achieving professional development. The said by law with its adopted classification categories and ranks when fully applied is expected to motivate TVET teachers/ trainers towards achieving professional development on continuous basis.

D.2.7 Ensuring the quality of teachers in VET

Each of the main TVET institutions has its own quality assurance policies and measures related to assess teacher effectiveness/ ineffectiveness, these tools and methods may differ from one another.

In VTC, trainers' monitoring and evaluation processes are implemented at two levels: The first is internally by the training officer, and the second is externally by the training coordinator from the quality control directorate in VTC. While the first one is conducted on continuous basis as the training officer is working in the training institute itself, the second is conducted through regular planned visits to the trainers. Both the training officer and the training coordinator provide feedback orally and/ or in writing (using specific form for the coordinator) regarding the trainer's performance and recommendations for improvements which may include proposing him/her for upgrading training courses.

In MOE, vocational teachers in schools are monitored and evaluated through periodic visits by the educational facilitator from the related educational directorate in the area. Also here, the education facilitator provides feedback orally and/ or in writing regarding the vocational teacher's performance with recommendations for improvements which may include nominating him for upgrading courses[56].

The short coming of such quality assurance procedure is the absence of any role for the department of vocational education and production.

In BAU/ community colleges, evaluation of teachers is conducted by students at the end of each semester using special forms. It isn't sure how the results of the evaluation are used in addressing the ineffectiveness of teachers' performance[57].

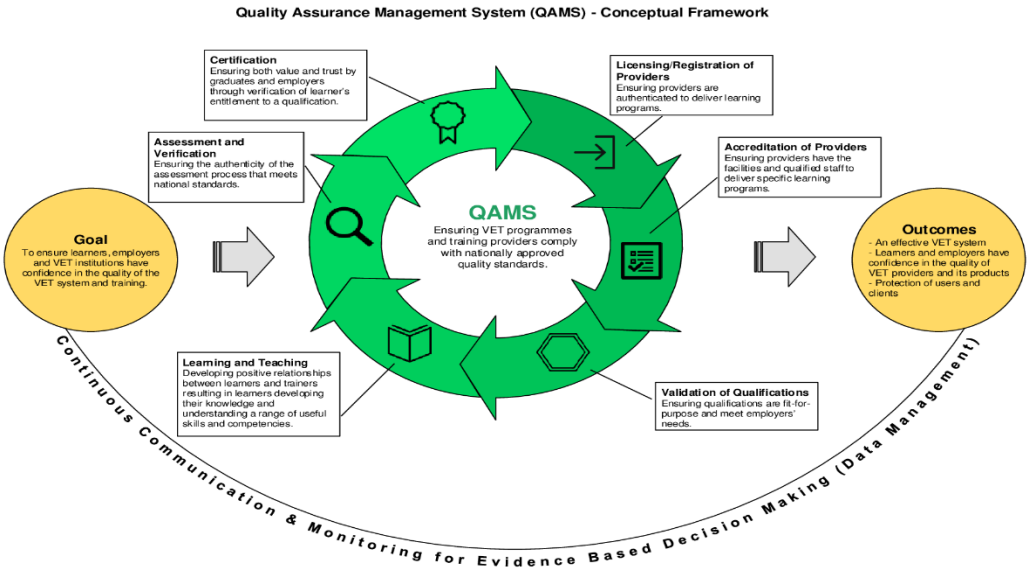
D.3: Quality and quality assurance

Given the priority assigned to quality and quality assurance in the NSHRD 2016-2025, as one the key pillars of the reform, the European Union budget support programme and the complementary technical assistance invested much on this aspect in an effort to enhance quality and quality assurance in the TVET sector. A specific working group was set up, covering: quality assurance, accreditation, NQF, Competence assessment including recognition of prior learning and involving the private sector in setting standards and qualifications.

With regard to Quality Assurance, and as illustrated in the following paragraphs, there is no common framework for guidance or reference in QA, despite this issue gains more and more attention. Through the support of the technical assistance of the EU SESIP project, a draft policy document has been developed with the aim to achieve a common quality assurance management systems (QAMS).

It is developed following agreed QA principles:

Source: SESIP technical assistance report (during SESIP closing conference – 17th February 2020)



[56] Meeting with director of education and production
[57] Meeting with director of National Center for Training and Trainers Rehabilitation/ BAU

D.3.1 Quality and relevance of education and training content in VET

The NSHRD states very clearly that “TVET provision is considered outdated, not ‘applied’ enough, and not providing the skills required by Jordanian employers. It does not place sufficient emphasis on preparing students for employment in a 21st century knowledge economy, which involves going beyond providing up-to-date technical competence, and also develops personal qualities of enterprise, networking and creativity. In terms of practical experience, there are not enough opportunities for applied learning, with apprenticeships and practical training mainly limited to the VTCs and not part of an overall approved progression framework”.

Regarding employers’ satisfaction, employers surveyed as part of the National Employment Strategy (NES) 2011-2020, indicated that less than half of employers surveyed were happy with the skill level of new hires. (NSHRD, 2016-2025).

For TVET learners’ expectations, feedback available is only through tracer studies conducted by VTC and MOE for their trainees/ students. According to the VTC tracer studies for its graduates of 2015, in the middle and northern regions, graduates’ satisfaction rate with the training received was 91.1% and 98.6% respectively. The studies also indicated that employers were satisfied with graduates’ skills and attitudes (85.4% in the middle region and 91.9% in the northern region).

In MOE, the latest graduates’ tracer studies conducted during 2016-2018 covered industry, hotels, and agriculture branches. Worth mentioning here that the studies conducted were limited to already employed students who graduated in the last 1-5 years before the study. Available details related to the hotels branch graduates’ tracer study showed: Graduates satisfaction of different assessment criteria with the vocational education received ranged between 60-80%, and regarding employers’ satisfactions of graduates’ performance, it ranged for different assessment criteria between 50-80%.

As it can be noticed, results of employers satisfaction with TVET graduates according to tracer studies conducted by VTC and MOE for their graduates contradicts the results of the survey conducted as part of NES.

Concerning TVET authorities’ requirements, actually there are so far no common and clear requirements, indicators, standards that can be referred to in judging if TVET meet such requirements.

No details are available on the expectations of employers and TVET learners vis-à-vis the different types of programme and providers, due to limited tracer studies conducted for TVET providers’ graduates. However, the above mentioned NES survey indicated that employers cannot differentiate between levels of programmes delivered by different TVET institutions, and only 15% of Jordanian employers currently hire TVET trained workers.

On the other hand, employers’ dissatisfaction is not limited to the TVET sector but also to the Higher education sector graduates. And regarding students’ opinions, a recent survey by the University of Jordan’s (UJ) Centre for Strategic Studies found that around 45% of a sample of 25,662 UJ students believe the curricula at Jordanian universities depend on ‘spoon-feeding’, while nearly 53% think the textbooks are ‘not enough’ to prepare students for the world outside campus” (NSHRD, 2016-2025).

Success rate in the national exams for vocational education (Tawjihi) was 41.4% in the first cycle of 2018/ 2019, and for the technical education (Comprehensive exam), it was

67.2% in the summer cycle. In VTC, success rate in the final occupational level test conducted by VTC is usually about 95%.

Concerning TVET graduates' employability, please refer to C.3.1 (Employability of VET graduates).

D.3.2 Defining the quality of learning outcomes

There is no common, formal definition of quality in TVET in Jordan, although CAQA's by law number 35 of 2012 included a definition for quality control stating: ***To ensure that training programmes' outcomes are matching TVET standards***.

The concept of quality comprises internal and external quality. While the internal quality is related to the training inputs and process, the external quality is related to the relevance of the training programmes' outcomes to the labour market needs. Traditional quality assurance in Jordan used to focus on the internal side of the TVET quality i.e training inputs and process, and the recently adopted NQF drives towards more focus on the quality of outcomes as well.

According to ETVET council law No 46 of 2008, CAQA is responsible for developing TVET standards for quality control purposes. Occupational standards used to be developed by sector skills committees established by CAQA, made up of skilled practitioners nominated by Sector Teams for each specific occupation. Occupational Standards identify knowledge, skills and employment competences required for the specific occupation. Each qualification registered on the Technical and Vocational Qualification Framework (TVQF) is required to be based on at least one occupation's standards to ensure relevance to labour market demand.

Problems that persisted for decades concerning quality assurance in TVET include:

- Lack of systematic process and measures for identifying LM training needs based on effective involvement of private sector.
- Insufficient legislations required for implementing common concept with specific measures of quality assurance covering all TVET sector institutions. Although CAQA was mandated with accreditation and quality control of TVET sector, its main influence was confined to private and public VET institutes governed by MOL. In addition, CAQA was lacking the required capacity to practice its role regarding accreditation and quality control.
- More focus on internal quality assurance elements such as training inputs and process vis-à-vis no/ less interest in training programmes' outcomes relevancy to the labour market needs.

However, the recent developments in regard to establishment of TVSDC with more involvement of private sector in TVET as well as adoption of NQF are expected to deal up with above mentioned problems.

D.3.3 Quality assurance processes in VET

As described by NSHRD "Quality assurance of TVET in Jordan is highly fragmented, with separate quality assurance processes and bodies in each of the three Ministries involved with TVET provision. Each institution has its own mechanisms for data collection, monitoring, and evaluation. The influence of CAQA was limited for the

accreditation and qualification of TVET providers governed by the MOL. Under CAQA authority, a series of sector-based occupational standards were developed by technical sector skills committees and reviewed by sector employers' teams. Developed occupational standards are used as a basis for registration of qualifications on TVQF, development of curricula, and accreditation of training programmes.

The recently established Technical and Vocational Skills Development Commission (TVSDC) is expected to impose more engagement of private sector in the TVET quality assurance process. According to the technical and vocational skills development law No (9) of 2019, governing council of TVSDC is headed by the Minister of Labour with majority of members (8 out of 15) "including commission's chairman" are private sector's representatives. Therefore, private sector is expected to have an effective role in quality assurance of TVET as the council's tasks and responsibilities include among others: i) the approval of the commission's strategies, polices, plans for TVET sector, ii) approval of sectors' standards, and iii) forming of sector skills councils. This is in addition to TVSD Commission's tasks and responsibilities related to quality assurance that includes: i) developing occupational standards, accrediting, licensing and supervising training providers, ii) registering qualifications on the NQF, and iii) identifying TVET teachers and trainers selection criteria, and classifying them.

The Accreditation and Quality Assurance Commission for Higher Education Institutions (AQACHEI) is mandated with developing accreditation and quality control criteria and accrediting higher education institutions and their programmes. This covers technical education programmes of no less than one-year duration which is part of the TVET system.

On the other hand, according to the National Qualifications Framework by law No. 9 of 2019, TVET qualifications awarding institutions are required to apply their requests for institutional registrations to CAQA (now part of the TVSD Commission). In addition, and in order to place their awarded qualifications in the framework, TVET institutions are required to apply to AQACHEI through CAQA.

As mentioned above, the EU SESIP technical assistance has closely worked with CAQA to enhance the process of registering qualifications to the TVQF and this has resulted in a substantial progress in the number of registered qualifications from 1 in 2014 to 32 in 2018.

D.3.4 Creating and updating VET content

The process of designing and updating TVET programmes varies from one institution to another. In VTC, the *programmes, tests and instructional resources directorate* is responsible for the design and updating of training programmes. According to the methodology adopted by the directorate, new programmes to be designed and those to be updated are identified based upon feedback and recommendations from the quality assurance directorate and regional training directorates. However, for those training programmes to be updated, priority is given to the older, outdated ones.

Curricula for training programmes are developed based on the DACUM[58] process, Arab Standard Classification of Occupations (ASCO, 2008), or occupational standards developed by CAQA. Learning materials are developed mainly as training units; each one covers a task or competency and includes technical knowledge, practical exercises

[58] DACUM: An acronym for Developing a Curriculum "process that incorporates the use of a focus group to identify competencies for any occupation/ job"

and assessment tests. A committee within VTC is responsible for the evaluation of the developed curricula and learning materials. It is worth mentioning that training programmes (curricula and learning materials) are developed, to some extent, with the participation of professionals and technicians from the private sector[59].

In MOE, curricula and learning materials development for vocational education programmes used to be the responsibility of the *Curricula and Text books Management Directorate*. Curricula and learning materials for different branches of the secondary vocational education stream used to be developed on a regular basis every 5 to 10 years. Curricula development takes place through technical committees consisting of subject experts mostly from TVET institutions and universities. The developed curricula and learning materials (theoretical text book and practice manual) are required to be approved by MOE education council.

After the establishment of the National Center of Curricula, curricula and learning materials development responsibility was transferred to the center but still in coordination with Curricula and Text books Management Directorate. Accordingly, the development process of vocational education curricula and learning materials takes place currently through open tenders (to which private or public entities can participate). The developed curricula and learning materials still need to be approved by the MOE education council. With support from Korean International Cooperation Agency (KOICA) and GIZ, 6 training programmes for 6 different specializations were recently developed[60].

The EU SESIP technical assistance also supported the development of specific processes for curriculum development. the processes foresee the involvement of the private sector from the start.

In response to the HRDS recommendation to expand technical programmes, BAU started recently a developing process for study plans and programmes in community colleges. Applying the newly developed framework for study plans, programmes, and specializations was planned to start in first semester of 2017/ 2018. However, there is no adopted mechanism for regular development of study plans and programmes in BAU/ community colleges as developments usually are initiated by the concerned technical staff and occasionally based on employers' notes and feedback. No specific text book needs to be developed as the related subject teacher can identify any text book or reference that covers the accredited curricula.

According to the recently approved NQF, registering TVET institutions as qualifications providers require that qualifications are expressed in learning outcomes to comply with the defined level descriptors. Therefore, it is expected that in the future TVET qualifications will have to shift towards learning-outcomes-based content.

D.3.5 EU key competences

Two initial training programmes in VTC (skilled and craftsman levels training programmes) include training on life, entrepreneurship, and self-employment skills (effective communication, career path exploring, self-marketing, start and manage small businesses, e-services, and English terminology linked to the specialisation) for 75 actual training hours (VTC, 2019).

[59] Meeting with programmes, curricula and tests director.
[60] Meeting with vocational education and production general director

In MOE secondary vocational education, all branches' programmes include general education subjects (Arabic language, English language, history, religion, and educational counselling) for 9 hours/ week, 2 selective topics (mathematics, Physics, biology science, chemistry, geography, and French language) for 2-8 hours/ week according to the vocational branch and the higher education path, graduate wants to follow (university or community college)[61]. As such, vocational education doesn't include training on entrepreneurship and soft skills.

In BAU community colleges, the study plan for the intermediate college diploma includes: National education, Islamic education, positive citizenship and life skills, mathematics, physics, Arabic language, English language, computer skills, and entrepreneurship skills[62].

For the technician level, the study plan includes: positive citizenship and life skills, mathematics, physics, and English language.

D.3.6 Policies to strengthen quality assurance

Recent approval of the NQF and its by law is expected to support the development of an integrated and unified reference for the quality of learning outcomes and quality assurance for all TVET providers. Qualifications are required to be based on occupational standards developed by sector skill councils led by the private sector. Positioning and registration of qualification on the NQF at a specific level requires meeting its descriptors (knowledge, skills and competencies). Accordingly, TVET programmes that lead to a registered qualification is supposed to be more relevant to labour market needs.

On the other hand, sector skills councils as defined by the new TVSD law are national consultancy councils of experts' members representing employers, employees, and the government in specific sector. It aims at proposing general policies for the sector, identifying skills and priority training needs according to labour market requirements. Such councils which will be formed by the TVSD Council are expected also to improve the quality and relevance of the TVET outputs.

Some sector skills councils have already been established at the time of the ETVET council with the support of international organizations (GIZ, ILO and EBRD) through their projects in Jordan. The number of established Sector Skills Councils (or in the process of being established) is seven in the following sectors: water and energy, ICT, Logistics, tourism, garments, furniture and chemicals (Rawashdeh/ UNESCO, 2019).

Summary and analytical conclusions

Teaching and learning in TVET institutions are still mostly dominated by traditional methods using lecturing for theoretical lessons and demonstration/ imitation for practical training. All TVET programmes include both theoretical and practical training but at different ratios. Apprenticeship/ dual training scheme is mainly applied in VTC. Also, other TVET providers apply some kind of work-based training in their programmes.

The TVET sector has been suffering of outdated curricula and learning materials. Facilities, including buildings and equipment, particularly in old institutes, schools, colleges are not in good shape and need to be renovated and upgraded on a regular

[61] Study plan for the comprehensive secondary vocational education 2018/ 2019
[62]https://www.bau.edu.jo/bauar/Colleges/Huson/Plans.aspx?colno=19&specno=264&degno=2&planno=172

basis to cope with changing of the labour market, in terms – but not only – of technology development. Curriculum development and validation processes are being revised and through the support of the EU SESIP project this process has been piloted and tested for newly accredited qualifications. The process foresees the involvement of the private sector including for the validation of equipment, learning material.

The key factors that contribute to the above mentioned teaching and learning environment policy challenges include: lack of training opportunities for upgrading trainers/ teachers' skills on using advanced teaching/ learning methods, shortage of learning aids and resources, obstacles that face expanding work based training schemes, weak participation of the private sector in identifying training needs and curricula development process, and shortage of financial resources required for continuous maintenance and upgrading of facilities as required.

Actions put in place to address those challenges at national level include: the establishment of sector skills councils (please see D.3.6) and the accreditation of two pedagogical, didactic training courses for licensed vocational trainers and in company instructors (please see D.1.3).

At institutional level and in line with NSHRD objective "to expand apprenticeship training scheme", BAU/ Al-Salt Technical College and Al Hussein Technical University started recently to apply apprenticeship/ dual training system in their technical/ intermediate university programmes. About the possible solutions related to challenges linked to curriculum development, learning materials, buildings, and equipment, partial and incomplete solutions have been put in place, in the absence of a comprehensive and agreed plan at national and institutional levels.

Regarding TVET teachers and trainers, the key challenges include: lack of teachers and trainers practical work skills and experience, insufficient pedagogical skills for both vocational teachers and trainers and in company instructors, shortage of teachers and trainers in TVET institutions, and weak interest in self-development by teachers and trainers.

The main factors contributing to those challenges include: CSB recruitment regulations, based on educational certificates; unavailability of teachers and trainers well-designed comprehensive pre and in service training system with regular placement in industry; absence of an accreditation and grading system for TVET teachers and trainers and in-company instructors; relatively low salaries for teachers and trainers in TVET; weak follow up and control mechanism on teachers and trainers performance aiming at providing feedback, comments and advice for improvement, and absence of incentives linked with self-professional developments for teachers and trainers.

No agreed upon solutions to the above mentioned challenges as a part of an official reform package are under implementation so far. However, measures were taken by individual institutions to partially deal with some of those challenges. Examples of such measures include: Upgrading of TVET teachers/ trainers practical skills in cooperation with private sector within the EU budget support programme, development of 2 new training courses for upgrading vocational trainers and in-company instructors pedagogical competencies, and conducting 3 pilot TOT courses for participants from TVET institutions and private sector, approving of VTC request for recruiting 30 trainers through comprehensive contracts that offer higher salaries which enable attracting higher quality trainers, hiring of tentative trainers on overtime account to compensate for trainers shortage, and the recent increase on MOE teachers' salaries starting from the

beginning of next year which will include VE teachers/ trainers that making teaching profession somewhat more attractive..

On the other hand, the establishment of TVSD commission with its tasks related to "trainers' selection standards, classification, grading, and upgrading their skills and capabilities" is expected to provide solutions for some of challenges mentioned above.

In regard to quality and quality assurance in TVET, the main challenge is related to weak relevancy of TVET outcomes to labour market needs. Factors contribute to this challenge include: TVET governance fragmentation and absence of a sector leading institution that resulted in weak and fragmented quality and quality assurance system, weak or absence of effective mechanisms for continuous measurement of TVET programmes outcomes relevancy to labour market needs, insufficient involvement of employers in TVET programmes design, implementation and evaluation, and unavailability of NQF to ensure quality provision of TVET programmes.

Recent TVET reform developments related to the issuance of TVSD law and NQF by law are expected to provide solutions for the challenge of weak relevancy of TVET outcomes to labour market needs. TVSD Commission and its governance council (with members majority coming from private sector) will play a leading role in TVET sector with authorities of accrediting, licensing, supervising, and evaluating TVET providers according to specific standards. On the other hand, NQF will provide unified referenced descriptors (knowledge, skills, and competencies) for the qualification levels that each TVET programme's outcomes need to be built upon in order to be registered and accommodated/ placed on the NQF.

So far, the TVSD Council is already established, and some of required by laws were issued, although more are expected to be prepared and issued. Operational instructions are to be issued by the TVDC as well as by ACQACHI for starting the implementation of the NQF.

Suggested recommendations for addressing internal efficiency and operation of TVET challenges:

- Adopt the concept of certified in-company instructor to improve work based training effectiveness.
- Develop strategic long term plans for maintaining/ upgrading TVET institutions facilities (buildings, equipment) using different financial resources (general budget, international support projects, and TVET Fund).
- Develop partnerships with private sector aiming at joint investing in training institutes/ workshops/ facilities.
- Expand apprenticeship and other work based training schemes to other TVET types/ programmes.
- Develop pre and in service training scheme linked with grading and promotion system for TVET teachers/ trainers.
- Conduct regular attachment of TVET teachers/ trainers in labour market companies to cope with latest technical developments.
- Adopt a comprehensive system for quality and quality assurance applied by all TVET providers under follow up and supervision of TVSD Commission.
- Implement tracer studies conducted by specialized body under supervision of TVSD Commission for TVET institutions graduates on regular basis.

BUILDING BLOCK E: GOVERNANCE AND FINANCING OF VET

E.1: Institutional arrangements

E.1.1 Effectiveness of institutional and governance arrangements

Chronic fragmentation that characterized TVET sector governance persisted despite the establishment of the ETVET council to bring cohesion to the sector. Responsibilities for TVET policies and provision rest with multiple Ministries and different strategic plans for the main TVET providers (VTC, MOE/ VE and BAU/ CCs).

However, the National Employment Strategy states: 'The challenge is not so much the diversity of the providers, but rather the poor state of governance of the sector'. Therefore, one of the NSHRD (2016-2025) projects was "creating a new employer-led public-private mechanism that is empowered to act as a single coordinating body for the TVET sector".

On the other hand, the shortcoming of the highly centralized management style in different TVET institutions is still a governance obstacle facing development of effectiveness training provision at local level. Limited authority is currently delegated to local TVET institutes in technical and financial issues such as signing partnership agreements with private sector, implementing new training courses, purchasing materials… etc. Actually NSHRD (2016-2025) included activities for capacity building for VTC, vocational school and community college management and key staff as well as decentralising the functioning of the TVET institutions to have greater autonomy.

The recently approved Technical and Vocational Skills Development law is expected to improve TVET sector governance at national level through (TVSDC) which as independent institution will be acting as a leading and coordinating body for TVET sector. Actually, participation of main TVET institutions related ministers (MOL minister/ head of the council, MOE and MOHESR ministers/ members) in the governing council of TVSDC is expected to facilitate cooperation and coordination between those institutions at policy and provision level. Also, with majority of the council's members are private sector's representatives (8 out of 15 members-including council's chairman) more effective role for the private sector in TVET governance.

E.1.2 Accountability, leadership and control

TVET sector lacks unified strong and effective leadership at national level due to governance fragmentation and the un-success of the ETVET council in achieving much in regard to policy coordination among different TVET providers. Actually, each TVET institution has its own mechanisms for accountability, leadership and control.

No cohesion accountability system is in place in any of the different TVET institutions, neither to external stakeholders nor internally within the same institution. Main factor affecting the accountability issue particularly to external stakeholders is the public funding allocations. As allocations aren't based on results or outcomes, but on historical spending trends, it didn't contribute to improving accountability. Also, shortage of regular and reliable studies and data related to TVET institutions graduates and their relevance to labour market needs negatively affect developing systematic accountability mechanism.

On the other hand, the centralised nature of the system in TVET institutions reduced local accountability. Due to lack of autonomy, key issues like curricula, financial and personnel management are centrally managed and consequently local public providers aren't held accountable for.

Accountability is also affected by the quality control mechanisms applied in each institutions which vary from one to another. In VTC, the quality control directorates' coordinators follow and report on the quality of training process through regular visits to vocational training institutes. In MOE, vocational education supervisors/ facilitators in each educational directorate are responsible for following up and reporting on the training process in vocational schools. In BAU/ CCs, no technical supervisory/ follow up visits' mechanism is in place, but students are requested to evaluate their teachers/ trainers performance at the end of each semester.

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, but its main influence has been confined to the areas of TVET governed by the MoL. Vocational schools and BAU technical colleges remain subject to the different laws, regulations and standards applied by their respective Ministries (the MoE and the Ministry of Higher Education and Scientific Research [MoHESR]) (NSHRD, 2016-2025).

E.1.3 Governance reforms

Yes, establishment of the Technical and Vocational Skills Development Commission (TVSDC) according to the recently approved law number 9 of 2019. The commission is expected to improve the institutional and governance arrangements in TVET particularly through its mandated tasks of:

- Accrediting and licensing of TVET providers as well as organizing their works, evaluating their performance, and supervising provided TVET programmes including: Vocational training/ apprenticeship, vocational education, technical education, continuous training, and any other developed non-degree programmes.
- Approval of TVET programmes' budgets according to the criteria approved by the TVSD council.
- Developing occupational criteria.
- Registering of qualifications on the national qualification framework.
- Institutionalizing partnerships with private sector to implement programmes.

The technical and vocational skills council is also expected to play an active role in the governance of TVET particularly through its authorities of:

- Approving sectors' development strategies, policies, and plans developed by MOL.
- Proposing sector's related laws and by laws.
- Coordinating with other educational, economic, social and human resources councils.
- Forming sectors skills councils.

However, it is still early to judge these governance reforms as some of the related by laws and regulations not developed and the commission isn't fully operational yet.

E.2 Involvement of non-state actors

E.2.1 Distribution of responsibilities between state and non-state actors in VET

At national level, non-state actors were underrepresented in ETVET Council (7 out of 15 and 4 of them are appointed by the minister), and accordingly their involvement in the TVET governance was ineffective. However, this was improved recently according to the TVSD law No 9 of 2019. As the number of private sector/ employers in TVSD council is 8 (6 representing key economic sectors and 2 private sector TVET specialists appointed by the minister) out of 14, it is expected to enable them as a majority of playing a key role in planning the sector's strategies and policies.

On the other hand, establishment of the sector skills councils became part of the TVSD council mandated responsibilities. Actually, 7 SSCs are already established or under establishment with support from international organizations' projects in Jordan (GIZ, ILO and EBRD). Established councils are private sector led and aim mainly at proposing the main policy, identifying skills needs and developing occupational standards for TVET in the targeted sector (Rawashdeh/ UNESCO, 2019).

At institutional level, non-state actors are represented in the governing bodies of VTC and NET. In VTC, five members out of the 11 VTC Board of Directors members i.e. about 45% are representing private sector and civil society institutions (Rawashdeh/ UNESCO, 2019). In NET, 80% of its Board of Directors' members are from private sector (ESC, 2018).

At training programmes design and implementation level, private sector's involvement is through their cooperation in the DACUM process for developing training curricula and in conducting of the work based training. This kind of cooperation is mainly observed in the apprenticeship training programmes in VTC as well as in in NET. Agreements are usually signed between TVET providers and employers (large scale companies) for implementing apprenticeship/ work based training.

In regard to non-state actors' role in establishing and operating TVET institutions, there are 15 private sector and 2 UNRWA community colleges working under technical supervision of BAU (ESC, 2018). In addition, by 2019, CAQA had licensed 268 centers for vocational training established by the private sector[63].

Regarding contribution of non-state actors in financing support of TVET sector, it is limited to what is paid by companies for the TVET Fund as % of their foreign workers permits. However, some non-state actors' institutions/ companies provides in kind support for TVET providers. Cooperation agreements are signed between two or more parties from state and non-state actors for cooperation in implementing training/ employment initiatives/ projects. Following are examples of such agreements (Rawashdeh/ UNESCO, 2019):

- Agreement between VTC and Zain Communication Company for training on cellular phones maintenance. VTC provided a workshop in the Jordan-Korean vocational training institute in Zarqa. The company after renovating and equipping the workshop is delivering the maintenance training courses for enrolled participants.

[63] CAQA statistics

- Agreement between VTC and Jordanian Association of Pharmaceutical Manufacturing (JAPM) for the establishment and management of a Pharmaceutical Center of Excellence. According to the agreement, JAPM involvement included developing related training curricula, management of the centre, and provision of work-based training and employment opportunities for trainees and graduates available in its members companies. The establishment of Pharmaceutical Center of Excellence was supported also by the EU financed project "Technical Assistance of the Programme in Support to the Employment and TVET Reform", mainly in developing curricula and text books, and by ETVET fund in financing center's required equipment and key staff salaries.
- Memorandum of understanding signed in 2017 between VTC and Jordan Chamber of Industry that enable the chamber of operating and management of 4 VTC vocational training workshops/sites in the areas of printing, chemical industries, wood working/furniture and leather works. The signed MOU is not activated so far due to financial constraints. However, the chamber with support from GIZ project in Jordan is in the process of developing curricula for wood working programme to start a pilot training that can be used as a model to encourage chamber's members of providing required financial support if successful.
- Memorandum of understanding signed between BAU / Al Husun College with Consolidated Contractors Company and the Morganti Group Inc. (CCC/ MORGANTI) and the USAID Jordan Economic Development Programme (SABEQ). According to the MOU, a training programme titled pipe supervisor was started in 2009 and still operated. Al Husun College provided training space, teachers/ trainers, and computer and English labs for employability skills training. The CCC/ Morganti companies provided training equipment, curricula and learning materials, and instructors. The USAID/SABEQ prepared the MOU, organized regular meetings between partners, and monitored and evaluated progress.

In addition, BAU has already about 25 agreements with private sectors. Most of these agreements aim at providing on job training opportunities for the diploma community colleges students.

Regarding MOE/ vocational education, cooperation with private sector is very limited since both theoretical and practical training is implemented within the school's premises, and even the summer training for the vocational students is implemented mainly in vocational schools.

E.2.2 Policies in support of participation of non-state actors

Policies concerning participation of non-state actors/ private sector in TVET sector were highlighted in the related development national plans such as employment strategy (2011 -2020), E-TVET strategy (2014 – 2020) and the national human resources development strategy (2016 – 2025). Those national strategies recognized the importance of and emphasized the private sector role in TVET development. It particularly, directed towards more involvement and partnership with the private sector in

governance, finance and implementation of TVET in Jordan (Rawashdeh/ UNESCO, 2019).

Recent developments related to TVET sector regarding the technical and vocational skills development law and approval of the NQF are expected to foster private sector role and participation in TVET governance, development of strategies and policies, and in the recognition of pre skills and experiences.

On the other hand, the current in place policies aiming at mobilising the participation of non-state actors in TVET include:

- Establishing of sector skills councils led by the private sector and aiming at identifying sector's training needs and developing occupational standards.
- Signing agreements between TVET institutions and private sector for cooperation/ partnership in implementing training, developing curricula and learning materials, providing of equipment, management of the training process/ facilities …etc.
- Using of DACUM methodology in developing curricula mainly by VTC with active participation of practitioners from private sector.
- Accreditation of private sector training centers and the provided training programmes by CAQA.
- Extending application of apprenticeship/ work based training methods to the technician (community college diploma) level programmes in BAU and Al Hussein Technical University.

However, although some good steps have already been taken foreword recently in regard to mobilizing participation of non-state actors in TVET, but still more to be done to achieve an effective role and participation. This includes but not limited to: Development of related legislations, providing incentives for promoting private sector participation in TVET, capacity building of employers' associations to participate in TVET, and applying decentralization in TVET institutions management to enable local institutes of establishing partnerships with private sector.

E.3: VET budget

E.3.1 Expenditure planning, VET budget formation and execution

Initial estimation of expenditures is based on the needs of each local institute/ school/ college within the TVET institution. Estimated expenditures usually cover salaries/ wages, training materials, equipment (machines, tools, and vehicles), renovation and maintenance, and other operational costs (electricity, water, internet …etc.). Public budget is developed for each institution separately and not at national level for all public TVET providers. Also, each institution's total budget has to be similar to previous years with limited variations.

Upon specialties/ sections' needs, each institute/ school/ college provides its annual estimated expenditures using specific formats to the concerned technical directorate/ department in the related institution (VTC, MOE, BAU, etc.). Estimated expenditures are technically reviewed and discussed before being initially approved/ modified. Then, expenditures are aggregated together for the training institutes/ vocational schools/ community colleges. In VTC and MOE, estimated expenditures of vocational training institutes/ schools are included in VTC/ MOE proposed annual budget and provided to

the general budget department for further discussion and approval before being issued as part of the governmental institutions budget law/ general budget law through legal channels. Usually, the requested budgets are approved considering previous years budgets and the availability of financial resources. Consequently, budgets are subjected to cuts that reflected on the allocations for the estimated expenditures for different items. In BAU, the proposed budget for community colleges are discussed internally in BAU, and in light of available financial resources, it either approved or reduced accordingly.

Monitoring of execution of the annual budget is mainly the financial department responsibility in each of TVET institutions. Allocations should be spent before December of each year, otherwise, it will be returned to the treasury and not re circled to the next year. Transferring allocations from specific articles to others in the budget are possible according to specific conditions and regulations.

The main shortcoming in the process described is that the budget preparation and its approval aren't linked with results/ outcomes. Hence, no appropriate criteria are in place to enable applying accountability as an essential tool for improving performance.

E.3.2 Policies to improve expenditure planning and budgeting in VET

NSHRD (2016-2025), indicated that currently applied "not results based public funding allocations to TVET providers" can perpetuate poor performance. The strategy identified the project titled "Enforce/facilitate the use of data to inform policy and decisions" in the accountability strategic area that included among others an objective "track and monitor spending efficiency of providers (e.g. cost per graduate; utilisation rates of TVET providers' space and resources etc.)".

However, the said project hasn't been implemented yet, and allocation of funding for the public TVET providers are still as described above.

E.4: Mobilisation of resources for VET

E.4.1 Sources and mechanisms of funding for VET

Public budget is still the main source of funding for VTC and MOE. Revenues generated by VTC/ VE-MOE institutes/ schools own activities as well as from trainees' fees in VTC case are currently transferred to MOF. However, revenues generated are very modest, for example, it ranges between 750-900 thousand JD in VTC forming about 6-7% of its annual budget only[64].

For BAU/ community colleges, main funding resource is still coming from BAU (students' fees which was increased recently for intermediate college programmes) as well as additional finance from public budget through MOHESR.

ETVET Fund is another possible source of funding for financing specific projects/ initiatives proposed by each TVET institutions. However, TVET institutions which benefited the most from the Fund were NET in the first place and then VTC. According to NSHRD (2016-2025) 44.8%, 24.3%, 12.7%, and 18.2% of ETVET allocations during the period 2005-2015 were for NET, MOL, VTC, and others respectively.

[64] Meeting with financial director in VTC

External donors finance development projects in TVET sector targeting one or more of TVET institutions. However, this source isn't continuously available on regular basis around the years and for all TVET institutions.

Contribution share of each mentioned funding sources of TVET budget vary from one institution to another and from one year to another.

Private sector contribution in financing TVET through a tax levy of 1% on private enterprise profits was eliminated by the Tax Law of 2009. Therefore, private sector contribution to TVET is currently limited to enterprises that pay fees for their foreign workers' permits which partially used for financing ETVET Fund.

However, some of the private enterprises contribution is represented in providing on job training opportunities for trainees/ students in apprenticeship and other work based training programmes. Also, some enterprises provide in kind support such as training equipment and materials and technical staff for training.

Problems in funding TVET include: Budgets are mostly annual based and not based on strategic plans for several years, insufficiency of allocated resources for the development issues but barely for covering salaries and basic operational costs, and lack of financial management authorities delegated to the TVET providers at local levels that hinder both efficiency and development.

E.4.2 Diversification and mobilisation of funding for VET

The strategic objective in the NSHRD (2016-2025) TVET4: Innovation stated "Innovate funding and provision in the sector through transforming the E-TVET Fund, PPPs, and expanding innovative modes of delivery". Among the identified projects for achieving sought outcomes were: Establish a Private Sector-led Skills Development Fund project that depends on its sources on % of foreign workers permits, direct allocation from MOF, and reintroduction of enterprises training levy, and expand apprenticeship programmes project.

So far, the new TVSD law No 9 of 2019 included the establishment of a fund called "skills development and TVET activities supporting fund" financed from the same sources used to be for the ETVET Fund, i.e % of foreign workers permits, direct allocation from MOF, and other donations approved by the cabinet. Therefore, the training levy on enterprises was not reintroduced as recommended by the strategy.

Regarding expanding apprenticeship training scheme, BAU / Salt Technical College and Al Hussein Technical University introduced recently the apprenticeship training scheme in the 2-3 years intermediate college diploma programmes.

E.5: Allocation and use of resources in VET

E.5.1 Patterns of resource allocation

Resources for public TVET providers are allocated for each provider independently as no central body has the responsibility of making disbursement decisions or setting priorities for the sector as a whole. As earlier explained MOF is the main financing resource for vocational training in VTC and for vocational education as part of MOE budget, and BAU is the main financing resource for technical education in community colleges.

Current expenditures (salaries, training materials, maintenance, electricity, water …etc.) usually forms very high percentage of TVET institutions expenditures compared with the capital expenditures (construction and equipment). Table E1 details actual expenditure of VTC for 2016 which to some extent applied to other main TVET public providers in regard to percentages of expenditures (not figures). As it can be seen from the table, current expenditures are forming 90.1% of the total expenditures, where salaries percentage is the highest (76.5%).

Table E1: VTC expenditures in 2016

Expenditures		JD	%
Current	Salaries	8,844,095	76.5
	Training materials	79,025	0.7
	Other operational costs (electricity, water, etc)	1,494,832	12.9
	Total	10,417,952	90.1
Capital	Buildings/ facilities (Renovation, maintenance …etc.)	947,906	8.2
	Equipment	174,252	1.5
	Others (furniture, studies …etc)	22,136	0.2
	Total	1,144,294	9.9
Grand total		11,562,246	100

Source: Total summary of current and capital expenditures of 2016-2020/ meeting with director of finance/ VTC

In VTC, resources are re allocated between institutes in accordance with the approved requested needs for each institute on one hand and availability of resources mainly allocated by MOF for VTC budget on the other hand. Same mechanism is applied in allocating expenditures' resources for vocational schools in MOE. However, in both institutions (VTC and MOE), allocated resources for TVET institutes/ schools are centrally managed.

In BAU, allocations of resources between colleges are approved by BAU; however, resources' management is still mainly centralized.

Two observations are to highly extent applied to all TVET providers: 1- Resources allocations aren't based on results/ performance but on the expenditures needs as identified in the annual work plan for the institute, school or college, 2- Shortage of funding due to cuts on the proposed budgets are mainly affecting the development activities/ initiatives in TVET institutions.

E.5.2 Policies to ensure adequacy of resources for VET and equity in their allocation

According to law No 9 of 2019 TVSDC is mandated with: Approving TVET programmes' budgets according to specific criteria approved by the council, and supervising its spending". This means having a central body for disbursement allocations to TVET institutions is expected to lead to more fairness in allocation of financial resources for TVET providers. Also, the establishment of skill development and TVET activities support fund (replaced ETVET Fund) within the commission is expected to increase funding resources available for implementing TVET programmes.

On the other hand, both strategic plans for VTC and BAU/ CCs included project/ measure aiming at increasing financial resources for vocational training/ technical education programmes. In VTC, the strategic plan included a project titled "Improving VTC Financial Resources" to be implemented during the period (2015-2019) with a total cost of JD 580,000. However, there was no evidence of implementing such project in recent VTC annual reports. In BAU, the strategic plan included a measure to increase the financial support for technical education and building partnerships between technical colleges and the private sector. Related indicators identified by the strategy for this measure were: Approving a mechanism for sustainable governmental financial support for the technical education, value of the governmental support, and the increase of the private sector investment in technical education. In this regard, BAU signed agreements with private sector for cooperation in technical education particularly in providing workplace training opportunities for students.

'Open floor'

Vocational education forms small part of ministry of education responsibilities compared with general education. Therefore, there is a risk of not receiving the required care and interests keeping in mind that it is more demanded than general education, and that decisions makers in the ministry are usually of academic backgrounds. On the other hand, vocational schools are linked with general education directorates in governorates with no regular follow up conducted by vocational education and production department which could negatively affect vocational education quality.

Also, in BAU, technical education programmes are provided with university degrees programmes in community colleges. Therefore, there is a risk also here that more focus will be on university studies than on the technical education.

Accordingly, required governance arrangements should be taken in MOE and BAU/ CCs to ensure effective and efficient implementation of vocational and technical education programmes

Summary and analytical conclusions

TVET sector governance in Jordan is characterized by fragmentation as TVET providers work under different ministries (MOL, MOE, and MoHESR), and no effective coordination is taking place between them. Fragmentation persisted even after establishing ETVET council to act as a leading body for developing sector's policies at national level and enhancing coordination between TVET providers.

Accountability is also weak as no strong and cohesion accountability system and mechanisms are in place in TVET sector. Several factors are leading to accountability weakness in the sector: Governance fragmentation and lack of enabled leadership for

TVET at national level, non-results based financial resources allocations for TVET institutions, shortage of credible feedback information/ data on TVET institutions graduates and their relevance to labour market needs, centralization management style used in managing TVET institutes/ schools/ colleges, and un clear definitions of roles, functions, and responsibilities linked with weak control mechanisms.

Role of non-state actors in TVET sector governance at national and institutional level are weak and ineffective although they are represented in the ETVET council, and VTC and NET board of directors. Factors affecting non-state actors' role in TVET sector governance include: Percentage of members representing non-state actors in TVET governance bodies, and capacity of those representatives required for effective participation.

At implementation level, there is some involvement of private sector in TVET in regard to curricula development and work-based training but it is mainly limited to VTC and NET programmes. Also very limited involvement of private sector in the management and the training process in TVET institutes at local level. Factors contribute to such situation include: Legislations and regulations that control TVET institutions management and operation, incentives for private sector participation in TVET, and local VET institutes' capacity to interact with private sector.

In regard to financing of public TVET institutions, main observations include: Each TVET institution deals directly with the Ministry of Finance (MOF)/ General Budget Department for its own budget, TVET institution' budgets are based on annual plans and not on a whole strategic development plan for the sector, main financial source comes from general budget for VTC and MOE/ VE and from BAU for technical education, budget allocations aren't results based, current expenditures (particularly salaries) are forming very high percentage of the total expenditures (80-90%), institutions' own revenues in MOE and VTC are very modest and it is transferred to MOF, and management and monitoring of allocations spending is centralized.

Factors contribute to above mentioned policy challenge include: Absence of a comprehensive budget for the TVET sector based on a strategic development plan, weak financial governance in TVE sector as no central body is responsible for setting priorities and making allocation decisions for the sector as a whole, insufficient public fund for TVET institutions, limited involvement of private sector in TVET financing, lack of accountability system that link financial allocations with performance indicators, and regulations that don't foster efficient management of financial resources, and initiatives for revenues generation at local level TVET providers institutes.

Worth mentioning here that extra financial resources from the E-TVET Fund weren't disbursed evenly between TVET providers as NET and VTC benefitted the most from the Fund. This could be attributed to lack of long-term strategy to direct the fund support of TVET sector, and lack of autonomy in taking financing decisions as the fund is supervised by the ETVET council headed by labour minister where majority of members are public officers.

Recently approved Technical and Vocational Skills Development law No. 9 of 2019 may bear solutions for most of aforementioned policy challenges. TVSDC as an autonomous national body together with its governing council (TVSD Council) will play key roles in regard to TVET sector's governance through their tasks and authorities of: Approving TVET sector strategies and policies, licensing and accreditation of TVET institutions and programmes, developing occupational standards, registering qualifications on NQF,

approving TVET programmes budgets, monitoring and evaluating TVET programmes, and forming sector skill councils.

On the other hand, composition of TVDS council headed by labour minister with majority of members (8 out of 14) from private sector is expected to strengthen private sector involvement in TVET governance. Also, participation of main TVET institutions related ministers in TVSD council (MOL minister as the head of the council, MOE and MOHESR ministers as members), is expected to facilitate cooperation/ coordination among TVET institutions. Nevertheless, roles and coordination between the new TVSD council and other TVET sector's councils (VTC, MOE, and MoHESR councils) need to be clarified to mitigate previous situation with the ETVET council where no effective coordination was taking place.

In this early stage after the approval of the TVSD law, progress achieved so far is limited to the establishment of TVSD Council. Some by laws were issued but further required implementation instructions still under preparation. However, some progress has already been achieved in the last few years particularly in regard to involvement of private sector in TVET. Such involvement includes but not limited to: Establishment of 7 sector skills councils led by private sector, extending apprenticeship/ work based training scheme to technical education programmes in both BAU and Al Hussein Technical University, developing curricula using DACUM process that require experienced technicians from private sector, and implementing joint training initiatives/ projects with TVET providers.

Suggested recommendations for addressing governance and financing challenges:

- Develop performance criteria for TVET institutions to be used as basis for monitoring, evaluation, financial allocations disbursement, and accountability systems.
- Modify regulations to delegate more authorities to the management of TVET institutes at local level towards achieving more decentralization in decision making and establishment of partnerships with private sector.
- Capacity building of TVET institutes' managers at local level to apply decentralization management style and effectively interact with private sector
- Develop governance arrangements of VE and TE in MOE and BAU/CCs to ensure effective and efficient management and implementation of vocational and technical education.
- Establish/ activate consultancy/ steering committee comprised of private sector and other social partners representatives for each TVET institute/ school/ college.
- Increase private sector role in financial support of TVET.
- Provide incentives for promoting private sector participation in TVET.
- Capacity building of employers' associations for more effective participation in TVET governance and implementation.
- Expand work based training schemes into other TVET programmes such as technical and vocational education.

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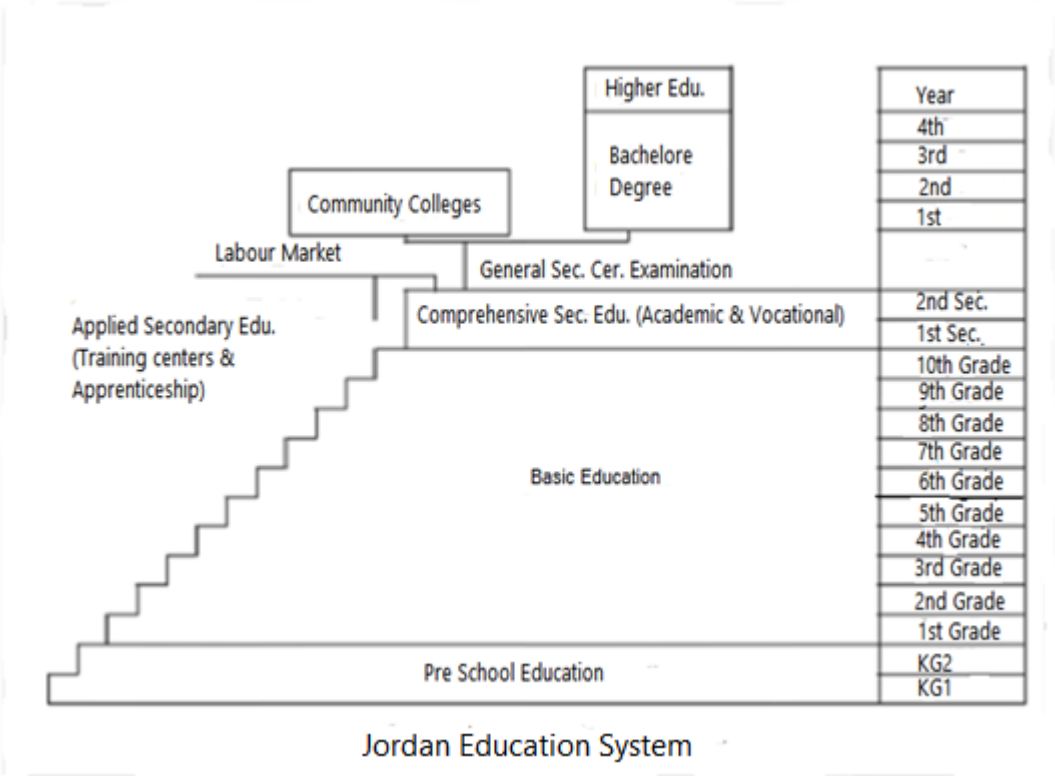
ANNEXES

Annex 1: structure of the education and training system in Jordan



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